

SAFET	Y DATA SHEET
Section 1, Identification	
Product:	Karlin Foods Baking Soda, KF ID# S24BS
Manufacturer:	Karlin Foods Corp
	1845 Oak St. Suite 19
	Northfield, IL 60093
Emergency Phone Number:	Karlin Foods: 847-441-8330
	Chemtrec: 800-424-9300
Recommended Use:	Leavening agent, cleaner ingredient, bath salt
	ingredient, water softener, diaper rinse ingredient,
	direct food additive
Restrictions on Use:	None
Section 2, Hazard(s) Identification	
Classification:	OSHA Regulatory Status. This chemical is not
	considered hazardous by the 2012 OSHA Hazard
	Communication Standard (29 CFR 1910.1200)
Required Label:	The product contains no substances which at their
	given concentration, are considered to be hazardous to
	health
Other Information:	Product dust may cause mechanical eye irritation.
Section 3, Composition/Information on Ingre	
Formula:	NaHCO3
Chemical Name:	Sodium Bicarbonate
Section 4, First Aid Measures	
Eye Contact:	Flush eyes with water as a precaution. Get Medical
	attention if irritation develops and persists.
Skin Contact:	Wash skin with soap and water. Get medical attention
	if irritation develops and persists.
Inhalation:	Remove person to fresh air. If signs/symptoms
	continue, get medical attention.
Ingestions:	Never give anything by mouth to an unconscious
5	person. Get medical attention if symptoms occur
Most important symptoms and effects, both	None known.
acute and delayed:	
Indication of immediate medial attention	Treat symptomatically.
and special treatment needed, if necessary	
Section 5, Fire-Fighting Measures	1
Suitable Extinguishing Media:	Use extinguishing measures that are appropriate to
	local circumstances and the surrounding environment
Specific Hazards Arising from the Chemical:	None in particular. Not flammable
Hazardous Combustion Products:	None
Explosion data	

Sensitivity to Mechanical Impact:	Not sensitive
Sensitivity to Static Discharge:	Not sensitive
Protective equipment and precautions for	As in any fire, wear self-contained breathing apparatus
firefighters	pressure-demand, MSHA/NIOSH (approved or
	equivalent) and full protective gear
Section 6, Accidental Release Measures	
Personal Precautions:	Avoid dust formation.
Other:	For further clean-up instructions, call Emergency
	Hotline number listed in Section 1 "Product and
	Company Identification" above.
Environmental Precautions:	Prevent material from entering into soil, ditches,
	sewers, waterways, and/or groundwater. See Section
	12, Ecological Information for more detailed
	information.
Methods for Containment:	Vacuum or shovel waste into a drum and label
	contents for disposal.
Methods for cleaning up:	Pick up and transfer to properly labeled containers.
	Keep in suitable and closed containers for disposal.
-	Dispose of waste as indications in Section 13.
Section 7, Handling and Storage	
Handling:	Use air conveying/mechanical systems for bulk transfer
	to storage. Provide appropriate exhaust ventilation at
	places where dust is formed. In case of insufficient
	ventilation, wear suitable respiratory equipment if
	release of airborne dust is expected.
Storage:	Keep in a dry place. Keep away from incompatible
	products (acids). Do not store with strong smelling
	materials.
Incompatible Products:	Except under controlled conditions: Acids
Sections 8, Exposure Controls/Personal Pro	
Control Parameters:	This product, as supplied, does not contain any
	hazardous materials with occupational exposure limits
	established by the region specific regulatory bodies
	Local nuisance dust standards apply.
Appropriate Engineering Controls:	Where reasonably practicable this should be achieved
	by the use of local exhaust ventilation and good
	general extraction.
Individual protection measures, such as per	
Eye/Face Protection:	Safety glasses with side shields
Skin and Body Protection:	Wear suitable protective clothing. Protective shoes or
	boots.
Hand Protection:	Protective gloves.
Respiratory Protection:	In case of inadequate ventilation, wear respiratory
	protection.
Hygiene Measures:	Handle in accordance with good industrial hygiene and
	safety practice.

General Information:	If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers.
Section 9, Physical and Chemical Propertie	ls
Appearance:	Crystalline, Powder
Physical State:	Solid
Color:	White
Odor:	Odorless
Odor Threshold:	Not applicable
рН:	8.3 (1% solution) @ 25 degrees Celsius
Melting Point/freezing point:	Not applicable
Boiling Point/Range:	No information available
Flash point:	Not applicable
Evaporation Rate:	No information available
Flammability (solid, gas):	No information available
Flammability Limit in Air:	No information available
Vapor pressure:	Negligible
Vapor density:	No information available
Density:	No information available
Specific gravity:	2.22
Water solubility:	96g/L @ 20 degrees Celsius
Solubility in other solvents:	No information available
Partition coefficient:	Not applicable
Autoignition temperature:	No information available
Decomposition temperature:	No information available
Viscosity, kinematic:	No information available
Viscosity, dynamic:	No information available
Explosive properties:	No information available
Oxidizing properties:	Non-oxidizing
Molecular weight:	84.01
Bulk Density:	66 lb/cu ft
Section 10, Stability and Reactivity	
Reactivity:	None under normal use conditions
Chemical Stability:	Stable
Possibility of Hazardous Reactions:	None under normal processing/
Hazardous polymerization:	Hazardous polymerization does not occur
Conditions to avoid:	Heat. Humid air. Avoid contact with acids except under
	controlled conditions. Keep away from strong odor.
Incompatible materials:	Except under controlled conditions: Acids.
Hazardous Decomposition Products:	Reacts with acids to release carbon dioxide gas and heat.
Section 11, Toxicological Information	
LD50 Oral:	>5,000 mg/kg (rat)
LD50 Dermal:	No information available
LC50 Inhalation:	>4.74 mg/L (rat) 4.5 hr
Eye Contact:	Non-irritating

Skin Contact:		Non-irritating			
Sensitization:		Non-sensitizing			
Info on toxicological effects: Symptoms		No information available.			
Chronic Toxicity:		No known effect			
Mutagenicity:		Not mutagenic			
Carcinogenicity:			carcinogenic by	Research Agencies	
C <i>i</i>		(IARC, NTP, OSHA		C C	
Reproductive toxicity:		No information av			
STOT – single exposure	2:	No information av	/ailable		
STOT – repeated expo		No information av	/ailable		
Aspiration hazard:		No information av	vailable		
Section 12, Ecological Ecotoxicity					
Sodium Bicarbonate (144 Active Ingredient(s)	Duration	Species	Value	Units	
Sodium bicarbonate	96 hr.	Lepomis macrochirus (Bluefill sunfish)	NOEC: 5,200 LC50: 7,100	mg/L	
Sodium bicarbonate	48 hr. immobilization test	Daphnia magna	NOEC: 3,100 EC50: 4,100	mg/L	
Sodium bicarbonate	96 hr.	Oncorhynchus mykiss (rainbow trout)	NOEC: 2,300 LC50: 7,700	mg/L	
Persistence and degra	dability:	Biodegradability does not pertain to inorganic			
		substances.			
Bioaccumulation:		Does not bio-accumulate			
Mobility:		Dissociates into ic	ons.		
Other Adverse Effects:		None known.			
Section 13, Disposal C		-			
Waste disposal metho	ds:	This material, as supplied, in not a hazardous waste			
		according to Federal regulations (40 CFR 261). Dispose			
		of in accordance v	-		
Contaminated Packag	-	Dispose of in acco	ordance with loca	al regulations	
Section 14, Transport	Information				
DOT		Not Regulated			
Section 15, Regulator					
U.S. Federal Regulatio	ns			<u> </u>	
SARA313		Section 313 of Title III of the Superfund Amendments			
		and Reauthorization Act of 1986 (SARA). This product			
		does not contain any chemicals which are subject to			
		the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372			
SARA 311/312 Hazard Categories				art J/Z	
Acute health hazard	categories	No			
Chronic health hazard		No			
Chronic health hazard Fire hazard		No			
Fire nazara Sudden release of pressure hazard		No			
Reactive Hazard		No			
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Clean Water Act					•	does not co	•		
				reg	ulated as p	pollutants p	ursuant to	the Clean	Water
				Act	(40 CFR 1	22.21 and 4	0 CFR 122	.42)	
CERCLA				This	s material,	as supplied	d, does not	t contain an	у
				sub	stances re	gulated as	hazardous	substances	under
				the	Compreh	ensive Envi	ronmental	Response	
				Cor	npensatio	n and Liabil	ity Act (CE	RCLA) (40 C	FR 302)
				or t	he Superf	und Amend	ments and	d Reauthori	zation
				Act	(SARA) (4	0 CFR 355).	There may	y be specific	2
				rep	orting req	uirements a	at the loca	l, regional, o	or state
				leve	el pertainii	ng to releas	es of this ı	material.	
California Proposi	ition 65			This	s product o	does not co	ntain any	Proposition	65
				Che	emicals				
U.S. State Right-to	o-Know Re	gulations		This product does not contain any substances					
				reg	ulated by s	state right-	to-know re	egulations.	
International Inve	entories								
Component	TSCA	DSL	EINECS		ENCS	China	KECL	PICCS	AICS
	(United States)	(Canada)	NCS (Euro		(Japan)	(IECSC)	(Korea)	(Philippines)	(Australia
Sodium Bicarbonate 144-55-8(100)	X	Х	X	,	Х	Х	Х	Х	Х
Section 16, Other	[.] Informati	on							
Section 16, Other		lazards 0	Flamr	nabilit	t v 0	Instability 0	Si	oecial Hazards	-
NFPA HMIS	Health H Health H	lazards 0 lazards 0	Flamr Flamr	nabilit	ty 0	Instability 0 Physical haza	rd 0 Pe	oecial Hazards ersonal Protec	
NFPA	Health H Health H	lazards 0 lazards 0	Flamr	nabilit	ty 0		rd 0 Pe		
NFPA HMIS	Health He	lazards 0 lazards 0 Severe =	Flamr 4; Serious	nabilit s = 3; [ty 0 Moderate = 2;	Physical haza Slight = 1; Min	rd 0 Pe imal = 0	ersonal Protec	tion X
NFPA HMIS NFPA/HMIS Ratings Product Certificatio	Health He	lazards 0 lazards 0 Severe =	Flamr 4; Serious tions defi	nabilit s = 3; f ned in	ty 0 Moderate = 2; the USP and	Physical haza Slight = 1; Min Food Chemica	rd 0 Pe	ersonal Protect	tion X



