SAFETY DATA SHEET



1. Identification

Product identifier TUMS ULTRA STRENGTH ASSORTED BERRIES 3001111-0038 (MIXED BERRY)

Other means of identification

TUMS ULTRA STRENGTH ASSORTED BERRIES (MIXED BERRY) * TUMS ULTRA STRENGTH **Synonyms**

ASSORTED BERRIES (MIXED BERRY) (CANADA) * FORMULATION NUMBER: 3001111-0038 *

CALCIUM CARBONATE, FORMULATED PRODUCT

Recommended use Medicinal Product

> This safety data sheet is written to provide health, safety and environmental information for people handling this formulated product in the workplace. It is not intended to provide information relevant

to medicinal use of the product. In this instance patients should consult prescribing

information/package insert/product label or consult their pharmacist or physician. For health and safety information for individual ingredients used during manufacturing, refer to the appropriate

safety data sheet for each ingredient.

No other uses are advised. Recommended restrictions

Manufacturer/Importer/Supplier/Distributor information

COMPANY NAME GlaxoSmithKline US

Address: 5 Moore Drive

Research Triangle Park, NC 27709 USA

+1-888-825-5249 (General Inquiries) Telephone:

Email: msds@gsk.com Website: www.gsk.com

EMERGENCY CONTACTS

CHEMTREC EMERGENCY NUMBERS

Telephone: +(1) 703 527 3887 (International)

24/7; multi-language response

CCN9484 **Contract Number:**

VERISK 3E GLOBAL INCIDENT RESPONSE

+(1) 760 476 3971 (In country) Telephone:

+(1) 760 476 3962 or +(1) 866 519 4752 (International)

24/7; multi-language response

Contract Number: 334878

2. Hazard(s) identification

Classified hazards

Exempt from requirements - product regulated as a medicinal product, cosmetic product or medical device.

Label elements

Exempt from requirements - product regulated as a medicinal product, cosmetic product or medical device.

Hazard(s) not otherwise classified (HNOC)

Exempt from requirements - product regulated as a medicinal product, cosmetic product or medical device.

3. Composition/information on ingredients

Mixtures

Chemical name	nemical name Common name and synonyms		%	
CALCIUM CARBONATE	CARBONIC ACID, CALCIUM SALT CALCIUM MONOCARBONATE PRECIPITATED CALCIUM CARBONATE CHALK	471-34-1	39.52	
STARCH	9 1 1 2 1		5.42	

Material name: TUMS ULTRA STRENGTH ASSORTED BERRIES 3001111-0038 (MIXED BERRY)

137317 Version #: 01 Issue date: 04-16-2018

Chemical name	Common name and synonyms	CAS number	%
TALC	TALCUM, NON-ASBESTOS FORM TALC HYDROUS MAGNESIUM SILICATE	14807-96-6	2.1
LIGHT MINERAL OIL	OHS12791 RTECS PY8047000	8042-47-5	1.15
ADIPIC ACID	HEXANEDIOIC ACID 1,4-BUTANEDICARBOXYLIC ACID 1,6-HEXANEDIOIC ACID ADIPINIC ACID	124-04-9	0.8
SODIUM HEXAMETAPHOSPHATE	METAPHOSPHORIC ACID, HEXASODIUM SALT CALGON CHEMI-CHARL GILTEX HAGAN PHOSPHATE HEXASODIUM HEXAMETAPHOSPHATE HEXASODIUM METAPHOSPHATE RTECS OY3675000	10124-56-8	0.35
FD&C RED NO. 40	DISODIUM 6-HYDROXY-5-((2-METHOXY-5-METHY L-4-SULFOPHENYL)AZO) DISODIUM 6-HYDROXY-5-((2-METHOXY-4-SULPH ONATO-M-TOLYL)AZO)NAPHTHALENE-2-SULPHONATE DISODIUM 6-HYDROXY-5-((2-METHOXY-4-SULPH ONATO-META-TOLYL)AZO)NAPHTHAL ENE-2-SULPHONATE FDC RED 40 FDC RED 40 DYE ALLURA RED ALLURA RED 40 RED 40 AND LAKE	25956-17-6	0.13
Other components below reportable	lovole		> 50