	SAFETY DATA SHEET
Section 1, Identification	n
Product:	Karlin Foods Corn Starch, KF ID# S34
Manufacturer:	Karlin Foods Corp
-	1845 Oak St. Suite 19
	Northfield, IL 60093
Emergency Phone	Karlin Foods: 847-441-8330
Number:	Chemtrec: 800-424-9300
Recommended Use:	Leavening agent, cleaner ingredient, bath salt ingredient, water softener,
	diaper rinse ingredient, direct food additive
Restrictions on Use:	None
Section 2, Hazard(s) Ide	entification
Classification:	According with the version of the Globally Harmonized System of
	Classification and labeling
	adopted in the United States and Regulation 1272/2008/EC [CLP]: Not
	classified
Required Label:	The product contains no substances which at their given concentration, are
	considered to be hazardous to health
Other Information:	May form combustible dust concentrations in air. Possibility of dust
	explosion. it is recommended that all dust control equipment and material
	transport systems involved are engineered to prevent conditions
	contributing to dust explosions. Do not allow dust to accumulate on flat
	surfaces, on rafters or building structural components. Keep away from all
	ignition sources including heat, sparks and flame.
Section 3, Composition	/Information on Ingredients
CAS Number	9005-25-8
Chemical Name:	Starch
Section 4, First Aid Mea	asures
Eye Contact:	Remove particulates by irrigating with eye wash solution or clean water,
	holding eyelids apart
Skin Contact:	Wash skin with soap and water. Get medical attention if irritation develops
	and persists.
Inhalation:	Remove person to fresh air. If signs/symptoms continue, get medical
	attention.
Ingestions:	Never give anything by mouth to an unconscious person. Get medical
2	attention if symptoms occur
Most important	None known.
symptoms and effects,	
both acute and	
delayed:	
Indication of	Treat symptomatically.
immediate medial	

attention and special	
treatment needed, if	
necessary	
Section 5, Fire-Fighting	Measures
Suitable Extinguishing	Water spray, dry powder, carbon dioxide or media appropriate for
Media:	surrounding fire. Use of water jet may cause explosive dust conditions.
Specific Hazards	Possibility of dust explosion. It is recommended that all dust control
Arising from the	equipment and material transport systems involved are engineered to
Chemical:	prevent conditions contributing to dust explosions. Do not allow dust to
	accumulate on flat surfaces, on rafters or building structural components.
	Use of water jet may cause explosive dust conditions.
	SEE NFPA 61, Standard for the prevention of Fire and Dust Explosions in
	Agricultural and Food
	Processing Facilities, 2008 or later Edition, and other related standards.
Hazardous	Carbon dioxide and carbon monoxide
Combustion Products:	
Explosion data	
Sensitivity to	Not sensitive
Mechanical Impact:	
Sensitivity to Static	Not sensitive
Discharge:	
Protective equipment	As in any fire, wear self-contained breathing apparatus pressure-demand,
and precautions for	MSHA/NIOSH (approved or equivalent) and full protective gear
firefighters	
Section 6, Accidental R	
Personal Precautions:	None under normal conditions. Avoid prolonged inhalation of dust.
Other:	For further clean-up instructions, call Emergency Hotline number listed in Section 1 "Product and Company Identification" above.
Environmental	Prevent further leakage or spillage if safe to do so. No special environmental
Precautions:	precautions required.
Methods for	Vacuum or shovel waste into a drum and label contents for disposal.
Containment:	
Methods for cleaning	Vacuum or sweep spills. Minimize dust generation.
up:	If washing down spilled area is necessary, use copious amounts of water and control runoff.
	Follow local, state and federal regulations for product disposal
Section 7, Handling and	
Handling:	See NFPA 61, Standard for the Prevention of Fire and Dust Explosions in
	Agricultural and Food
	Processing Facilities, 2008 Edition, and other related standards. Use with adequate
	ventilation. Minimize dust generation and accumulation; dust deposits should
	not be allowed to
	accumulate on surfaces, as these may form an explosive mixture if they are disturbed.
	All dust control equipment and material transport systems involved are engineered to prevent
	conditions contributing to dust explosions and may require explosion relief vents or an

	explosion suppression system or an oxygen-deficient environment. Bonding and grounding systems may be required.
	Dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing
	equipment) should be designed to limit or prevent leakage of dust into the work area.
	Do not allow dust to accumulate on flat surfaces, on rafters or building structural components.
	Routine housekeeping should be instituted to reduce dust accumulation. Use Avoid dispersal of
	dust in the air; use vacuum or wet sweeping methods. Do not use compressed air to clean surfaces.
	Keep away from all ignition sources including heat, sparks, and flame. Where dust
	accumulations occur use non-sparking tools.
Storage:	Store in a cool dry place. Store in a tightly closed container/bag. The packaging material should have reasonable moisture and air barriers and comply with food regulations.
Incompatible Products:	Except under controlled conditions: Acids
	ontrols/Personal Protection
Control Parameters:	8.1 CONTROL PARAMETERS
	Exposure limits: Nuisance dust (also called particulate not otherwise regulated (PNOR)). OSHA PEL: 15 mg/ mg/m3 Total dust 5 mg/m3 Respirable dust ACGIH TLV: 10 mg/m3 Inhalable dust 5 mg/m3 Respirable dust 15 mg/m3 Total dust
Appropriate	Ventilation: See NFPA 61, Standard for the Prevention of Fire and Dust
Engineering Controls:	Explosions in Agricultural and Food Processing Facilities, 2008 Edition, and National Fire Protection
	Association 650, Standard for Pneumatic Conveying Systems for Handling Combustible Materials,
	1997 Edition and other related standards. Normal industrial hygiene measures should be
	sufficient for protection of employees from exposure to dusts. Local and mechanical exhaust is
Individual protoction m	desirable when dumping bags.
	easures, such as personal protective equipment.
Eye/Face Protection:	Safety glasses are recommended. Safety goggles are desirable when dumping bags.
Skin and Body Protection:	Wear suitable protective clothing. Protective shoes or boots.
Hand Protection:	Protective gloves.
Respiratory Protection:	In case of inadequate ventilation, wear respiratory protection.
Hygiene Measures:	Handle in accordance with good industrial hygiene and safety practice.
General Information:	If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers.

Section 9, Physical and	Chemical Properties
Appearance:	Crystalline, Powder
Physical State:	Powder
Color:	White to off-white
Odor:	Starch-like odor
pH:	Data on specification
Melting	Not applicable
Point/freezing point:	The second s
Boiling Point/Range:	No information available
Flash point:	Not applicable
Evaporation Rate:	No information available
, Flammability (solid,	No information available
gas):	
Flammability Limit in	No information available
Air:	
Vapor pressure:	Negligible
Vapor density:	No information available
Density:	No information available
Specific gravity:	No Data
Water solubility:	Data on specification
Solubility in other	No information available
solvents:	
Partition coefficient:	Not applicable
Autoignition	No information available
temperature:	
Decomposition	No information available
temperature:	
Viscosity, kinematic:	No information available
Viscosity, dynamic:	No information available
Explosive properties:	No information available
Oxidizing properties:	Non-oxidizing
Molecular weight:	No data
Bulk Density:	No data
Section 10, Stability an	d Reactivity
Reactivity:	Stable
Chemical Stability:	Stable under normal conditions. Polymerization will not occur.
Possibility of	Not applicable.
Hazardous Reactions:	
Hazardous	Hazardous polymerization does not occur
polymerization:	
Conditions to avoid:	Practices which produce dust or disperse finely divided dust in air.
	See NFPA 61. Standard for the Prevention of Fire and Dust Explosions in
	Agricultural and Food Processing Facilities, 2008 Edition, and other related
	standards.
Incompatible	Oxidizing agents, strong acids
materials:	

Hazardous	Nothing unusual
Decomposition	
Products:	
Section 11, Toxicologic	al Information
Inhalation:	Exposure to high airborne concentrations may cause mild
	respiratory irritation due to drying effects of dust.
Ingestion:	No effects known or anticipated.
Skin	Sustained exposure in a dusty manufacturing environment may
irritation/corrosion:	result in mechanical irritation in the creases of the skin,
	particularly at the fingers, or other drying effects. no
	health effects known or anticipated.
Eye Irritation:	May cause slight mechanical irritation from acute exposure.
Skin sensitivity:	Not sensitizing
Chronic Toxicity:	Not known or anticipated
Genetic Toxicity:	Not known or anticipated
Carcinogenicity:	Not classifiable as Carcinogen
Reprotoxicity:	Not known or anticipated
Specific effects:	Not applicable
Section 12, Ecological I	
Toxicity:	Starch and its breakdown products are not known to be toxic to plant and
	animal life.
Persistence and	Readily biodegradable
degradability:	
Bioaccumulation:	Starch and its breakdown products are not fat-soluble, and do not accumulate in plant or animal tissue.
Mobility:	Not applicable
Other Adverse Effects:	None known.
Section 13, Disposal Co	nsiderations
Waste disposal methods:	Follow local, state and federal regulations for product disposal. Not a hazardous waste unless contaminated with hazardous products.
Section 14, Transport I	nformation
DOT shipping label	Non-hazardous
Section 15, Regulatory	Information
U.S. Federal Regulation	S
Safety, Health and	According with the version of the Globally Harmonized System of
Environmental	Classification and labeling adopted in the United States and Regulation
Regulations:	1272/2008/EC(CLP): Not classified
Clean Air Act:	
ODS:	Not applicable
TSCA:	Not applicable
SARA (EPCRA) Section	Not applicable
313 (40 C.F.R. 372.65)	
California Proposition	Not applicable
65	
Section 16, Other Infor	mation
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See Hazard Communication Guidance of Combustible Dusts, OSHA 3371-08 2009, U.S. Occupational

Citric Acid Anhydrous

Version	Revision Date:	SDS Number:	Date of last issue: 06/16/2017
1.1	06/22/2017	10000000123	Date of first issue: 06/16/2017
US / EN			

SECTION 1. IDENTIFICATION

Product name	:	Citric Acid Anhydrous
Substance name	:	Citric Acid Anhydrous
Molecular formula	:	C6-H8-O7
Chemical identity	:	2-hydroxypropane-1,2,3-tricarboxylic acid
CAS-No.	:	77-92-9
Chemical nature	:	Solid

Manufacturer or supplier's details Details of the supplier of the safety data sheet

Company	:	Jungbunzlauer Inc. 7 Wells Avenue Newton Centre, Massachusetts 02459 USA www.jungbunzlauer.com
Telephone Telefax E-mail address Responsi- ble/issuing person	:	+1 617 969-0900 +1 617 964-2921 msds@jungbunzlauer.com
Emergency telephone number	er	
Emergency telephone num- ber	:	National Chemical Emergency Centre (NCEC) +1 202 464 2554
Recommended use of the ch	err	ical and restrictions on use
Recommended use	:	Food/ feedstuff additives Cosmetic additive Medical aids Industrial use
Restrictions on use	:	None known.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accord	lan	ce with 29 CFR 1910.1200
Eye irritation	:	Category 2A

GHS label elements

Jungbunzlauer

Citric Acid Anhydrous

Version 1.1 US / EN	Revision Date: 06/22/2017	SDS Nu 1000000		Date of last issue: 06/16/2017 Date of first issue: 06/16/2017
Haz	ard pictograms		!>	
Sigr	nal word	: War	ning	
Haz	ard statements	: H31	9 Causes seri	ious eye irritation.
Pred	cautionary statements	P264 P280		s thoroughly after handling. ctive gloves/ protective clothing/ eye pro- tection.
		P30 for s		338 IF IN EYES: Rinse cautiously with water es. Remove contact lenses, if present and easy nsing.
			7 + P313 If ey ntion.	ye irritation persists: Get medical advice/

Hazards Not Otherwise Classified

May form combustible dust concentrations in air (during processing).