Other components below reportable levels

> 50

4. First-aid measures

Inhalation Move to fresh air. If breathing is difficult, remove to fresh air and keep at rest in a position

comfortable for breathing. Call a physician if symptoms develop or persist. Call a POISON

CENTER or doctor/physician if you feel unwell.

Immediately flush skin with plenty of water. Take off contaminated clothing and wash before reuse. Skin contact

Get medical attention if symptoms occur.

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Eye contact

If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting Ingestion

without advice from poison control center.

Most important

symptoms/effects, acute and delayed

Irritant effects.

Indication of immediate

medical attention and special treatment needed

No specific antidotes are recommended. Treat according to locally accepted protocols. For additional guidance, refer to the local poison control information centre.

General information

In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Pre-placement and periodic health surveillance is not usually indicated. The final determination of the need for health surveillance should be determined by local risk assessment.

5. Fire-fighting measures

Suitable extinguishing media

Dry chemical powder. Carbon dioxide (CO2). Water. Foam.

Unsuitable extinguishing media

None known.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

and precautions for firefighters

Material name: TUMS ULTRA STRENGTH ASSORTED BERRIES 3001111-0038 (MIXED BERRY)

Fire fighting

equipment/instructions

Use water spray to cool unopened containers.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards Expected to be non-combustible.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective equipment.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

GSK

Components	Туре	Value	
FD&C RED NO. 40 (CAS 25956-17-6)	OHC	1	
SODIUM HEXAMETAPHOSPHATE (CAS 10124-56-8)	OHC	1	
US. OSHA Table Z-1 Limits for Air	Contaminants (29 CFR 1910.	1000)	
Components	Туре `	Value	Form
CALCIUM CARBONATE (CAS 471-34-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
LIGHT MINERAL OIL (CAS 8042-47-5)	PEL	5 mg/m3	Mist.
STARCH (CAS 9005-25-8)	PEL	5 mg/m3	Respirable fraction.
•		15 mg/m3	Total dust.
US. OSHA Table Z-3 (29 CFR 1910.	1000)	-	
Components	Туре	Value	Form
TALC (CAS 14807-96-6)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		20 mppcf	
		2.4 mppcf	Respirable.
US. ACGIH Threshold Limit Values	•		
Components	Туре	Value	Form
ADIPIC ACID (CAS 124-04-9)	TWA	5 mg/m3	
LIGHT MÍNERAL OIL (CAS 8042-47-5)	TWA	5 mg/m3	Inhalable fraction.
STARCH (CAS 9005-25-8)	TWA	10 mg/m3	
TALC (CAS 14807-96-6)	TWA	2 mg/m3	Respirable fraction.
US. NIOSH: Pocket Guide to Chem	ical Hazards		
Components	Туре	Value	Form
CALCIUM CARBONATE (CAS 471-34-1)	TWA	5 mg/m3	Respirable.
` '		10 mg/m3	Total

Material name: TUMS ULTRA STRENGTH ASSORTED BERRIES 3001111-0038 (MIXED BERRY)

Components	Туре	Value	Form
LIGHT MINERAL OIL (CAS 8042-47-5)	STEL	10 mg/m3	Mist.
·	TWA	5 mg/m3	Mist.
STARCH (CAS 9005-25-8)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
TALC (CAS 14807-96-6)	TWA	2 mg/m3	Respirable.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

General ventilation normally adequate. An Exposure Control Approach (ECA) is established for operations involving this material based upon the OEL/Occupational Hazard Category and the

outcome of a site- or operation-specific risk assessment.