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture	:	Pure substance
Substance name	:	Citric Acid Anhydrous
CAS-No.	:	77-92-9
Chemical nature	:	Solid

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
Citric acid anhydrous	77-92-9	100

SECTION 4. FIRST AID MEASURES

General advice	:	Avoid inhalation, ingestion and contact with skin and eyes. Consult a physician.
If inhaled	:	If breathed in, move person into fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.

Citric Acid Anhydrous

Vers 1.1 US /		Revision Date: 06/22/2017		DS Number: 0000000123	Date of last issue: 06/16/2017 Date of first issue: 06/16/2017	
				If breathing is diff	icult, give oxygen.	
	In case	of skin contact	:		t, immediately flush skin with plenty of water. tion if symptoms occur.	
In case of eye contact		:	If easy to do, remove contact lens, if worn. Rinse immediately with plenty of water, also under the eyelic for at least 15 minutes. If eye irritation persists, consult a specialist.			
	lf swalle	owed	:	Drink plenty of wa If swallowed, DO	ater. NOT induce vomiting.	
		nportant symptoms ects, both acute and d	:	Eye irritation may cause mild and mechanical irritation and thus symptoms which would be redness and pain. Causes serious eye irritation.		
	Notes t	o physician	:	Treat symptomatically.		
SEC	TION 5	. FIREFIGHTING MEA	SU	RES		
	Suitable	e extinguishing media	:	Water spray Dry powder Foam Carbon dioxide (0	02)	
	Unsuita media	ble extinguishing	:	High volume wate	er jet	
	Specific fighting	c hazards during fire-	:	concentrations, a potential dust exp Do not use a solid fire.	dust; fine dust dispersed in air in sufficient nd in the presence of an ignition source is a losion hazard. d water stream as it may scatter and spread nposition products formed under fire condi-	
	Hazard ucts	ous combustion prod-	:	Carbon dioxide (0 Carbon monoxide		
	Specific ods	c extinguishing meth-	:	Standard procedu	are for chemical fires.	
	Further	information	:	cumstances and	measures that are appropriate to local cir- the surrounding environment. e and/or explosion do not breathe fumes.	
	Special for firef	protective equipment ighters	:		e, wear self-contained breathing apparatus. It or flame retardant clothing.	

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- :	Avoid dust formation.
tive equipment and emer-	Dust deposits should not be allowed to accumulate on surfac-

Citric Acid Anhydrous

Version 1.1 US / EN	Revision Date: 06/22/2017	· · ·	DS Number: 00000000123	Date of last issue: 06/16/2017 Date of first issue: 06/16/2017
gency	v procedures		leased into the at Avoid breathing c Ensure adequate Wear personal pr Avoid contact with	ventilation, especially in confined areas. otective equipment.
Enviro	onmental precautions	:		nmental precautions required. akage or spillage if safe to do so.
	Methods and materials for : containment and cleaning up		Use mechanical handling equipment. Keep in suitable, closed containers for disposal. Clean contaminated surface thoroughly. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.	

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
Advice on safe handling	:	Risk of dust explosion. Do not breathe dust. Avoid contact with skin and eyes. Wear personal protective equipment. For personal protection see section 8.
Conditions for safe storage	:	Keep in an area equipped with acid resistant flooring. Keep container tightly closed in a dry and well-ventilated place. Minimize dust generation and accumulation. Take measures to prevent the build up of electrostatic charge.
Materials to avoid	:	Incompatible with strong bases and oxidizing agents.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

	Engineering measures	o 1 1
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Personal p	rotective	equipment
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Respiratory protection	In the case of dust or aerosol formation use respirator with an approved filter. Use NIOSH approved respiratory protection.

Hand protection

Citric Acid Anhydrous

Version 1.1 US / EN	Revision Date: 06/22/2017	SDS Number 10000000012	
Remarks		on the col stance an For specia sistance t	loves to protect hands against chemicals depending ncentration and quantity of the hazardous sub- id specific to place of work. al applications, we recommend clarifying the re- o chemicals of the aforementioned protective th the glove manufacturer.
Eye protection			asses at eyewash stations and safety showers are close kstation location.
Skin a	Skin and body protection		ody protection according to the amount and con- of the dangerous substance at the work place.
Hygiene measures :		practice. Wash har the produ Remove o	accordance with good industrial hygiene and safety nds before breaks and immediately after handling ct. contaminated clothing and protective equipment tering eating areas.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	crystalline
Colour	:	white
Odour	:	odourless
Odour Threshold	:	Not relevant
рН	:	1.8 (77 °F) Concentration: 5 %
Melting point/range	:	ca. 307 °F
Boiling point/boiling range	:	Not applicable
Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	does not ignite
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	Not applicable
Relative vapour density	:	Not applicable
Relative density	:	No data available

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Citric Acid Anhydrous

Versio 1.1 US / E	00	evision Date: 6/22/2017		S Number: 0000000123	Date of last issue: 06/16/2017 Date of first issue: 06/16/2017	
	ensity		:	1.665 g/cm3 (68	°F)	
S	olubility(Water	ies) solubility	:	ca. 1,450 g/l (68	°F)	
Partition coefficient: n- octanol/water		:	log Pow: -1.80 Calculation	.2		
lç	Ignition temperature		:	No data available)	
D	Decomposition temperature		:	No data available)	
V	Viscosity Viscosity, dynamic		:	Not applicable		
	Viscosity, kinematic		:	Not applicable		
E	Explosive properties		:	Not explosive		
C	xidizing	properties	:	No oxidising effect	ct.	
Ν	lolecular	weight	:	192.12 g/mol		
D	ust explo	osion class	:	St1		

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reac- tions	:	No dangerous reaction known under conditions of normal use.
Conditions to avoid	:	Avoid dust formation.
Incompatible materials	:	Strong bases Oxidizing agents
Hazardous decomposition products	:	Build-up of dangerous/toxic fumes possible in cases of fire/high temperature. Carbon dioxide (CO2) Carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Components:

Citric acid anhydrous:

Acute oral toxicity

: LD50 Oral (Mouse): 5.400 mg/kg body weight

Citric Acid Anhydrous

Version 1.1 US / EN	Revision Date: 06/22/2017	SDS Number: 100000000123	Date of last issue: 06/16/2017 Date of first issue: 06/16/2017
		Method: OECD	Test Guideline 401
): 11.700 mg/kg body weight Test Guideline 401
Acute	dermal toxicity	: LD50 Dermal (F	Rat): > 2.000 mg/kg body weight
	toxicity (other routes of nistration)	: LD50 (Rat): 72 Application Rot	
		LD50 (Mouse): Application Rot	
Skin	corrosion/irritation		
Com	oonents:		
Metho Resul May o	es: Rabbit od: OECD Test Guideline t: No skin irritation cause skin irritation in su	sceptible persons.	
	us eye damage/eye irri oonents:	itation	
	acid anhydrous:		
Speci Resul	es: Rabbit t: Irritating to eyes. od: OECD Test Guideline	e 405	
Resp	iratory or skin sensitis	ation	
Com	oonents:		
	a cid anhydrous: Ita available		
Germ	cell mutagenicity		
Com	oonents:		
	acid anhydrous: toxicity in vitro	Concentration:	onella typhimurium 0 - 5 mg/plate enicity (Salmonella typhimurium - reverse mu
Geno	toxicity in vivo	: Test Type: in vi	

Genotoxicity in vivo : Test Type: in vivo assay Species: Rat Application Route: Oral

Citric Acid Anhydrous

Vers 1.1 US /	sion / EN	Revision Date: 06/22/2017	-	DS Number: 0000000123	Date of last issue: 06/16/2017 Date of first issue: 06/16/2017
				Method: OECD T Result: negative	est Guideline 475
	Germ o Assess	ell mutagenicity - ment	:	In vitro tests did r	ot show mutagenic effects
	Carcin	ogenicity			
	Compo	onents:			
		acid anhydrous: ogenicity - Assess-	:	Not classifiable a	s a human carcinogen.
	Repro	ductive toxicity			
	Compo	onents:			
		acid anhydrous: luctive toxicity - As- ent	:	No toxicity to repr	oduction
	STOT	single exposure			
	Compo	onents:			
		acid anhydrous: a available			
	STOT	· repeated exposure			
	Compo	onents:			
		acid anhydrous: a available			
	Repea	ted dose toxicity			
	Compo	onents:			
	Specie NOAEL LOAEL Applica Exposu	acid anhydrous: s: Rat .: 4,000 mg/kg .: 8,000 mg/kg tion Route: Oral ire time: 10 d 2, 4, 8, 16 g/kg bw/day			

Citric Acid Anhydrous

Version 1.1 US / EN	Revision Date: 06/22/2017		DS Number: 00000000123	Date of last issue: 06/16/2017 Date of first issue: 06/16/2017				
Asp	Aspiration toxicity							
<u>Cor</u>	nponents:							
	ic acid anhydrous: aspiration toxicity classific	catio	n					
Exp	perience with human ex	posi	ure					
<u>Pro</u>	duct:							
Inha	alation	:		espiratory system formation available.				
Skir	n contact	:	Target Organs: S Symptoms: May	kin cause skin irritation in susceptible persons.				
Eye	contact	:	Target Organs: E Symptoms: Redn					
Inge	estion	:	Target Organs: D Symptoms: No in	igestive organs formation available.				

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Citric acid anhydrous:		
Toxicity to fish	:	LC50 (Leuciscus idus (Golden orfe)): 440 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Daphnia magna (Water flea)): 1,535 mg/l Exposure time: 24 h Test Type: static test
Toxicity to algae	:	NOEC (Scenedesmus quadricauda (Green algae)): 425 mg/l Exposure time: 8 d Test Type: static test
Toxicity to microorganisms	:	TT (Pseudomonas putida): > 10,000 mg/l Exposure time: 16 h

Persistence and degradability

Components:

Citric acid anhydrous:		
Biodegradability	:	Biodegradation: 97 % Testing period: 28 d Method: OECD Test Guideline 301B Readily biodegradable.

Citric Acid Anhydrous

Vers 1.1 US /	-	Revision Date: 06/22/2017		0S Number: 0000000123	Date of last issue: 06/16/2017 Date of first issue: 06/16/2017
				Biodegradation: 7 Testing period: 1 Method: OECD To Readily biodegrad	9 d est Guideline 301E
	Biochemical Oxygen De- mand (BOD)		:	526 mg/g	
	Chemic (COD)	al Oxygen Demand	:	728 mg/g	
	Physico ity	o-chemical removabil-	:	Readily biodegrad	lable.
		umulative potential			
	Produce Partition octanol	n coefficient: n-	:	log Pow: -1.80. Calculation	2
	Compo	onents:			
		icid anhydrous: umulation	:		scible in water and readily biodegradable in il. Accumulation is not expected.
		y in soil a available			
	Other a	adverse effects			
	Compo	onents:			
		cid anhydrous: of PBT and vPvB ment	:	This substance is lating and toxic (P	not considered to be persistent, bioaccumu- BT).
	Addition mation	nal ecological infor-	:	This product has	no known ecotoxicological effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	Where possible recycling is preferred to disposal or incinera- tion. Can be landfilled or incinerated, when in compliance with local regulations.
Contaminated packaging	Empty containers should be taken to an approved waste han- dling site for recycling or disposal. Dispose of as unused product.