Individual protection measures, such as personal protective equipment

Eye/face protection Not normally needed. If contact is likely, safety glasses with side shields are recommended.

Skin protection

Hand protection Not normally needed. For prolonged or repeated skin contact use suitable protective gloves.

Other Not normally needed. Wear suitable protective clothing as protection against splashing or

contamination.

No personal respiratory protective equipment normally required. Use a NIOSH/MSHA approved Respiratory protection

respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. When workers are facing concentrations above the exposure limit they must use appropriate certified

respirators.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. For advice on suitable monitoring methods, seek guidance

from a qualified environment, health and safety professional.

9. Physical and chemical properties

Appearance

Solid. Physical state Tablet. **Form**

Color Not available. Odor Not available. **Odor threshold** Not available. Not available. Hq Not available. Melting point/freezing point Initial boiling point and boiling Not available.

range

Flash point Not available. **Evaporation rate** Not available. Not available. Flammability (solid, gas)

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%) Not available. Not available. Explosive limit - upper (%)

Vapor pressure Not available. Not available. Vapor density Relative density Not available.

Solubility(ies)

Solubility (water) Not available. Partition coefficient (n-octanol/water)

Not available.

Auto-ignition temperature

Decomposition temperature

Viscosity

Not available.

Not available.

10. Stability and reactivity

Reactivity Not available.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Acids. Fluorine.

Hazardous decomposition None known. Irritating and/or toxic fumes and gases may be emitted upon the products

products decomposition.

11. Toxicological information

Information on likely routes of exposure

Inhalation Health injuries are not known or expected under normal use. Inhalation of dusts may cause

respiratory irritation.

Skin contact Health injuries are not known or expected under normal use. Dust or powder may irritate the skin.

Eye contact Health injuries are not known or expected under normal use. Dust or powder may irritate eye

tissue

Ingestion Health injuries are not known or expected under normal use.

Symptoms related to the physical, chemical and toxicological characteristics

Irritant effects.

Information on toxicological effects

Acute toxicity Health injuries are not known or expected under normal use.

Components	Species	Test Results
------------	---------	--------------

ADIPIC ACID (CAS 124-04-9)

Acute Oral

LD50 Rat > 11 g/kg

CALCIUM CARBONATE (CAS 471-34-1)

<u>Acute</u>

Oral

LD50 Rat 6450 mg/kg

FD&C RED NO. 40 (CAS 25956-17-6)

Acute Dermal

LD50 Rabbit > 10 g/kg

Oral

LD50 Rat > 10 g/kg

LIGHT MINERAL OIL (CAS 8042-47-5)

Acute Oral

LD50 Rat > 2000 mg/kg

SODIUM HEXAMETAPHOSPHATE (CAS 10124-56-8)

<u>Acute</u>

Oral

LD50 Rat 6200 mg/kg

^{*} Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Health injuries are not known or expected under normal use. Prolonged skin contact may cause

temporary irritation.

Serious eye damage/eye

irritation

Health injuries are not known or expected under normal use. Dust or powder may irritate eye

tissue.

Respiratory or skin sensitization

Respiratory sensitization

Not applicable.

Skin sensitization Health injuries are not known or expected under normal use.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenic effects are not expected as a result of occupational exposure. Contains a material Carcinogenicity

(talc) classified as a carcinogen by external agencies. These effects are linked only to high doses

of this substance; lower doses did not cause this adverse effect.

IARC Monographs. Overall Evaluation of Carcinogenicity

LIGHT MINERAL OIL (CAS 8042-47-5)

3 Not classifiable as to carcinogenicity to humans.

2B Possibly carcinogenic to humans.

Health injuries are not known or expected under normal use. Contains no ingredient listed as toxic

3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

TALC (CAS 14807-96-6)

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity

to reproduction

Specific target organ toxicity -

single exposure

None known.

Specific target organ toxicity -

repeated exposure

None known.

Aspiration hazard Due to partial or complete lack of data the classification is not possible.

Further information Occupational exposure to the substance or mixture may cause adverse effects.

12. Ecological information

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
ADIPIC ACID (CAS 124-0	4-9)		
Aquatic			
Acute			
Algae	EC50	Green algae (Scenedesmus subspicatus)	31.3 mg/l, 72 hours
Crustacea	EC50	Water flea (Daphnia magna)	85.7 mg/l, 48 hours
Fish	EC50	Fathead minnow (Adult Pimephales promelas)	97 mg/l, 96 hours Static test
		Golden ide/orfe (Adult Leuciscus idus)	230 mg/l, 96 hours Static test
		Rainbow trout (Adult Oncorhyncus mykiss)	> 100 mg/l, 48 hours Static renewal test
CALCIUM CARBONATE ((CAS 471-34-1)		
Aquatic			
Fish	LC50	Western mosquitofish (Gambusia affinis	s) > 56000 mg/l, 24 hours
TALC (CAS 14807-96-6)			
Aquatic			
Acute			
Fish	EC50	Zebra fish (Adult Brachydanio rerio)	> 100 g/l, 24 hours Static renewal test

^{*} Estimates for product may be based on additional component data not shown.

No data is available on the degradability of this product. Persistence and degradability

Photolysis

Half-life (Photolysis-atmospheric)

ADIPIC ACID

LIGHT MINERAL OIL

2.9 Days Estimated

< 1 Days Estimated

Biodegradability

Percent degradation (Aerobic biodegradation-ready)

ADIPIC ACID 100 %, 28 days Modified Sturm test., Activated sludge LIGHT MINERAL OIL 24 %, 28 days Modified Sturm test., Activated sludge

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

ADIPIC ACID 0.08

Bioconcentration factor (BCF)

ADIPIC ACID 0.68 Estimated

Mobility in soil

Adsorption

Soil/sediment sorption - log Koc

ADIPIC ACID 1.4 Estimated

Mobility in general

Volatility

Henry's law

ADIPIC ACID 0 atm m^3/mol Estimated

Other adverse effects Not available.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow

this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches

with chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

Not regulated as a dangerous good.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulationsOne or more components are not listed on TSCA.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

ADIPIC ACID (CAS 124-04-9) Listed. SODIUM HEXAMETAPHOSPHATE (CAS 10124-56-8) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Immediate Hazard - Yes **Hazard categories**

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

No

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

Inventory name

(SDWA)

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.

(a))

TALC (CAS 14807-96-6)

International Inventories

Country(s) or region

Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances	No

(PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing

country(s).

16. Other information, including date of preparation or last revision

04-16-2018 Issue date

Version # 01

HMIS® is a registered trade and service mark of the NPCA. **Further information**

HMIS® ratings

Flammability: 0 Physical hazard: 0

NFPA ratings Health: 1

> Flammability: 0 Instability: 0

GSK Hazard Determination References

No

On inventory (yes/no)*

Disclaimer

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create any warranty, express or implied. It is the responsibility of the user to determine the applicability of this information and the suitability of the material or product for any particular purpose.

Section 1 Identification Page E1 of E2

HOME SCIENCE TOOLS

665 Carbon Street Billings, MT 59102 800-860-6272 www.homesciencetools.com CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory and industrial use only. Not for drug, food or household use.

Product	HYDROCHLORIC ACID, 1 MOLAR (1 NORMAL) SOLUTION

Synonyms Muriatic Acid, Water Solution / Hydrogen Chloride, Water Solution

Section 2 Hazards identification

Signal word: WARNING **Pictograms:** GHS05

Target organs: Respiratory system, skin, eyes, lungs.



GHS Classification:

Corrosive to metals (Category 1) Skin irritant (Category 3) Eye irritant (Category 2B)

GHS Label information: Hazard statement(s):

H290: May be corrosive to metals. H316: Causes mild skin irritation. H320: Causes eve irritation.