Citric Acid Anhydrous

Version	Revision Date:	SDS Number:	Date of last issue: 06/16/2017
1.1	06/22/2017	10000000123	Date of first issue: 06/16/2017
US / EN			

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

DOT Not regulated as a hazardous material

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

SARA 311/312 Hazards	Acute Health Hazard Fire Hazard				
SARA 302 :	No chemicals in this material are subject to the reporting re- quirements of SARA Title III, Section 302.				
SARA 313 :	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.				
Clean Water Act					
This product does not contain an 307	y toxic pollutants listed under the U.S. Clean Water Act Section				
California Prop. 65	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other re- productive harm.				
The components of this product are reported in the following inventories:					
EINECS :	On the inventory, or in compliance with the inventory				
TSCA :	On TSCA Inventory				
TSCA_12b :	Not applicable				
DSL :	All components of this product are on the Canadian DSL				

: All components of this product are on the Canadian DSL

REACH On the inventory, or in compliance with the inventory :

SECTION 16. OTHER INFORMATION

Citric Acid Anhydrous

Version	Revision Date:	SDS Number:	Da
1.1	06/22/2017	10000000123	Da
US / EN			

Date of last issue: 06/16/2017 Date of first issue: 06/16/2017

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI -Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ -Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB -Very Persistent and Very Bioaccumulative

Revision Date : 06/22/2017

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Section 1 Chemical Product and Company Identification

HOME SCIENCE TOOLS

665 Carbon Street Billings, MT 59102 800-860-6272 www.homesciencetools.com

Page E1 of E2

CHEMTREC 24 Hour Emergency USA Phone Number (800) 424-9300 1 703-741-5500 (from anywhere in the world). For laboratory and industrial use only. Not for drug, food or household use.

Product	MAGNESIUM SULFATE, HEPTAHYDRATE	
Synonyms	Epsom Salts	
Section 2	Hazards Identification	
This substa to the Globa Chemicals. Signal word Pictograms Target orga GHS Classi GHS Label i	nce or mixture has not been classified as hazardous according ally Harmonized System (GHS) of Classification and Labeling of	Supplementary information: Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

 Section 3
 Composition / Information on Ingredients

 Chemical Name
 CAS #
 %
 EINECS

 Magnesium sulfate
 10034-99-8
 100%
 231-298-2 (anhydrous)

 Section 4
 First Aid Measures
 First Aid Measures
 First Aid Measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: MAY CAUSE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Recover for reuse if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8	Exposure Controls / Personal Protection				
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)	
	Magnesium sulfate	None established	None established	None established	

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Section 9	Physical & Chemica	al Properties					
Odor: No odor. Odor threshold: Da pH: Data not availab	ole. point: Data not available not available	Flammability Explosion lin Vapor pressu Vapor density Relative dens	rate (=1): Data not a (solid/gas): Data not nits: Lower / Upper: I re (mm Hg): Data not (Air = 1): Data not av ity (Specific gravity):): Appreciable in water	available. Data not available available /ailable 2.7	Auto-ignitic Decomposi Viscosity: Molecular f		Data not available re: Data not available le.
Section 10	Stability & Reactivit	v					
Chemical stability:	-	Hazard	lous polymerization:	Will not occur.			
Incompatible mater	ials: None known.						
·	osition products: Sulfu	ır oxides					
·····	p						
Section 11	Toxicological Inform	nation					
Acute toxicity: Dat Skin corrosion/irrit Serious eye damag Respiratory or skin Germ cell mutagen Carcinogenity: Dat NTP: No component IARC: No componer OSHA: No componer Reproductive toxic STOT-single expos STOT-repeated exp Aspiration hazard: Potential health eff Inhalation: May cau Ingestion: Ingestion Skin: Contact with s Eyes: Contact with o Signs and symptom not available. Exerc	a not available ation: Data not available e/irritation: Data not available is ensitization: Data not sensitization: Data not icity: Data not available ta not available of this product present a nt of this product present ify: Data not available ure: Data not available Data not available ects: se respiratory irritation. may cause nausea, vom kin may cause irritation.	e ailable available t levels greater than or at levels greater than o at levels greater than the le iting and diarrhea. best of our knowledge es to minimize potentia	r equal to 0.1% is iden or equal to 0.1% is iden the chemical, physical	ified as probable, po tified as a carcinoge	ossible or confiri en or potential c	med human carc arcinogen by OS	0,
Section 12	Ecological Informat	ion					
Toxicity to daphnia Toxicity to algae: S Persistence and de Mobility in soil: No	mbusia affinis (fish, fresh and other aquatic inver- cenedesmus subspicatus gradability: No data ava data available sts: An environmental ha Disposal Considera	rtebrates: Daphnia ma s (Algae), EC50: 2,700 ailable Bioaccun PBT and zard cannot be exclude	gna (Crustacea), EC50 mg/L/ 72 hours nulative potential: No vPvB assessment: N	data available o data available			
	•				lationa	why to creat	enteiner Otate
regulations may be	e different. Dispose of	in accordance with a	alog-size quantities of all local, state and fee	leral regulations o	r contract with	a licensed che	ontainer. State and/or local mical disposal agency.
Section 14	Transport Informat			<u> </u>			
UN/NA number:	•	Shipping name:					
Hazard class: No Exceptions: No	ot applicable	Packing group: 1 2016 ERG Guide	Not applicable	Reportable Qu	antity: No	Ма	rine pollutant: No
Section 15	Regulatory Informa	tion					
A chemical is considere	d to be listed if the CAS num	ber for the anhydrous for	m is on the Inventory list.				
Compone	ent	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Magnesium sulfate		Listed	Not listed	Not listed	Listed	Not listed	This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.
Section 16	Other Information						
dent determinations of	suitability and completeness ency for Research on Cance	of information from all sou	urces to assure proper use	of these materials and	d the safety and h	ealth of employees	ered by them and must make indepen- . NTP: National Toxicology Program, osure, RE: Repeated Exposure,

Form 06/2015



Material safety data sheet Gel Spice Company, Inc. 48 Hook Road Bayonne, NJ, 07002

Tel: 201-339-0700

Blue Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) Page 1

1.1. Identification

Product form : Mixture Product name : Blue Food Color Product code : S9123 1.2. Relevant identified uses of the substance or mixture and uses advised against No additional information available 1.3. Details of the supplier of the safety data sheet Shank's Extracts, Inc. 350 Richardson Drive Lancaster, PA 17603 T 717-393-4441 - F 717-393-3148 www.shanks.com

1.4. Emergency telephone number Emergency number : CHEMTREC: 1-800-424-9300

2.1. Classification of the substance or mixture

Classification (GHS-US) Skin corrosion/irritation Category 2 H315 Full text of H statements : see section 16 2.2. Label elements **GHS-US** labeling Hazard pictograms (GHS-US) : GHS07 Signal word (GHS-US) : Warning Hazard statements (GHS-US) : H315 - Causes skin irritation Precautionary statements (GHS-US) : P264 - Wash hands and any affected areas thoroughly after handling P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of a doctor, a POISON CENTER P321 - Specific treatment see doctor if affected P332+P313 - If skin irritation occurs: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse 2.3. Other hazards No additional information available 2.4. Unknown acute toxicity (GHS US) Not applicable

3.1. Substance

3.2. Mixture

Blue Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 2/6

Name Product identifier % Classification (GHS-US) trade name component* (CAS No) Trade Secret 11.626284704 4598 Skin Irrit. 2, H315 *Chemical name, CAS number and/or exact concentration have

been withheld as a trade secret Full text of H-phrases: see section 16

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Allow victim to breathe fresh

air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed

by warm water rinse. Wash skin with plenty of water. Take off contaminated clothing. If skin

irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persist. Rinse eyes with water as a precaution. First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison

center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use. Symptoms/injuries after skin contact : Irritation.

4.3. Indication of any immediate medical attention and

special treatment needed Treat symptomatically.

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand. Unsuitable extinguishing media : Do not use a heavy water stream

5.2. Special hazards arising from the substance or mixture

Not applicable

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Do

not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes. 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal

protection".

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

Blue Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 3/6

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wash hands and other exposed areas with mild

soap and water before eating, drinking or smoking and when leaving work. Provide good

ventilation in process area to prevent formation of vapor. Avoid contact with skin and eyes.

Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : acids and bases. Keep container closed when not in use. Store in a well-ventilated place. Keep cool.

Incompatible products : Strong bases. Strong acids. Incompatible materials : Sources of ignition. Direct sunlight.

8.1. Control parameters

trade name component

OSHA OSHA PEL (TWA) (mg/m³) 15 mg/m³ (mist, total particulate)

5 mg/m³ (mist, respirable fraction) 8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves/protective clothing/eye protection/face protection. protective gloves. Eye protection : Chemical goggles or safety glasses. Safety glasses.

Škin and body protection : Wear suitable protective clothing. Respiratory protection : Wear appropriate mask. Environmental exposure controls : Avoid release to the environment.

Other information : Do not eat, drink or smoke during use.

9.1. Information on basic physical and chemical properties

Physical state : Liquid Color : dark blue Odor : characteristic Odor threshold : No data available pH : No data available Melting point : Not applicable Freezing point : No data available Boiling point : No data available Flash point : > 100 °C Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : No data available Explosion limits : No data available Explosive properties : No data available Oxidizing properties : No data available Vapor pressure : No data available Relative density : 1.035 - 1.25 Relative vapor density at 20 °C : No data available Solubility : Water: Solubility in water of component(s) of the mixture : • : 576 g/l (at 20 °C) • : 630 g/l (at 20 °C) Log Pow : No data available

Blue Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 4/6 Auto-ignition temperature : No data available Decomposition temperature : No data available Viscosity : No data available Viscosity ; No data available Viscosity, kinematic : No data available Viscosity, dynamic : No data available 9.2. Other information No additional information available

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport. **10.2. Chemical stability** Not established. **10.3. Possibility of hazardous reactions** Not established. **10.4. Conditions to avoid** Direct sunlight. Extremely high or low temperatures. 10.5. Incompatible materials Strong acids. Strong bases. 10.6. Hazardous decomposition products fume. Carbon monoxide. Carbon dioxide.

11.1. Information on toxicological effects Acute toxicity : Not classified trade name component LD50 oral rat 12600 mg/kg LD50 dermal rabbit > 10 g/kg LC50 inhalation rat (mg/l) > 570 mg/m³ (Exposure time: 1 h) ATE US (oral) 12600.000 mg/kg body weight Skin corrosion/irritation : Causes skin irritation. Serious eye damage/irritation : Not classified Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified Specific target organ toxicity (repeated exposure) : Not classified Aspiration hazard : Not classified Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not

met.

Symptoms/injuries after skin contact : Irritation.

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

trade name component

LC50 fish 1 51 - 57 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

Blue Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 5/6

12.2. Persistence and degradability

Blue Food Color

Persistence and degradability Not established. 12.3. Bioaccumulative potential

Blue Food Color

Bioaccumulative potential Not established. trade name component BCF fish 1 (no bioaccumulation)

Log Pow -1.76

12.4. Mobility in soil No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions. Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Ecology - waste materials : Avoid release to the environment.

Department of Transportation (DOT)

In accordance with DOT Not regulated for transport TDG No additional information available Transport by sea No additional information available Air transport No additional information available

15.1. US Federal regulations

trade name component

Listed on the United States TSCA (Toxic Substances Control Act) inventory EPA TSCA Regulatory Flag Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule

15.2. International regulations CANADA

trade name component

Listed on the Canadian DSL (Domestic Sustances List) WHMIS Classification Uncontrolled product according to WHMIS classification criteria **EU-Regulations**

trade name component Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) National regulations

Blue Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02



Material safety data sheet Gel Spice Company, Inc. 48 Hook Road Bayonne, NJ, 07002 Tel: 201-339-0700

Green Food Color (SENSITIZER-Y5)

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 03/03/2016 EN (English US) Page 1

1.1. Identification

Product form : Mixture Product name : Green Food Color (SENSITIZER-Y5) Product code : S90109 **1.2. Relevant identified uses of the substance or mixture and uses advised against** No additional information available **1.3. Details of the supplier of the safety data sheet** Shank's Extracts, Inc. 350 Richardson Drive Lancaster, PA 17603 T 717-393-4441 - F 717-393-3148 www.shanks.com **1.4. Emergency telephone number** Emergency number : CHEMTREC: 1-800-424-9300

2.1. Classification of the substance or mixture Classification (GHS-US)

Skin corrosion/irritation Category 2 H315 Full text of H statements : see section 16 2.2. Label elements **GHS-US** labeling Hazard pictograms (GHS-US) : GHS07 Signal word (GHS-US) : Warning Hazard statements (GHS-US) : H315 - Causes skin irritation Precautionary statements (GHS-US) : P264 - Wash hands and any affected areas thoroughly after handling P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of a doctor, a POISON CENTER P321 - Specific treatment see doctor if affected P332+P313 - If skin irritation occurs: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse 2.3. Other hazards No additional information available 2.4. Unknown acute toxicity (GHS US) Not applicable

3.1. Substance Not applicable

3.2. Mixture

Green Food Color (SENSITIZER-Y5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 03/03/2016 EN (English US) 2/5

Name Product identifier % Classification (GHS-US) trade name component* (CAS No) Trade Secret 15.699457819 7336

Skin Irrit. 2, H315 *Chemical name, CAS number and/or exact concentration have been withheld as a trade secret Full text of H-phrases: see section 16

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention. First-aid measures after eye contact : Rinse eyes with water as a precaution. First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell. 4.2. Most important symptoms and effects, both acute and delayed Symptoms/injuries after skin contact : Irritation. 4.3. Indication of any immediate medical attention and special treatment needed Treat symptomatically.

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

6.1. Personal precautions, protective equipment and emergency procedures 6.1.1. For non-emergency personnel Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal

protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

8.1. Control parameters

Green Food Color (SENSITIZER-Y5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

03/03/2016 EN (English US) 3/5 trade name component

OSHA OSHA PEL (TWA) (mg/m³) 15 mg/m³ (mist, total particulate)

5 mg/m³ (mist, respirable fraction)

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Hand protection : Protective gloves.

Eye protection : Safety glasses.

Skin and body protection : Wear suitable protective clothing. Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Environmental exposure controls : Avoid release to the

environmental exposure controls : Avoid release to the environment.

9.1. Information on basic physical and chemical properties

Physical state : Liquid Color : Green Odor : Bland Odor threshold : No data available pH : No data available Melting point : Not applicable Freezing point : No data available Boiling point : No data available Flash point : > 100 °C Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : No data available Explosion limits : No data available Explosive properties : No data available Oxidizing properties : No data available Vapor pressure : No data available Relative density : 1.0593 Relative vapor density at 20 °C : No data available Solubility : Water: Solubility in water of component(s) of the mixture : • : 576 g/l (at 20 °C) • : 630 g/l (at 20 °C) Log Pow : No data available

Auto-ignition temperature : No data available Decomposition temperature : No data available Viscosity : No data available Viscosity, kinematic : No data available Viscosity, dynamic : No data available 9.2. Other information

No additional information available

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport. **10.2. Chemical stability** Stable under normal conditions. **10.3. Possibility of hazardous reactions** No dangerous reactions known under normal conditions of

No dangerous reactions known under normal conditions of use. 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

Green Food Color (SENSITIZER-Y5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 03/03/2016 EN (English US) 4/5 10.5. Incompatible materials No additional information available 10.6. Hazardous decomposition products Under normal conditions of storage and use, hazardous

decomposition products should not be produced.

11.1. Information on toxicological effects

Acute toxicity : Not classified trade name component LD50 oral rat 12600 mg/kg LD50 dermal rabbit > 10 g/kg LC50 inhalation rat $(mg/l) > 570 mg/m^3$ (Exposure time: 1 h) ATE US (oral) 12600.000 mg/kg body weight Skin corrosion/irritation : Causes skin irritation. Serious eye damage/irritation : Not classified Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified Specific target organ toxicity (repeated exposure) : Not classified Aspiration hazard : Not classified Symptoms/injuries after skin contact : Irritation.

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

trade name component

LC50 fish 1 51 - 57 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static]) 12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

trade name component

BCF fish 1 (no bioaccumulation) Log Pow -1.76 **12.4. Mobility in soil** No additional information available **12.5. Other adverse effects** Effect on the global warming : No known ecological damage caused by this product.

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Green Food Color (SENSITIZER-Y5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 03/03/2016 EN (English US) 5/5

Department of Transportation (DOT)

In accordance with DOT Not regulated for transport **TDG** No additional information available **Transport by sea** No additional information available **Air transport** No additional information available

15.1. US Federal regulations

trade name component

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule

15.2. International regulations CANADA

trade name component

Listed on the Canadian DSL (Domestic Sustances List) WHMIS Classification Uncontrolled product according to WHMIS classification criteria EU-Regulations

trade name component

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

trade name component

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical

Substances) inventory

Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on INSQ (Mexican national Inventory of Chemical Substances) Listed on Turkish inventory of chemical

15.3. US State regulations

trade name component

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance

U.S. - Pennsylvania - RTK (Right to Know) List

Full text of H-phrases:

H315 Causes skin irritation SDS US (GHS HazCom 2012) This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product



Material safety data sheet

Gel Spice Company, Inc. 48 Hook Road Bayonne, NJ, 07002 Tel: 201-339-0700

Red Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) Page 1

1.1. Identification

Product form : Mixture Product name : Red Food Color Product code : S9119 **1.2. Relevant identified uses of the substance or mixture and uses advised against** No additional information available **1.3. Details of the supplier of the safety data sheet** Shank's Extracts, Inc. 350 Richardson Drive Lancaster, PA 17603 T 717-393-4441 - F 717-393-3148 www.shanks.com

1.4. Emergency telephone number Emergency number : CHEMTREC: 1-800-424-9300

2.1. Classification of the substance or mixture

Classification (GHS-US) Skin corrosion/irritation Category 2 H315 Full text of H statements : see section 16 2.2. Label elements **GHS-US** labeling Hazard pictograms (GHS-US) : GHS07 Signal word (GHS-US) : Warning Hazard statements (GHS-US) : H315 - Causes skin irritation Precautionary statements (GHS-US) : P264 - Wash hands and any affected areas thoroughly after handling P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of a doctor, a POISON CENTER P321 - Specific treatment see doctor if affected P332+P313 - If skin irritation occurs: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse 2.3. Other hazards No additional information available 2.4. Unknown acute toxicity (GHS US) Not applicable

3.1. Substance Not applicable

3.2. Mixture

Red Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 2/6

Name Product identifier % Classification (GHS-US) trade name component* (CAS No) Trade Secret 15.141151453 3923 Skin Irrit. 2, H315 *Chemical name, CAS number and/or exact concentration have

been withheld as a trade secret Full text of H-phrases: see section 16

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Allow victim to breathe fresh

air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed

by warm water rinse. Wash skin with plenty of water. Take off contaminated clothing. If skin

irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persist. Rinse eyes with water as a precaution. First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison

center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use. Symptoms/injuries after skin contact : Irritation.

4.3. Indication of any immediate medical attention and

special treatment needed

Treat symptomatically.

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand. Unsuitable extinguishing media : Do not use a heavy water stream

5.2. Special hazards arising from the substance or mixture

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Do

not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes. 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal

protection".

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

Red Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 3/6

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wash hands and other exposed areas with mild

soap and water before eating, drinking or smoking and when leaving work. Provide good

ventilation in process area to prevent formation of vapor. Avoid contact with skin and eyes.

Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : acids and bases. Keep container closed when not in use. Store in a well-ventilated place. Keep cool.

Incompatible products : Strong bases. Strong acids. Incompatible materials : Sources of ignition. Direct sunlight.

8.1. Control parameters

trade name component

OSHA OSHA PEL (TWA) (mg/m³) 15 mg/m³ (mist, total particulate)

5 mg/m³ (mist, respirable fraction) 8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves/protective clothing/eye protection/face protection. protective gloves. Eye protection : Chemical goggles or safety glasses. Safety glasses.

Škin and body protection : Wear suitable protective clothing. Respiratory protection : Wear appropriate mask. Environmental exposure controls : Avoid release to the environment.

Other information : Do not eat, drink or smoke during use.

9.1. Information on basic physical and chemical properties

Physical state : Liquid Color : red Odor : characteristic Odor threshold : No data available pH : No data available Melting point : Not applicable Freezing point : No data available Boiling point : No data available Flash point : > 100 °C Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : No data available Explosion limits : No data available Explosive properties : No data available Oxidizing properties : No data available Vapor pressure : No data available Relative density : 1.06 - 1.07 Relative vapor density at 20 °C : No data available Solubility : Water: Solubility in water of component(s) of the mixture : • : 576 g/l (at 20 °C) • : 630 g/l (at 20 °C) Log Pow : No data available

Red Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 4/6 Auto-ignition temperature : No data available Decomposition temperature : No data available Viscosity : No data available Viscosity, kinematic : No data available Viscosity, dynamic : No data available 9.2. Other information No additional information available

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport. **10.2. Chemical stability** Not established. **10.3. Possibility of hazardous reactions** Not established. **10.4. Conditions to avoid** Direct sunlight. Extremely high or low temperatures. **10.5. Incompatible materials** Strong acids. Strong bases. **10.6. Hazardous decomposition products** fume. Carbon monoxide. Carbon dioxide.

11.1. Information on toxicological effects Acute toxicity : Not classified trade name component LD50 oral rat 12600 mg/kg LD50 dermal rabbit > 10 g/kg LC50 inhalation rat (mg/l) > 570 mg/m³ (Exposure time: 1 h) ATE US (oral) 12600.000 mg/kg body weight Skin corrosion/irritation : Causes skin irritation. Serious eye damage/irritation : Not classified Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified Specific target organ toxicity (repeated exposure) : Not classified Aspiration hazard : Not classified Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not

met.

Symptoms/injuries after skin contact : Irritation.

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

trade name component

LC50 fish 1 51 - 57 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

Red Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 5/6

12.2. Persistence and degradability

Red Food Color

Persistence and degradability Not established. 12.3. Bioaccumulative potential

Red Food Color

Bioaccumulative potential Not established. trade name component BCF fish 1 (no bioaccumulation)

Log Pow -1.76

12.4. Mobility in soil No additional information available

12.5. Other adverse effects Effect on the global warming : No known ecological damage caused by this product. Other information : Avoid release to the environment.

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions. Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Ecology - waste materials : Avoid release to the environment.

Department of Transportation (DOT)

In accordance with DOT Not regulated for transport **TDG** No additional information available **Transport by sea** No additional information available **Air transport** No additional information available

15.1. US Federal regulations

trade name component Listed on the United States TSCA (Toxic Substances Control Act) inventory EPA TSCA Regulatory Flag Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule

15.2. International regulations CANADA

trade name component

Listed on the Canadian DSL (Domestic Sustances List) WHMIS Classification Uncontrolled product according to WHMIS classification criteria EU-Regulations

trade name component

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) National regulations

Red Food Color

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 6/6



Material safety data sheet Gel Spice Company, Inc. 48 Hook Road Bayonne, NJ, 07002 Tel: 201-339-0700

Yellow Food Color (SENSITIZER Y-5)

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) Page 1

1.1. Identification

Product form : Mixture Product name : Yellow Food Color (SENSITIZER Y-5) Product code : S9118 **1.2. Relevant identified uses of the substance or mixture and uses advised against** No additional information available **1.3. Details of the supplier of the safety data sheet** Shank's Extracts, Inc. 350 Richardson Drive Lancaster, PA 17603 T 717-393-4441 - F 717-393-3148 www.shanks.com **1.4. Emergency telephone number** Emergency number : CHEMTREC: 1-800-424-9300

2.1. Classification of the substance or mixture Classification (GHS-US)

Skin corrosion/irritation Category 2 H315 Full text of H statements : see section 16 2.2. Label elements **GHS-US** labeling Hazard pictograms (GHS-US) : GHS07 Signal word (GHS-US) : Warning Hazard statements (GHS-US) : H315 - Causes skin irritation Precautionary statements (GHS-US) : P264 - Wash hands and any affected areas thoroughly after handling P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of a doctor, a POISON CENTER P321 - Specific treatment see doctor if affected P332+P313 - If skin irritation occurs: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse 2.3. Other hazards No additional information available 2.4. Unknown acute toxicity (GHS US) Not applicable

3.1. Substance

Not applicable 3.2. Mixture

Yellow Food Color (SENSITIZER Y-5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

02/17/2016 EN (English US) 2/6 Name Product identifier % Classification (GHS-US)

trade name component* (CAS No) Trade Secret 15.256641733 2989 Skin Irrit. 2, H315

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret Full text of H-phrases: see section 16

Full text of H-phrases: see section 16

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). First-aid measures after inhalation : Rémove person to fresh air and keep comfortable for breathing. Allow victim to breathe fresh air. Allow the victim to rest. First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention. First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist. Rinse eyes with water as a precaution. First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center/doctor/physician if you feel unwell. 4.2. Most important symptoms and effects, both acute and delayed Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use. Symptoms/injuries after skin contact : Irritation. 4.3. Indication of any immediate medical attention and special treatment needed

5.1. Extinguishing media

Treat symptomatically.

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Do

not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes. 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal

protection".

Emergency procedures : Ventilate area. 6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

Yellow Food Color (SENSITIZER Y-5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 3/6

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wash hands and other exposed areas with mild

soap and water before eating, drinking or smoking and when leaving work. Provide good

ventilation in process area to prevent formation of vapor. Avoid contact with skin and eyes.

Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : acids and bases. Keep container closed when not in use. Store in a well-ventilated place. Keep cool. Incompatible products : Strong bases. Strong acids. Incompatible materials : Sources of ignition. Direct sunlight.

8.1. Control parameters

trade name component OSHA OSHA PEL (TWA) (mg/m³) 15 mg/m³ (mist, total

particulate) 5 mg/m³ (mist, respirable fraction)

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves/protective clothing/eye protection/face protection. protective gloves. Eye protection : Chemical goggles or safety glasses. Safety glasses.

Skin and body protection : Wear suitable protective clothing. Respiratory protection : Wear appropriate mask. Environmental exposure controls : Avoid release to the environment.

Other information : Do not eat, drink or smoke during use.

9.1. Information on basic physical and chemical properties

Physical state : Liquid Color : clear Yellow orange Odor : characteristic Odor threshold : No data available pH : No data available Melting point : Not applicable Freezing point : No data available Boiling point : No data available Flash point : > 100 °C Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : No data available Explosion limits : No data available Explosive properties : No data available Oxidizing properties : No data available Vapor pressure : No data available Relative density : 1.05 - 1.07 Relative vapor density at 20 °C : No data available Solubility : Water: Solubility in water of component(s) of the mixture : • : 576 g/l (at 20 °C) • : 630 g/l (at 20 °C) Log Pow : No data available

Yellow Food Color (SENSITIZER Y-5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 4/6 Auto-ignition temperature : No data available Decomposition temperature : No data available Viscosity : No data available Viscosity, kinematic : No data available Viscosity, dynamic : No data available 9.2. Other information

No additional information available

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport. **10.2. Chemical stability** Not established. **10.3. Possibility of hazardous reactions** Not established. **10.4. Conditions to avoid** Direct sunlight. Extremely high or low temperatures. **10.5. Incompatible materials** Strong acids. Strong bases. **10.6. Hazardous decomposition products** fume. Carbon monoxide. Carbon dioxide.

11.1. Information on toxicological effects

Acute toxicity : Not classified trade name component LD50 oral rat 12600 mg/kg LD50 dermal rabbit > 10 g/kg LC50 inhalation rat (mg/l) > 570 mg/m³ (Exposure time: 1 h) ATE US (oral) 12600.000 mg/kg body weight Skin corrosion/irritation : Causes skin irritation. Serious eye damage/irritation : Not classified Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified Specific target organ toxicity (repeated exposure) : Not classified Aspiration hazard : Not classified Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/injuries after skin contact : Irritation.

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. trade name component

LC50 fish 1 51 - 57 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

Yellow Food Color (SENSITIZER Y-5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 5/6 **12.2. Persistence and degradability**

Yellow Food Color (SENSITIZER Y-5)

Persistence and degradability Not established.

12.3. Bioaccumulative potential Yellow Food Color (SENSITIZER Y-5)

Bioaccumulative potential Not established.

trade name component BCF fish 1 (no bioaccumulation)

Log Pow -1.76

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product. Other information : Avoid release to the environment.

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions. Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Ecology - waste materials : Avoid release to the environment.

Department of Transportation (DOT)

In accordance with DOT Not regulated for transport **TDG** No additional information available **Transport by sea** No additional information available **Air transport** No additional information available

15.1. US Federal regulations

trade name component

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule

15.2. International regulations CANADA

trade name component

Listed on the Canadian DSL (Domestic Sustances List) WHMIS Classification Uncontrolled product according to WHMIS classification criteria

EU-Regulations

trade name component Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) National regulations

Yellow Food Color (SENSITIZER Y-5)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations 02/17/2016 EN (English US) 6

DOC ID: 41171.477211.717241

Product: Raspberry

Product :

SKU : ras

Page 1 of 8 2014-01-29

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade Name: Raspberry

Product/Sales No:

1.2 Relevant indentified product use

Intended use: Compound used in customer substance/mixture/product

1.3 Details of the manufacturer/supplier of the saftey data sheet

Wellington Fragrance 33306 Glendale St. Livonia, MI 48150 USA 734-261-5531 Fax 734-261-5571 wellingtonfragrance.com

1.4 Emergency telephone number

(800) 255-3924 Domestic USA, Canada, Puerto Rico, and US Virgin Islands

+1 813 248-0585 International (CHEMTEL MIS 0000533)

2. Hazards Identification

2.1 Classification of the substance or mixture

This mixture has not been tested as a whole. The effects, listed below, are based on evaluation of individual components in accordance with the provisions of the regulation(s) noted below.

Classification according to GHS Regulation (EC) No 1272/2008

Aquatic Acute Toxicity, Category 2	:
Flammable Liquids, Category 4	H227: Combustible liquid
Acute Toxicity Oral, Category 5	H303: May be harmful if swallowed
Acute Toxicity Dermal, Category 5	H313: May be harmful in contact with skin
Skin Corrosion/Irritation, Category 2	H315: Causes skin irritation
Sensitization, Skin, Category 1B	H317: May cause an allergic skin reaction
Acute Toxicity Inhalation, Category 4	H332: Harmful if inhaled
Carcinogenicity, Category 2	H351: Suspected of causing cancer
Aquatic Chronic Toxicity, Category 2	H411: Toxic to aquatic life with long lasting effects
anification OCUA (Dravisions 4040 4000 of title	

Classification OSHA (Provisions 1910.1200 of title 29)

Flammability	Class IIIA Combustible Liquid	
Acute Dermal/Eye	12 : Causes moderate skin irritation.	
	15 : May cause eye irritation.	
Acute Oral	3 : May be harmful if swallowed or if aspirated into the lungs	
Sensitization/Allergic Response	31 : May cause allergic skin reaction.	
Target Organ Effects	28 : Prolonged or repeated Dermal Exposure may cause damage to: kidneys, skin	
Carcinogenicity	This mixture contains ingredients identified as carcinogens, at 0.1 or greater, by the following:None [] ACGIH [] IARC [] NTP [] OSHA []	

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

DOC ID: 41171.477211.717241

Page 2 of 8

2014-01-29

Product: Raspberry

Product :

SKU : ras





Signal Word: Warning

Hazard statments

H227	Combustible liquid
H303	May be harmful if swallowed
H313	May be harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H332	Harmful if inhaled
H351	Suspected of causing cancer
H411	Toxic to aquatic life with long lasting effects

Precautionary Statements

Prevention:

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P235	Keep cool
P264	Wash hands thoroughly after handling
P271	Use only outdoors or in a well-ventilated area
P272	Contaminated work clothing should not be allowed out of the workplace
P273	Avoid release to the environment
P281	Use personal protective equipment as required
Response:	
P302 + P352	IF ON SKIN: Wash with soap and water
P304 + P312 + P340	IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell Remove victim to fresh air and keep at rest in a position comfortable for breathing
P308 + P313	IF exposed or concerned: Get medical advice/attention
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P333 + P313	If skin irritation or a rash occurs: Get medical advice/attention
P362	Take off contaminated clothing and wash before reuse
P363	Wash contaminated clothing before reuse
P370 + P378	In case of fire: Use Carbon dioxide (CO2), Dry chemical, or Foam for extinction. Do not use a direct water jet on burning material
P391	Collect Spillage

2.3 Other Hazards

no data available

3. Composition/Information on Ingredients

3.1 Mixtures

This product is a complex mixture of ingredients, which contains among others the following substance(s), presenting a health or environmental hazard within the meaning of the UN Globally Harmonized System of Classification and Labeling of Chemicals (GHS):

DOC ID: 41171.477211.717241

Product:	Raspberry		
Product :			
SKU :	ras		

Page 3 of 8 2014-01-29

CAS# Ingredient	EC#	Conc. Range	GHS Classification	OSHA Classification
8050-15-5	232-476-2	50 - 60	H412	31
Methyl est	er of rosin (parti	ally hydrogenate	d)	
120-51-4	204-402-9	10 - 20	H302 H313 H411	28, 3
Benzyl Be	nzoate			
8008-57-9	232-433-8	5 - 10	H226 H304 H315 H410	12, 3, 31
Citrus aura	antium dulcis (O	range) oil		
110-27-0	203-751-4	2 - 5	H316	
lsopropyl r	nyristate			
141-97-9	205-516-1	2 - 5	H227 H303 H316	
Ethyl aceto	oacetate			
108-64-5	203-602-3	2 - 5	H226 H315	11
Ethyl isova	alerate			
103-37-7	203-105-1	1 - 2	H303 H316	
Benzyl but	tyrate			
77-83-8	201-061-8	1 - 2	H317 H411	11, 15
Ethyl meth	lylphenylglycida	te		
659-70-1	211-536-1	1 - 2	H227 H411	11, 15
Isoamyl iso	ovalerate			
104-21-2	203-185-8	1 - 2	H303 H315 H319	12, 15
p-Anisyl ad	cetate			
127-41-3	204-841-6	1 - 2	H316	11, 15
alpha-lond	one			
105-54-4	203-306-4	1 - 2	H226 H316	11
Ethyl butyr	Ethyl butyrate			
8030-89-5	232-449-5	0.1 - 1.0	H225 H314 H336 H351	
Rum ether	-			
See Section 16	See Section 16 for full text of GHS classification codes			

Total Hydrocarbon Content (w/w) = 5.35

4. First Aid Measures

4.1 Description of first aid measures		
Inhalation:	Remove from exposure site to fresh air and keep at rest. Obtain medical advice.	
Eye Exposure:	Flush immediately with water for at least 15 minutes. Contact physician if symptoms persist.	
Skin Exposure:	Remove contaminated clothes. Wash thoroughly with water (and soap). Contact physician if symptoms persist.	
Ingestion:	Rinse mouth with water and obtain medical advice.	
4.2 Most important symptoms and effect	s, both acute and delayed	
Symptoms:	no data available	
Risks:	Refer to Section 2.2 "Hazard Statements"	

DOC ID: 41171.477211.717241

Product:	Raspberry
Product :	
SKU :	ras

Page 4 of 8 2014-01-29

4.3 Indication of any immediate medical attention and special treatment needed

Treatment:	Refer to Section 2.2 "Response"	
5. Fire-Fighting measures 5.1 Extinguishing media		
Suitable:	Carbon dioxide (CO2), Dry chemical, Foam	
Unsuitable 5.2 Special hazards arising from the	Do not use a direct water jet on burning material om the substance or mixture	
During fire fighting: 5.3 Advice for firefighters	Water may be ineffective	
Further information:	Standard procedure for chemical fires	

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures 6.1

Avoid inhalation and contact with skin and eyes. A self-contained breathing apparatus is recommended in case of a major spill.

6.2 Environmental precautions

Keep away from drains, soil, and surface and groundwater.

Methods and materials for containment and cleaning up 6.3

Clean up spillage promptly. Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapors. Gross spillages should be contained by use of sand or inert powder and disposed of according to the local regulations.

6.4 Reference to other sections

Not Applicable

7. Handling and Storage

Precautions for safe handling 7.1

Apply according to good manufacturing and industrial hygiene practices with proper ventilation. Do not drink, eat or smoke while handling. Respect good personal hygiene.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry and ventilated area away from heat sources and protected from light in tightly closed original container. Avoid plastic and uncoated metal container. Keep air contact to a minimum.

7.3 Specific end uses

No information available

8. **Exposure Controls/Personal Protection**

8.1 Control parameters

Exposure Limits: Contains no substances with occupational exposure limit values

Engineering Controls: Use local exhaust as needed.

8.2 Exposure controls - Personal protective equipment

DOC ID: 41171.477211.717241

	Product: Raspberry	
	Product :	Page 5 of 8
	SKU : ras	2014-01-29
Eye protection:	Tightly sealed goggles, face shield, or safety glasses with brow guards and s	ide shields, etc.
	as may be appropriate for the exposure	

Respiratory protection:Avoid excessive inhalation of concentrated vapors. Apply local ventilation where appropriate.Skin protection:Avoid Skin contact. Use chemically resistant gloves as needed.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Conforms to Standard
Odor:	Conforms to Standard
Color:	Yellow
Viscosity:	Liquid
Freezing Point:	Not determined
Boiling Point:	Not determined
Melting Point:	Not determined
Flashpoint:	148 F (64.44 C)
Auto flammability:	Not determined
Explosive Properties:	None Expected
Oxidizing properties:	None Expected
Vapor Pressure (mmHg@20 C):	0.7865
%VOC:	14.5041
Specific Gravity @ 25 C:	1.0020
Density @ 25 C:	0.9990
Refractive Index @ 25 C:	1.5000
Soluble in:	Oil

10. Stability and Reactivity

10.1 Reactivity	None
10.2 Chemical stability	Stable
10.3 Possibility of hazardous reactions	None known
10.4 Conditions to avoid	None known
10.5 Incompatible materials	Strong oxidizing agents, strong acids, and alkalis
10.6 Hazardous decomposition products	None known

11. Toxicological Information

11.1 Toxicological Effects

Acute toxicity - Oral Acute toxicity - Dermal Acute toxicity - Inhalation (LD50: 3,502.31) May be harmful if swallowed (LD50: 4,346.76) May be harmful in contact with skin (LC50: 18.81) Harmful if inhaled

SDS Type: GHS / OSHA

DOC ID: 41171.477211.717241

Product:	Raspberry	
Product :		
SKU :	ras	

Page 6 of 8 2014-01-29

Skin corrosion / irritation	Causes skin irritation
Serious eye damage / irritation	Not classified - the classification criteria are not met
Respiratory sensitization	Not classified - the classification criteria are not met
Skin sensitization	May cause an allergic skin reaction
Germ cell mutagenicity	Not classified - the classification criteria are not met
Carcinogenicity	Suspected of causing cancer
Reproductive toxicity	Not classified - the classification criteria are not met
Specific target organ toxicity - single exposure	Not classified - the classification criteria are not met
Specific target organ toxicity - repeated exposure	Not classified - the classification criteria are not met
Aspiration hazard	Not classified - the classification criteria are not met

12. Ecological Information

12.1 Toxicity

Acute acquatic toxicity	
Chronic acquatic toxicity	Toxic to aquatic life with long lasting effects
Toxicity Data on soil	no data available
Toxicity on other organisms	no data available
12.2 Persistence and degradability	no data available
12.3 Bioaccumulative potential	no data available
12.4 Mobility in soil	no data available
12.5 Other adverse effects	no data available

13. Disposal Conditions

13.1 Waste treatment methods

Do not allow product to reach sewage systems. Dispose of in accordance with all local and national regulations. Send to a licensed waste management company. The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container.

14. Transport Information

Regulator		Class	Pack Group	Sub Risk	UN-nr.
U.S. DOT (Non-Bulk)		Not Regulated	- Not Dangerous	Goods	
Chemicals NOI					
ADR/RID (International Road	d/Rail)				
Environmentally Hazardous Liquid, n.o.s. IATA (Air Cargo)	Substance,	9	III		UN3082
Environmentally Hazardous Liquid, n.o.s. IMDG (Sea)	Substance,	9	Ш		UN3082

DOC ID: 41171.477211.717241

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	Product:	Rasp	oberry		
	Product :				Page 7 of 8
	SKU :	ras			2014-01-29
Environmentally Hazardous Liquid, n.o.s.	Substance,	9		111	UN3082
15. Regulatory Inf U.S. Federal Regulations:	ormation				
TSCA (Toxic Substance	Control Act):		All com	ponents of the substar	nce/mixture are listed or exempt
40 CFR(EPCRA, SARA, CERCLA and CAA) U.S. State Regulations:			This pro	duct contains NO com	nponents of concern.
California Proposition 65 Warning Canadian Regulations:			No War	ning required	
DSL / NDSL			100.03	of the components a	are listed or exempt.
16. Other Informa	tion				
GHS H-Statements refer	red to under se	ection	3		
H225 : Highly flammable liquid and vapor				H226 : Flammabl	e liquid and vapour
H227 : Combustible liquid			H302 : Harmful if swallowed		
H303 : May be harmful if swallowed			H304 : May be fatal if swallowed and enters airways		
H313 : May be harmful in	contact with sk	in	H314 : Causes severe skin burns and eye damage		evere skin burns and eye damage
H315 : Causes skin irritat	ion		H316 : Causes mild skin irritation		ild skin irritation
H317 : May cause an alle	ergic skin reactio	on	H319 : Causes serious eye irritation		erious eye irritation
H336 : May cause drowsiness or dizziness			H351 : Suspected of causing cancer		
,					

- H410 : Very toxic to aquatic life with long lasting effects
- H412 : Harmful to aquatic life with long lasting effects
- **Total Fractional Values**

(TFV) Risk

- (7.74) Aquatic Acute Toxicity, Category 2
- (1.80) Sensitization, Skin, Category 1B
- (3.15) Aquatic Chronic Toxicity, Category 2
- Department issuing data sheet:

Department E-mail address:

Remarks

(TFV) Risk (1.29) Skin Corrosion/Irritation, Category 2

H411 : Toxic to aquatic life with long lasting effects

(3.00) Carcinogenicity, Category 2

This safety data sheet is based on the properties of the material known to Wellington Fragrance at the time the data sheet was issued. The safety data sheet is intended to provide information for a health and safety assessment of the material and the circumstances, under which it is packaged, stored or applied in the workplace. For such a safety assessment Welling holds no responsibility. This document is not intended for quality assurance purposes.

DOC ID: 41171.477211.717241

Product:	Raspberry	
Product :		Page 8 of 8
SKU :	ras	2014-01-29

DOC ID: 41555.595008.11445469

Product: Vanilla Phthalate Free

Product :

SKU :

Page 1 of 7 2014-01-29

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade Name: Vanilla Phthalate Free

Product/Sales No:

1.2 Relevant indentified product use

Intended use: Compound used in customer substance/mixture/product

1.3 Details of the manufacturer/supplier of the saftey data sheet

Wellington Fragrance 33306 Glendale St. Livonia, MI 48150 USA 734-261-5531 Fax 734-261-5571 wellingtonfragrance.com

1.4 Emergency telephone number

(800) 255-3924 Domestic USA, Canada, Puerto Rico, and US Virgin Islands

+1 813 248-0585 International (CHEMTEL MIS 0000533)

2. Hazards Identification

2.1 Classification of the substance or mixture

This mixture has not been tested as a whole. The effects, listed below, are based on evaluation of individual components in accordance with the provisions of the regulation(s) noted below.

Classification according to GHS Regulation (EC) No 1272/2008

Aquatic Acute Toxicity, Category 1	:
Acute Toxicity Oral, Category 4	H302: Harmful if swallowed
Acute Toxicity Dermal, Category 5	H313: May be harmful in contact with skin
Sensitization, Skin, Category 1B	H317: May cause an allergic skin reaction
Eye Damage/Eye Irritation, Category 2A	H319: Causes serious eye irritation
Acute Toxicity Inhalation, Category 5	H333: May be harmful if inhaled
Carcinogenicity, Category 2	H351: Suspected of causing cancer
Aquatic Chronic Toxicity, Category 2	H411: Toxic to aquatic life with long lasting effects

Classification OSHA (Provisions 1910.1200 of title 29)

Flammability	Class IIIB Combustible Liquid		
Acute Dermal/Eye	12 : Causes moderate skin irritation.		
	15 : May cause eye irritation.		
	9 : Harmful if absorbed through the skin.		
Acute Oral	2 : Harmful if swallowed		
Sensitization/Allergic Response	31 : May cause allergic skin reaction.		
Target Organ Effects	26 : Prolonged or repeated ingestion may cause damage to: kidneys, liver, spleen, blood, bile duct.		
	28 : Prolonged or repeated Dermal Exposure may cause damage to: kidneys, skin		
Carcinogenicity	This mixture contains ingredients identified as carcinogens, at 0.1 or greater, by the following:None [] ACGIH [] IARC [] NTP [] OSHA []		

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Product: Vanilla Phthalate Free

Product :

SKU :

Page 2 of 7 2014-01-29

DOC ID: 41555.595008.11445469

Hazard pictograms





Signal Word: Warning

Hazard statments

H302	Harmful if swallowed
H313	May be harmful in contact with skin
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H333	May be harmful if inhaled
H351	Suspected of causing cancer
H411	Toxic to aquatic life with long lasting effects

Precautionary Statements

Prevention:

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P264	Wash hands thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P272	Contaminated work clothing should not be allowed out of the workplace
P273	Avoid release to the environment
P281	Use personal protective equipment as required
Response:	
P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth
P302 + P352	IF ON SKIN: Wash with soap and water
P304 + P312	IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes Remove contact lenses if present and easy to do. continue rinsing
P308 + P313	IF exposed or concerned: Get medical advice/attention
P333 + P313	If skin irritation or a rash occurs: Get medical advice/attention
P337 + P313	If eye irritation persists: Get medical advice/attention
P363	Wash contaminated clothing before reuse
P391	Collect Spillage

2.3 Other Hazards

no data available

3. Composition/Information on Ingredients

3.1 Mixtures

This product is a complex mixture of ingredients, which contains among others the following substance(s), presenting a health or environmental hazard within the meaning of the UN Globally Harmonized System of Classification and Labeling of Chemicals (GHS):

SDS Type: GHS / OSHA

DOC ID: 41555.595008.11445469

Product:	Vanilla Phthalate Free
Product :	
SKU :	

Page 3 of 7 2014-01-29

CAS# Ingredient	EC#	Conc. Range	GHS Classification	OSHA Classification
120-51-4	204-402-9	70 - 80	H302 H313 H411	28, 3
Benzyl B	enzoate			
121-32-4	204-464-7	10 - 20	H303 H320	
Ethyl van	illin			
91-64-5	202-086-7	5 - 10	H302 H317	12, 15, 2, 26, 31, 9
Coumarir	า			
121-33-5	204-465-2	2 - 5	H303 H319	31
Vanillin				
706-14-9	211-892-8	1 - 2	H316	
gamma-L	Decalactone			
8030-89-5	232-449-5	0.1 - 1.0	H225 H314 H336 H351	
Rum ethe	ər			
See Section ?	16 for full text of	GHS classification	tion codes	

Total Hydrocarbon Content (w/w) = 0.33

5.2 Special hazards arising from the substance or mixture

4. First Aid Measures

Unsuitable

During fire fighting:

5.3 Advice for firefighters Further information:

4.1 Description of first aid measures

Inhalation:	Remove from exposure site to fresh air and keep at rest. Obtain medical advice.
Eye Exposure:	Flush immediately with water for at least 15 minutes. Contact physician if symptoms persist.
Skin Exposure:	Remove contaminated clothes. Wash thoroughly with water (and soap). Contact physician if symptoms persist.
Ingestion:	Rinse mouth with water and obtain medical advice.
4.2 Most important symptoms and effects,	both acute and delayed
Symptoms:	no data available
Risks:	Refer to Section 2.2 "Hazard Statements"
4.3 Indication of any immediate medical att	ention and special treatment needed
Treatment:	Refer to Section 2.2 "Response"
5. Fire-Fighting measures	
5.1 Extinguishing media	
Suitable:	Carbon dioxide (CO2), Dry chemical, Foam

Water may be ineffective

Standard procedure for chemical fires

Do not use a direct water jet on burning material

DOC ID: 41555.595008.11445469

Product: Vanilla Phthalate Free

Product : SKU : Page 4 of 7 2014-01-29

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid inhalation and contact with skin and eyes. A self-contained breathing apparatus is recommended in case of a major spill.

6.2 Environmental precautions

Keep away from drains, soil, and surface and groundwater.

6.3 Methods and materials for containment and cleaning up

Clean up spillage promptly. Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapors. Gross spillages should be contained by use of sand or inert powder and disposed of according to the local regulations.

6.4 Reference to other sections

Not Applicable

7. Handling and Storage

7.1 Precautions for safe handling

Apply according to good manufacturing and industrial hygiene practices with proper ventilation. Do not drink, eat or smoke while handling. Respect good personal hygiene.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry and ventilated area away from heat sources and protected from light in tightly closed original container. Avoid plastic and uncoated metal container. Keep air contact to a minimum.

7.3 Specific end uses

No information available

8. Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits:	Contains no substances with occupational exposure limit values		
Engineering Controls:	Use local exhaust as needed.		
8.2 Exposure controls - Personal protective equipment			
Eye protection:	Tightly sealed goggles, face shield, or safety glasses with brow guards and side shields, etc. as may be appropriate for the exposure		
Respiratory protection:	Avoid excessive inhalation of concentrated vapors. Apply local ventilation where appropriate.		
Skin protection:	Avoid Skin contact. Use chemically resistant gloves as needed.		

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Conforms to Standard
Odor:	Conforms to Standard
Color:	Pale Yellow to Yellow
Viscosity:	Liquid
Freezing Point:	Not determined
Boiling Point:	Not determined

DOC ID: 41555.595008.11445469

Product:	Vanilla Phthalate Free
Product :	
SKU :	

Page 5 of 7 2014-01-29

Melting Point:	Not determined
Flashpoint:	>200 F (93.33 C)
Auto flammability:	Not determined
Explosive Properties:	None Expected
Oxidizing properties:	None Expected
Vapor Pressure (mmHg@20 C):	2.2795
%VOC:	1.2725
Specific Gravity @ 25 C:	1.1300
Density @ 25 C:	1.1270
Refractive Index @ 25 C:	1.5680
Soluble in:	Oil

10. **Stability and Reactivity**

10.1 Reactivity	None
10.2 Chemical stability	Stable
10.3 Possibility of hazardous reactions	None known
10.4 Conditions to avoid	None known
10.5 Incompatible materials	Strong oxidizing agents, strong acids, and alkalis
10.6 Hazardous decomposition products	None known

11.Toxicological Information11.1 Toxicological Effects 11.

Acute toxicity - Oral	(LD50: 1,508.32) Harmful if swallowed
Acute toxicity - Dermal	(LD50: 2,357.76) May be harmful in contact with skin
Acute toxicity - Inhalation	(LC50: 231.94) May be harmful if inhaled
Skin corrosion / irritation	Not classified - the classification criteria are not met
Serious eye damage / irritation	Causes serious eye irritation
Respiratory sensitization	Not classified - the classification criteria are not met
Skin sensitization	May cause an allergic skin reaction
Germ cell mutagenicity	Not classified - the classification criteria are not met
Carcinogenicity	Suspected of causing cancer
Reproductive toxicity	Not classified - the classification criteria are not met
Specific target organ toxicity - single exposure	Not classified - the classification criteria are not met
Specific target organ toxicity - repeated exposure	Not classified - the classification criteria are not met
Aspiration hazard	Not classified - the classification criteria are not met

SDS Type: GHS / OSHA

DOC ID: 41555.595008.11445469

Product:	Vanilla	Phthalate	Free
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Product	:	

SKU :

Page 6 of 7 2014-01-29

12. Ecological Information	
12.1 Toxicity	
Acute acquatic toxicity	
Chronic acquatic toxicity	Toxic to aquatic life with long lasting effects
Toxicity Data on soil	no data available
Toxicity on other organisms	no data available
12.2 Persistence and degradability	no data available
12.3 Bioaccumulative potential	no data available
12.4 Mobility in soil	no data available
12.5 Other adverse effects	no data available

13. Disposal Conditions

13.1 Waste treatment methods

Do not allow product to reach sewage systems. Dispose of in accordance with all local and national regulations. Send to a licensed waste management company. The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container.

14. Transport Information

Regulator U.S. DOT (Non-Bulk) Chemicals NOI ADR/RID (International Roa	d/Rail)	Class Not Regulated	Pack Group - Not Dangerous	Sub Risk s Goods	UN-nr.
Environmentally Hazardous Liquid, n.o.s. IATA (Air Cargo)	Substance,	9	111		UN3082
Environmentally Hazardous Liquid, n.o.s. IMDG (Sea)	Substance,	9	111		UN3082
Environmentally Hazardous Liquid, n.o.s.	Substance,	9	Ш		UN3082

15. F	Regulatory Infor	mation		
	l Regulations:			
TSCA (To	oxic Substance Cor	ntrol Act):	All components of the substance/mixture are listed or exempt	
40 CFR(EPCRA, SARA, CERCLA and CAA)		CLA and CAA)	This product contains NO components of concern.	
U.S. State R	egulations:			
Californi	a Proposition 65 W	arning	This product contains the following components:	
94-59	-7 202-345-4	= 12 ppm	Safrole (NFS)	
93-15	-2 202-223-0	= 3 ppm	Methyl eugenol (NFS)	

SDS Type: GHS / OSHA

DOC ID: 41555.595008.11445469

Product:	Vanilla	Phthalate	Free
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Product :

SKU :

Page 7 of 7 2014-01-29

Canadian Regulations:

DSL / NDSL

100.00 of the components are listed or exempt.

16. Other Information

GHS H-Statements referred to under section 3

H225 : Highly flammable liquid and vapor

H303 : May be harmful if swallowed

H314 : Causes severe skin burns and eye damage

H317 : May cause an allergic skin reaction

H320 : Causes eye irritation

H351 : Suspected of causing cancer

Total Fractional Values

(TFV) Risk

(2.92) Aquatic Acute Toxicity, Category 1

(1.99) Eye Damage/Eye Irritation, Category 2A

(3.07) Aquatic Chronic Toxicity, Category 2

Department issuing data sheet:

Department E-mail address:

Remarks

This safety data sheet is based on the properties of the material known to Wellington Fragrance at the time the data sheet was issued. The safety data sheet is intended to provide information for a health and safety assessment of the material and the circumstances, under which it is packaged, stored or applied in the workplace. For such a safety assessment Welling holds no responsibility. This document is not intended for quality assurance purposes.

- H302 : Harmful if swallowed
- H313 : May be harmful in contact with skin
- H316 : Causes mild skin irritation
- H319 : Causes serious eye irritation
- H336 : May cause drowsiness or dizziness
- H411 : Toxic to aquatic life with long lasting effects

(TFV) Risk

- (5.00) Sensitization, Skin, Category 1B
- (2.00) Carcinogenicity, Category 2