Precautionary statement(s):

P234: Keep only in original container.
P264: Wash hands thoroughly after handling.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313: If skin irritation occurs: Get medical attention. P337+P313: If eye irritation persists: Get medical attention.

P390: Absorb spillage to prevent material damage.

P406: Store in corrosive resistant container with a resistant inner liner.

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	
Water		7732-18-5	96.86%	231-791-2	
Hydrochloric acid		7647-01-0	3.14%	231-595-7	

Section 4 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. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: MAY CAUSE 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 CAUSE 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: Carbon dioxide, dry chemical, dry sand, alcohol foam.

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. Contact with metals produce hydrogen, which is flammable and may produce explosive mixtures with air.

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: Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Page E2 of E2 Section 7 Handling and 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 vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

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

Section 8 Exposure controls / personal protection				
Evnoeuro Limite:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Exposure Limits:	Hydrogen chloride	STEL: C 2 ppm / C 2.98 mg/m ³	STEL: C 5 ppm / C 7 mg/m ³	STEL: C 5 ppm / C 7 mg/m ³

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 misty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator

Section 9 Physical and chemical properties

Appearance: Clear, colorless liquid. Odor: No odor Odor threshold: No data available

pH: No data available Melting / Freezing point: ~ 0°C (~ 32°F) [water] Boiling point: ~ 100°C (212°F) [water]

Flash point: Not flammable. Evaporation rate (= 1): < 1 Flammability (solid/gas): No data available Explosion limits: Upper/Lower: No data available Vapor pressure (mm Hg): 14 [water] Vapor density (Air = 1): 0.7 [water]

Relative density (Specific gravity): 1.0 [water] Solubility(ies): Complete.

Partition coefficient: (n-octanol / water): No data available Auto-ignition temperature: No datá available

Decomposition temperature: No data available

Viscosity: No data available Molecular formula: Mixture. Molecular weight: Mixture.

Section 10 Stability and reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Containers may burst when heated. Avoid contact with water.

Incompatible materials: Metals, bases, active metals, alkali metals, oxidizing agents, hydroxides, amines, carbonates, cyanides, sulfides, sulfites,

formaldehyde

Hazardous decomposition products: Hydrogen chloride gas.

Section 11 **Toxicological information**

Acute toxicity: Data not available

Skin corrosion/irritation: Data not available at this dilution. Serious eye damage/irritation: Data not available at this dilution.

Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.

IARC: Group 3: Not classifiable as to its carcinogenicity to humans.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Data not available

STOT-single exposure: Data not available at this dilution.

STOT-repeated exposure: Data not available

Aspiration hazard: Data not available

Potential health effects: To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available.

Exercise appropriate procedures to minimize potential hazards.

Inhalation: May be harmful if inhaled. Material may cause irritation to the tissue of the mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed. Skin: May cause irritation and/or burns. Eyes: May cause irritation and/or burns.

Signs and symptoms of exposure: Data not available at this dilution. Additional information: RTECS #: MW4025000 [Hydrochloric acid]

Section 12 **Ecological information**

Toxicity to fish: LC50 - Gambusia affinis (Mosquito fish) - 282 mg/l - 96 h (Hydrochloric acid)

Toxicity to daphnia and other aquatic invertebrates: No data available

Toxicity to algae: No data available

Persistence and degradability: No data available Bioaccumulative potential: No data available Mobility in soil: No data available PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport information

UN/NA number: UN1789 Shipping name: Hydrochloric acid

Reportable Quantity: 5000 lbs (2270 kg) Hazard class: 8 Packing group: III Marine pollutant: No 2016 ERG Guide # 157 **Exceptions:** Limited quantity equal to or less than 5 Lt

Section 15 Regulatory information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list

· · · · · · · · · · · · · · · · · · ·						
Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Hydrochloric acid	Listed	5000 lbs (2270 kg)	D002	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

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook