

SECTION 1 Identification of the substance/mixture and of the company

1.1 Product identifier

- Product Name: **Nutrient Agar**
- Product Part Number: **7145**

1.2 Relevant identified uses of the substance or mixture and uses advised against

- Use of the substance/preparation: For the cultivation of a wide variety of microorganisms. Conforms to FDA/BAM formulation.
- Use advised against: No information available

1.3 Details of the supplier of the safety data sheet

- Name of Manufacturer: Acumedia Manufacturers, Inc.
- Address of Manufacturer: 740 East Shiawassee
Lansing, Michigan 48912
USA
- Telephone: 517/372-9200
- Email: foodsafety@neogen.com

1.4 Emergency telephone number

- Emergency Telephone: Chemtrec: (800) 424-9300
Outside USA and Canada: +1 (703) 527-3887
-

SECTION 2 Hazards identification

2.1 Classification of the substance or mixture

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]
- Not classified as hazardous for supply
- Classification (67/548/EEC, 1999/45/EC) (OSHA 29 CFR 1910.1200)
- Not classified as hazardous for supply
- Additional information: For full text of R-phrases and Hazard- and EU Hazard-statements: see section 16

2.2 Label elements

- Signal Word: None
- Symbols: None
- Hazard phrases
None
- Precautionary Phrases
Keep container tightly closed.
Do not breathe dust
Do not get in eyes, on skin, or on clothing.

2.3 Other hazards

- Mildly irritating to skin and eyes
 - Mildly irritating to respiratory system
-

SECTION 3 Composition/information on ingredients

3.1 Substances

3.2 Mixtures

- This product does not contain any hazardous substances at the concentration limits given in Regulation (EC) No. 1272/2008 and OSHA Hazard Communication Standard 29 CFR 1910.1200
-

SECTION 4 First aid measures

4.1 Description of first aid measures

- Contact with skin
 - Remove contaminated clothing
 - Wash affected area with plenty of soap and water
 - If skin irritation or rash occurs: Get medical advice/attention.
 - Contaminated clothing should be laundered before reuse
- Contact with eyes
 - If substance has gotten into eyes, immediately wash out with plenty of water for at least 15 minutes
 - Irrigate eyes thoroughly while lifting eyelids
 - Seek medical advice if necessary
- Ingestion
 - Rinse mouth with water (do not swallow)
 - Never make an unconscious person vomit or drink fluids
 - If medical advice is needed, have product container or label at hand.
- Inhalation
 - If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
 - Call a POISON CENTER or doctor/physician if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

- May cause irritation

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically
-

SECTION 5 Fire-fighting measures

5.1 Extinguishing media

- In case of fire: use foam, carbon dioxide or dry agent for extinction

5.2 Special hazards arising from the substance or mixture

- Smoke from fires is toxic. Take precautions to protect personnel from exposure
- Decomposition products may include carbon oxides
- May form explosive dust/air mixtures
- See Section 10

5.3 Advice for firefighters

- Keep container(s) exposed to fire cool, by spraying with water
 - Wear chemical protection suit and positive-pressure breathing apparatus
 - Wear protective clothing as per section 8
-

SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Shut off all ignition sources
- Use non-sparking hand tools

SECTION 6 Accidental release measures (continued)

- Avoid raising dust
- Remove contaminated clothing
- Wear protective clothing as per section 8
- Wash thoroughly after dealing with spillage

6.2 Environmental Precautions

- Do not allow to enter public sewers and watercourses
- Avoid scattering in the environment

6.3 Methods and material for containment and cleaning up

- Absorb spillage in inert material and shovel up
- Place in sealable container
- Seal containers and label them
- Seek expert advice for removal and disposal of all contaminated materials and wastes
- Ventilate the area and wash spill site after material pick-up is complete

6.4 Reference to other sections

- See Section 7
-

SECTION 7 Handling and storage

7.1 Precautions for safe handling

- Do not breathe dust
- Avoid contact with skin and eyes
- Do not eat, drink or smoke when using this product.
- Ensure adequate ventilation
- Eyewash bottles should be available
- Wash hands thoroughly after using this substance

7.2 Conditions for safe storage, including any incompatibilities

- Store at temperatures not exceeding 30°C/86°F. Keep cool.
- Store in a well-ventilated place. Keep container tightly closed.
- Store in a dry place.
- Keep away from oxidizing substances
- Keep away from acid

7.3 Specific end use(s)

- For the cultivation of a wide variety of microorganisms. Conforms to FDA/BAM formulation.
-

SECTION 8 Exposure controls/personal protection

8.1 Control parameters

- There are no recommended or established controls for this product

8.2 Exposure controls

- Eyewash bottles should be available
- Engineering controls should be provided to prevent the need for ventilation
- No respiratory protection is needed if ventilation/extraction is adequate, otherwise wear approved dust mask, N95 (US) or type FFP1 (EN143) dust masks.
- Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
- Wear safety glasses approved to standard for NIOSH (US) or EN 166.

SECTION 8 Exposure controls/personal protection (continued)

- Wear suitable protective clothing



Gloves



Safety
Glasses



Lab Coat

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Homogenous, free-flowing powder, Beige
- Odor: No information available
- pH: Not applicable
- Melting point/Range: No information available
- Boiling Point/Range: Not determined
- Flashpoint: No information available
- Evaporation Rate: No information available
- Flammability: No information available
- Vapor Pressure: No information available
- Vapor Density: No information available
- Specific Gravity: No information available
- Solubility in water: Completely soluble in water
- Partition Coefficient (n-Octanol/Water): No information available
- Autoignition Temperature Product is not self-igniting
- Viscosity: No information available
- Explosive Properties: Product does not present an explosion hazard
- Oxidizing Properties: No information available

9.2 Other information

- No information available

SECTION 10 Stability and reactivity

10.1 Reactivity

- No information available

10.2 Chemical stability

- Considered stable under normal conditions

10.3 Possibility of hazardous reactions

- No hazardous reactions known if used for its intended purpose

10.4 Conditions to avoid

- Avoid contact with moisture
- Keep away from heat and sources of ignition

10.5 Incompatible materials

- Incompatible with oxidizing substances

10.6 Hazardous Decomposition Products

- Decomposition products may include carbon oxides

SECTION 11 Toxicological information

11.1 Information on toxicological effects

- No experimental data available
 - Contact with skin
 - May cause redness and irritation
 - Contact with eyes
 - May cause redness and irritation
 - Ingestion
 - May cause irritation of the throat
 - Inhalation
 - May cause coughing
 - Carcinogenicity
 - No evidence of carcinogenic effects
 - Mutagenicity
 - No evidence of mutagenic effects
 - Teratogenicity
 - No information available
-

SECTION 12 Ecological information

12.1 Toxicity

- No information available

12.2 Persistence and degradability

- No information available

12.3 Bioaccumulation Potential

- No information available

12.4 Mobility in soil

- No information available

12.5 Results of PBT and vPvB assessment

- Not a PBT according to REACH Annex XIII
- PBT/vPvB assessment not available

12.6 Other Adverse Effects

- To the best of our knowledge, the properties of this material have not been fully evaluated
 - On available data, substance is not harmful to the environment
-

SECTION 13 Disposal considerations

13.1 Waste treatment methods

- Disposal should be in accordance with local, state or national legislation
- Do not discharge into drains or the environment, dispose to an authorized waste collection point
- Do not reuse empty containers without commercial cleaning or reconditioning
- Refer to manufacturer/supplier for information on recovery/recycling

13.2 Classification (REACH)

- Waste Codes in accordance with the European Waste catalogue (EWC) are origin-defined. Since this product is used in several industries, no Waste Code can be provided by the supplier. The Waste Code should be determined in arrangement with your waste disposal partner or the responsible authority.
-

SECTION 14 Transport information

14.1 UN Number

Not classified as hazardous for transport

14.2 UN Proper Shipping Name

- Not applicable

14.3 Transport hazard class(es)

- Not applicable

14.4 Packing group

- Not applicable

14.5 Environmental hazards

- Not Classified

14.6 Special precautions for user

- Not Classified

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

- Not Classified

14.8 DOT

- Proper Shipping Name: Not applicable
- DOT UN No.: Not applicable
- DOT Hazard Class: Not applicable
- DOT Packing Group: Not applicable

14.9 Road/Rail (ADR/RID)

- Proper Shipping Name: Not applicable
- ADR UN No.: Not applicable
- ADR Hazard Class: Not applicable
- ADR Packing Group: Not applicable
- Tunnel Code: Not applicable

14.10 Sea (IMDG)

- Proper Shipping Name: Not applicable
- IMDG UN No.: Not applicable
- IMDG Hazard Class: Not applicable
- IMDG Pack Group.: Not applicable

14.11 Air (ICAO/IATA)

- Proper Shipping Name: Not applicable
 - ICAO Un No.: Not applicable
 - ICAO Hazard Class: Not applicable
 - ICAO Packing Group: Not applicable
-

SECTION 15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006-453/2010 and OSHA Hazard Communication Standard 29 CFR 1910.1200.
- Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe

15.2 Chemical Safety Assessment

- No information available

15.3 United States Regulatory Information

SECTION 15 Regulatory information (continued)

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: The 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.

SARA 311/312

No SARA Hazards

SECTION 16 Other information

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Neogen Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANTY.

SAFETY DATA SHEET



Issuing Date: 05-Oct-2015

Revision Date: 05-Oct-2015

Version 1

1. IDENTIFICATION

Product Name	Dawn Ultra Dishwashing Liquid, Original Scent
Product ID:	97591965_RET_NG
Product Type:	Finished Product - Consumer (Retail) Use Only
Recommended use	Dish Care
Restrictions on Use	Use only as directed on label.
Synonyms	Dawn Ultra Dishwashing Liquid, Pomegranate Awakening (97591967_RET_NG) Dawn Ultra Dishwashing Liquid, Apple Orchard Harvest (97591968_RET_NG)
Manufacturer	PROCTER & GAMBLE - Fabric and Home Care Division Ivorydale Technical Centre 5289 Spring Grove Avenue Cincinnati, Ohio 45217-1087 USA Procter & Gamble Inc. P.O. Box 355, Station A Toronto, ON M5W 1C5 1-800-331-3774
E-mail Address	pgsds.im@pg.com
Emergency Telephone	Transportation (24 HR) CHEMTREC - 1-800-424-9300 (U.S./ Canada) or 1-703-527-3887 Mexico toll free in country: 800-681-9531

2. HAZARD IDENTIFICATION

"Consumer Products", as defined by the US Consumer Product Safety Act and which are used as intended (typical consumer duration and frequency), are exempt from the OSHA Hazard Communication Standard (29 CFR 1910.1200). This SDS is being provided as a courtesy to help assist in the safe handling and proper use of the product.

This product is classified under 29CFR 1910.1200(d) and the Canadian Hazardous Products Regulation as follows:.

Hazard Category	
Eye Damage / Irritation	Category 2B
Signal Word	WARNING
Hazard Statements	Causes eye irritation
Hazard pictograms	None

Precautionary Statements - Prevention	Wash hands thoroughly after handling
Precautionary Statements - Response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention IF SWALLOWED: Drink 1 or 2 glasses of water
Precautionary Statements - Storage	None
Precautionary Statements - Disposal	None
Hazards not otherwise classified (HNOC)	None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients are listed according to 29CFR 1910.1200 Appendix D and the Canadian Hazardous Products Regulation

Chemical Name	Synonyms	Trade Secret	CAS-No	Weight %
Sulfuric acid, mono-C10-16-alkyl esters, sodium salts	Sulfuric acid, mono-C10-16-alkyl esters, sodium salts	No	68585-47-7	15 - 20
Poly(oxy-1,2-ethanediyl), alpha-sulfo-omega-hydroxy-, C10-16-alkyl ethers, sodium salts	Poly(oxy-1,2-ethanediyl), alpha-sulfo-omega-hydroxy-, C10-16-alkyl ethers, sodium salts	No	68585-34-2	5 - 10
Amine oxides, C10-16-alkyldimethyl	Amine oxides, C10-16-alkyldimethyl	No	70592-80-2	5 - 10
Ethanol	Ethanol	No	64-17-5	1 - 5

4. FIRST AID MEASURES

First aid measures for different exposure routes

Eye contact	Rinse with plenty of water. Get medical attention immediately if irritation persists.
Skin contact	Rinse with plenty of water. Get medical attention if irritation develops and persists.
Ingestion	Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately if symptoms occur.
Inhalation	Move to fresh air. If symptoms persist, call a physician.
Most important symptoms/effects, acute and delayed	None under normal use conditions.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Dry chemical, CO ₂ , alcohol-resistant foam or water spray.
Unsuitable Extinguishing Media	None.
Special hazard	None known.
Special protective equipment for fire-fighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Specific hazards arising from the chemical	None.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Use personal protective equipment. Do not get in eyes, on skin, or on clothing.
Advice for emergency responders	Use personal protective equipment as required.

Methods and materials for containment and cleaning up

Methods for containment	Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
Methods for cleaning up	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling	Use personal protective equipment as required. Keep container closed when not in use. Never return spills in original containers for re-use. Keep out of the reach of children.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place.
Incompatible products	None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	CAS-No	ACGIH TLV	OSHA PEL	Mexico PEL
Ethanol	64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	Mexico: TWA 1000 ppm Mexico: TWA 1900 mg/m ³

Chemical Name	CAS-No	Alberta	Quebec	Ontario TWAEV	British Columbia
Ethanol	64-17-5	TWA: 1000 ppm TWA: 1880 mg/m ³	TWA: 1000 ppm TWA: 1880 mg/m ³	STEL: 1000 ppm	STEL: 1000 ppm

No relevant exposure guidelines for other ingredients

Exposure controls

Engineering Measures**Distribution, Workplace and Household Settings:**

Ensure adequate ventilation

Product Manufacturing Plant (needed at Product-Producing Plant ONLY):

Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction

Personal Protective Equipment**Eye Protection****Distribution, Workplace and Household Settings:**

No special protective equipment required

Product Manufacturing Plant (needed at Product-Producing Plant ONLY):

Use appropriate eye protection

Hand Protection**Distribution, Workplace and Household Settings:**

No special protective equipment required

Product Manufacturing Plant (needed at Product-Producing Plant ONLY):

Protective gloves

Skin and Body Protection**Distribution, Workplace and Household Settings:**

No special protective equipment required

Product Manufacturing Plant (needed at Product-Producing Plant ONLY):

Wear suitable protective clothing

Respiratory Protection**Distribution, Workplace and Household Settings:**

No special protective equipment required

Product Manufacturing Plant (needed at Product-Producing Plant ONLY):

In case of insufficient ventilation wear suitable respiratory equipment

9. PHYSICAL AND CHEMICAL PROPERTIES**Physical State @20°C**

liquid

Appearance

Various color by product

Odor

Scented

Odor threshold

No information available

Property**Values****Note****pH value**

9.0 - 9.2

10% aqueous solution

Melting/freezing point

No information available

Boiling point/boiling range

100 - 104 °C / 212 - 219 °F

Flash point

No Flash to Boiling (NFTB)

Evaporation rate

No information available

Flammability (solid, gas)

No information available

Flammability Limits in Air**Upper flammability limit**

No information available

Lower Flammability Limit

No information available

Vapor pressure

No information available

Vapor density

No information available

Relative density

1.04

Water solubility

100%

Solubility in other solvents

No information available

Partition coefficient: n-octanol/water

No information available

Autoignition temperature

No information available

Decomposition temperature

No information available

Viscosity of Product
VOC Content (%)

No information available
Products comply with US state and federal regulations for VOC content in consumer products.

10. STABILITY AND REACTIVITY

Reactivity	None under normal use conditions.
Stability	Stable under normal conditions.
Hazardous polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.
Conditions to Avoid	None under normal processing.
Materials to avoid	None in particular.
Hazardous Decomposition Products	None under normal use.

11. TOXICOLOGICAL INFORMATION**Product Information****Information on likely routes of exposure**

Inhalation	No known effect.
Skin contact	No known effect.
Ingestion	No known effect.
Eye contact	Irritating to eyes.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Acute toxicity	No known effect.
Skin corrosion/irritation	No known effect.
Serious eye damage/eye irritation	Irritating to eyes.
Skin sensitization	No known effect.
Respiratory sensitization	No known effect.
Germ cell mutagenicity	No known effect.
Neurological Effects	No known effect.
Reproductive toxicity	No known effect.
Developmental toxicity	No known effect.
Teratogenicity	No known effect.
STOT - single exposure	No known effect.
STOT - repeated exposure	No known effect.
Target Organ Effects	No known effect.
Aspiration hazard	No known effect.
Carcinogenicity	No known effect.

Component Information

Chemical Name	CAS-No	LD50 Oral	LD50 Dermal	LC50 Inhalation
Poly(oxy-1,2-ethanediyl), alpha-sulfo-omega-hydroxy-, C10-16-alkyl ethers, sodium salts	68585-34-2	>2001 mg/kg	-	-

12. ECOLOGICAL INFORMATION**Ecotoxicity**

The product is not expected to be hazardous to the environment.

Persistence and degradability	No information available.
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Bioaccumulative potential	No information available.
Mobility	No information available.
Other adverse effects	No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste from Residues / Unused Products	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.
California Hazardous Waste Codes (non-household setting)	331

14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>IMDG</u>	Not regulated
<u>IATA</u>	Not regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313

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

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	CAS-No	Hazardous Substances RQs	Extremely Hazardous Substances RQs	CERCLA/SARA 302 TPQ
Sodium hydroxide	1310-73-2	1000 lb	-	

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following substance(s) which are either listed as hazardous air pollutants (HAPS) or VOC's per the Clean Air Act:

Chemical Name	CAS-No	CAA (Clean Air Act) - 1990 Hazardous Air Pollutants
Phenoxyethanol	122-99-6	X

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CAS-No	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hydroxide	1310-73-2	1000 lb	-	-	X

California Proposition 65

This product is not subject to warning labeling under California Proposition 65.

U.S. State Regulations (RTK)

Chemical Name	CAS-No	New Jersey
Ethanol	64-17-5	X

Chemical Name	CAS-No	Massachusetts
Ethanol	64-17-5	X

Chemical Name	CAS-No	Pennsylvania
Ethanol	64-17-5	X
Sodium hydroxide	1310-73-2	X
Phenoxyethanol	122-99-6	X

International Inventories

United States

All intentionally-added components of this product(s) are listed on the US TSCA Inventory.

Canada

This product is in compliance with CEPA for import by P&G.

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

CEPA - Canadian Environmental Protection Act

16. OTHER INFORMATION

Issuing Date: 05-Oct-2015

Revision Date: 05-Oct-2015

Disclaimer

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

End of SDS

Section 1 Chemical Product and Company Identification

Page E1 of E2

HOME SCIENCE TOOLS

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

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 HYDROGEN PEROXIDE, 6%**Synonyms** Hydrogen Dioxide

Section 2 Hazards Identification

Signal word: WARNING**Pictograms:** GHS07**Target organs:** Respiratory and gastrointestinal systems, skin, eyes**GHS Classification:**

Acute toxicity (Category 4)

Eye irritation (Category 2A)

GHS Label information: Hazard statement:

H302: Harmful if swallowed.

H319: Causes serious eye irritation.

Precautionary statement:

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P312: IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor 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.

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

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Supplementary information:

Do not tamper with venting mechanism.

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	<94%	231-791-2
Hydrogen peroxide	7722-84-1	6%	231-765-0
Acetanilide	103-84-4	0.05%	203-150-7

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. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES IRRITATION AND / OR BURNS TO EYES. 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. CAUSES IRRITATION AND / OR BURNS TO THE SKIN. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Water only! Apply vast amounts for cooling and dilution.

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. This product is a strong oxidizer which may release oxygen and promote the combustion of flammable materials. Spontaneous combustion can occur if allowed to remain in contact with oxidizable materials. Drying of product on clothing or combustible material may cause fire.

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: Remove all sources of ignition. 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.

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. Keep away from ignition sources. Do not allow temperature of storage to rise above 100°F.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Hydrogen peroxide	TWA: 1 ppm ; 1.4 mg/m ³ (A3)	TWA: 1 ppm ; 1.4 mg/m ³	TWA: 1 ppm ; 1.4 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/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Clear, colorless liquid. Odor: Slightly pungent odor. Odor threshold: Data not available. pH: Data not available. Melting / Freezing point: Approximately 0°C (32°F) (water) Boiling point: Approximately 100°C (212°F) (water) Flash point: Data not available	Evaporation rate (Water = 1): <1 Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): 14 (water) Vapor density (Air = 1): 0.7 (water) Relative density (Specific gravity): Approximately 1.0 (water) Solubility(ies): Complete in water.	Partition coefficient: Data not available Auto-ignition temperature: Data not available Decomposition temperature: Data not available. Viscosity: Data not available. Molecular formula: Mixture Molecular weight: Mixture
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Section 10 Stability & Reactivity

Chemical stability: Stable

Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperatures, heat, sparks, open flame and other sources of ignition. Contact with combustible materials may result in spontaneous combustion.

Incompatible materials: Acids, bases, metals, metal salts, reducing agents, organic materials, alkalies, dust and dirt contaminants, flammable substances, oxidizable materials.

Hazardous decomposition products: Oxygen, which will promote the combustion of flammable material.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 800 mg/kg [50% hydrogen peroxide]

Skin corrosion/irritation: Skin-rabbit - Slight irritant.

Serious eye damage/irritation: Eyes-rabbit - Severe irritant.

Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenicity: Data not available

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

IARC classified: 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: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

STOT-repeated exposure: Data not available

Aspiration hazard: Data not available

Potential health effects:

Inhalation: Expected to be irritating to respiratory tract.

Ingestion: Expected to cause burns to the gastrointestinal tract.

Skin: Expected to cause irritation and/or burns. As the concentration or time of exposure increases, the extent of damage increases.

Eyes: Expected to cause irritation and/or burns. Could cause corneal damage which may occur several days later.

Signs and symptoms of exposure: See Potential health effects above. Medical conditions which may be aggravated by exposure include conjunctivitis of the eye, dermatitis of the skin, asthma and respiratory diseases.

Additional information: RTECS #: MX0900000 [Hydrogen peroxide]

Section 12 Ecological Information

Toxicity to fish: Gambusia affinis (fish, fresh water), NOEC = 2.38 - 9.86 mg/l [Hydrogen peroxide]

Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacea), EC50 = 7.7 mg/l/24 hours [Hydrogen peroxide]

Toxicity to algae: Chlorella vulgaris (Algae), EC50 = 2.5 mg/l/growth rate [Hydrogen peroxide]

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 (US DOT / CANADA TDG)

UN/NA number: Not applicable

Shipping name: Not Regulated

Hazard class: Not applicable

Packing group: Not applicable

Reportable Quantity: No

Marine pollutant: No

Exceptions: Not applicable

2016 ERG Guide # Not applicable

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	CERCLA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Hydrogen peroxide	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

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.

Section 1 Chemical Product and Company Identification

Page E1 of E2

HOME SCIENCE TOOLS

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

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 METHYLENE BLUE CHLORIDE, 1% AQUEOUS SOLUTION**Synonyms** Methylene Blue Chloride, Water Solution

Section 2 Hazards Identification

Signal word: WARNING
Pictograms: No symbol required
Target organs: None known

GHS Classification:
Acute toxicity, oral (Category 5)

GHS Label information:
Hazard statement(s):
H303: May be harmful if swallowed.

Precautionary statement(s):
P312: Call a POISON CENTER or doctor 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
Water	7732-18-5	98.8%	231-791-2
Methylene blue chloride	61-73-4	1.0%	200-515-2
Sodium benzoate, as preservative	532-32-1	0.2%	208-534-8

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 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 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 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: 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.

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

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Methylene blue chloride	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 misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Dark blue liquid.	Evaporation rate (Water = 1): <1	Partition coefficient: Data not available.
Odor: No odor.	Flammability (solid/gas): Data not available.	Auto-ignition temperature: Data not available.
Odor threshold: Data not available.	Explosion limits: Lower / Upper: Data not available.	Decomposition temperature: Data not available.
pH: Data not available.	Vapor pressure (mm Hg): 14 (water)	Viscosity: Data not available.
Melting / Freezing point: ~0°C (32°F) (water)	Vapor density (Air = 1): 0.7 (water)	Molecular formula: Mixture
Boiling point: ~100°C (212°F) (water)	Relative density (Specific gravity): Approximately 1.1	Molecular weight: Mixture
Flash point: Data not available.	Solubility(ies): Complete in water.	

Section 10 Stability & Reactivity

Chemical stability: Stable **Hazardous polymerization:** Will not occur.

Conditions to avoid: Excessive temperatures which cause evaporation. Stable under recommended storage conditions.

Incompatibilities with other materials: Strong oxidizing materials and reducers.

Hazardous decomposition products: Sulfur oxides, nitrogen oxides, hydrogen chloride gas.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 1180 mg/kg [Methylene blue chloride] / Oral-rat LD50: 2100 mg/kg [Sodium benzoate]

Skin corrosion/irritation: Data not available

Serious eye damage/irritation: Data not available

Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenicity:
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
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

STOT-repeated exposure: Data not available

Aspiration hazard: Data not available

Potential health effects:
Inhalation: May cause respiratory irritation.
Ingestion: May be harmful if swallowed.
Skin: Contact with skin may cause irritation.
Eyes: Contact with eyes may cause irritation.

Signs and symptoms of exposure: 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.

Additional information: RTECS #: SP5740000 [Methylene blue chloride] / DH6650000 [Sodium benzoate]

Section 12 Ecological Information

Toxicity to fish: No data available

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 (US DOT / CANADA TDG)

UN/NA number: Not applicable **Shipping name:** Not Regulated

Hazard class: Not applicable **Packing group:** Not applicable **Reportable Quantity:** No **Marine pollutant:** No

Exceptions: Not applicable **2016 ERG Guide #** Not applicable

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	CERCLA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Methylene blue chloride	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.
Sodium benzoate	Listed	Not listed	Not listed	Listed	Not listed	

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.

SAFETY DATA SHEET



www.ranaco.com

FORMALIN FIXED SPECIMENS IN PRESERVED HOLDING SOLUTION – EXCLUDING FETAL PIGS, CATS, GRASSFROGS, BULLFROGS, RABBITS, RATS, MINK

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Formalin Fixed Specimens In Preserved Holding Solution – Excluding Fetal Pigs, Cats, Grassfrogs, Bullfrogs, Rabbits, Rats, Mink
Recommended Use: Science education applications
Synonyms: None
Manufacturer/Supplier: Ranaco Corporation, 4345 E Irvington Road, Tucson, AZ 85714
General Information: 800-528-7023
Transportation Emergency Number: 800-424-9300 Chemtrec – 24 hours assistance

SECTION 2: HAZARD IDENTIFICATION

DANGER



Targeted organs:


Eyes, Skin, Central Nervous System, Respiratory Tract

GHS Classification:

Acute Toxicity, oral (Category 4)
Acute Toxicity, dermal (Category 4)
Skin Irritation (Category 2)
Eye irritation (Category 2A)
Skin sensitization (Category 1)
Acute toxicity, inhalation (Category 4)
Carcinogenicity (Category 2)

Hazard Statements:

Maybe harmful if swallowed.
Causes skin irritation.
Causes eye irritation.
May cause an allergic skin reaction.
May cause respiratory irritation.
May cause cancer.

 **WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov

Precautionary Statements:

Obtain special instructions before use.
Wear protective gloves and eye protection.
Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.
IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF SWALLOWED: Immediately call a POISON CENTER or physician
IF exposed or concerned: Get medical advice/attention.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local/regional/national regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS #	%
Formaldehyde	50-00-0	> 0.1% - ≤ 0.6%
Methanol	67-56-1	≤ 0.03%
Propylene Glycol	57-55-6	≤ 9%
Ethylene Glycol Monophenyl Ether	122-99-6	≤ 1%
Water	7732-18-5	Balance

SECTION 4: FIRST AID MEASURES

SKIN CONTACT: Wash affected area with soap and water. Seek medical attention if symptoms develop.

EYE CONTACT: Rinse cautiously for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Seek medical attention if irritation persists.

INHALATION: Remove to fresh air. Get medical treatment if symptoms persist.

INGESTION: Immediately call a POISON CENTER or physician. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

SIGNS AND SYMPTOMS OF EXPOSURE: Irritation of skin, eyes, respiratory tract. Repeated exposure may cause dermatitis or other allergic reactions.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use dry chemical, CO₂, water spray (fog) or alcohol foam.

FIRE FIGHTING METHODS AND PROTECTION: Firefighters should wear self-contained breathing apparatus and wear full protective equipment.

FIRE AND/OR EXPLOSION HAZARDS: During a fire, smoke generated can be irritating or toxic.

HAZARDOUS COMBUSTION PRODUCTS: Products of combustion include but are not limited to carbon monoxide and carbon dioxide.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Avoid breathing vapors. Use gloves and eye protection to clean up spills.

EMERGENCY PROCEDURES: Ventilate area of spill. Eliminate all sources of ignition. Remove non-essential personnel.

ENVIRONMENTAL PRECAUTIONS: No special hazards. Follow applicable federal, state, provincial and local regulations regarding releases.

METHODS FOR CONTAINMENT AND CLEAN-UP: Absorb with liquid binding material and place in a sealed container. Dispose of waste in accordance with federal, state, provincial and local regulations.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Do not eat, drink or smoke when using this product. Avoid breathing vapors. Avoid direct skin or eye contact with liquids. Do not ingest. Wash hands with soap and water after use or handling of product.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Store at room temperature in a dry well ventilated area. Keep specimen container tightly closed when not in use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Formaldehyde	C 0.3 ppm / C 0.37 mg/m ³	TWA: 0.75 ppm / STEL: 2ppm	TWA: 0.016 ppm / STEL: 0.1 ppm
Methanol	TWA: 200 ppm / STEL: 250 ppm	TWA: 200 ppm / STEL: 260 ppm	TWA: 200 ppm / STEL: 250 ppm
Ethylene Glycol Monophenyl Ether	Not available	Not available	Not available
	WEEL		
Propylene Glycol	TWA 10 mg/m ³ Aerosol	Not available	Not available

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

Respiratory Protection: None should be needed in normal handling and room temperatures. If use conditions generate fumes above the OSHA regulations, use of a NIOSH/MSHA approved respirator is required.

ACGIH: American Conference of Industrial Hygienists, OSHA: U.S. Occupational Safety and Health Administration, NIOSH: U.S. National Institute for Occupational Safety and Health, PEL: Permissible Exposure Limit, TWA: Time Weighted Average, STEL: Short Term Exposure Limit, REL: Recommended Exposure Limit, WEEL: Workplace Environmental Exposure Limit

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Appearance: Specimen with/without clear colorless liquid

Odor: Mild pungent odor

Odor Threshold: Data not available

pH: Data not available

Melting/Freezing Point: Data not available

Boiling Point: Data not available

Flash Point: Data not available

Evaporation Rate (Water = 1) : >1

Flammability (solid/gas): Data not available

Explosion Limits: Lower/Upper: Data not available

Vapor Pressure (mmHg): Data not available

Vapor Density: Data not available

Relative Density (Specific Gravity): >1

Solubility(ies): Complete in water

Partition Coefficient: Data not available

Auto-ignition Temperature: Data not available

Decomposition Temperature: Data not available

Viscosity: Data not available

Molecular Formula: Mixture

Molecular Weight: Mixture

SECTION 10: STABILITY & REACTIVITY

Reactivity: None under normal conditions.

Chemical Stability: Stable

Conditions to Avoid: Excessive temperatures which cause evaporation.

Incompatible Materials: Strong acids, phenol, strong oxidizers, strong bases, hydrochloric acid, ammonia, iodine, alkalies, tannin, iron products, gelatin, bisulfate

Hazardous Polymerization: None under normal conditions.

Hazardous Decomposition Products: May include, but are not limited to carbon monoxide, carbon dioxide, gaseous formaldehyde, aldehydes, ketones, alcohols, ethers and organic acids

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity: Formalin Fixed Specimens in Preserved Holding Solution have not been tested as a mixture. Information about individual components is supplied.

Formaldehyde – Oral-rat LD50: 100 mg/kg; Inhalation-rat LC50: 250 ppm/4 hours; Dermal-rat: 270 mg/kg

Methanol - Oral-rat LD50: 5,600 mg/kg; Inhalation-rat LC50: 6,400 ppm/4 hours, 145,000 ppm/ 1 hour; Dermal-rat: 15,800 mg/kg

Propylene Glycol – Ingestion-rat LD50: > 20,000 mg/kg; Skin absorption-rabbit LD50: > 20,000 mg/kg

Ethylene Glycol Monophenyl Ether- Oral-rat LD50: 1,840 mg/kg; Dermal-rabbit: >2,214 mg/kg

Chronic Effects: Data not available.

Skin Corrosion/Irritation:

Causes skin irritation. May cause an allergic skin reaction.

Serious Eye Damage/Irritation:

Causes eye irritation or damage.

Respiratory or Skin Sensitization:

May cause sensitization by skin contact

Germ Cell Mutagenicity: Data not available.

Carcinogenicity: Data not available. Information about individual components is supplied.

Formaldehyde – Classified as a carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP) and OSHA. CA Prop 65: Formaldehyde is known to the State of California to cause cancer.

Reproductive Toxicity: Data not available. Information about individual components is supplied.

Methanol - CA Prop 65: This chemical is known to the State of California to cause birth defects or other reproductive harm.

Specific Target Organ Toxicity – Single exposure: Data not available.

Specific Target Organ Toxicity– Repeated exposure: Data not available.

Aspiration Hazard: Data not available.

Potential Health Effects:

Inhalation: May cause respiratory irritation.

Ingestion: May be harmful if swallowed.

Skin: May cause skin irritation. May cause an allergic skin reaction.

Eyes: May cause eye irritation or damage.

Signs and Symptoms of Exposure:

The chemical, physical and toxicological properties have not been thoroughly investigated for this product/mixture. Specific data is not available. Exercise appropriate procedures to minimize hazards.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish: No data available.

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

Dispose of contents/container in accordance with local/regional/national regulations.

SECTION 14: TRANSPORTATION INFORMATION (US DOT /CANADA TDG)

UN/NA Number: Not applicable

Shipping Name: Not regulated

Hazard Class: Not applicable

Packing Group: Not applicable

Reportable Quantity: No

Marine Pollutant: No

Exceptions: Not applicable

2012 ERG Guide#: Not applicable

SECTION 15: REGULATORY INFORMATION

Toxic Substances Control Act (TSCA): All components of this product are included on the TSCA inventory.

Component	TSCA	CERLCA (RQ)	RCRA CODE	DSL	NDSL	WHMIS CLASSIFICATION
Formaldehyde	Listed	100 lbs (45.4 kg)	U122	Listed	Not Listed	D1A; D2A; D2B
Methanol	Listed	5,000 lbs (2,270 kg)	U154	Listed	Not Listed	B2; D1B; D2A; D2B
Propylene Glycol	Listed	None	None	Listed	Not Listed	None
Ethylene Glycol Monophenyl Ether	Listed	None	None	Listed	Not Listed	B3

California Proposition 65 Information:

⚠WARNING: This product can expose you to chemicals including formaldehyde, which is known to the State of California to cause cancer, and methanol, which is known to the State of California to cause birth defects or other reproductive harm.

For more information go to www.P65Warnings.ca.gov.

SECTION 16: OTHER INFORMATION

Date Prepared: July 23, 2018

Supersedes: April 24, 2018

RANACO disclaims all expressed or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or information provided herein. All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, RANACO makes no representations as to its accuracy or sufficiency. Conditions of use are beyond RANACO's control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling and disposal of the product or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.



Hong Kong Government Recognized Service Supplier
Approved Laboratory of The Woolmark Company

Members of :

American National Standards Institute
American Society for Testing and Materials
British Standards Institute

Hong Kong Association for Testing, Inspection and Certification Limited
Hong Kong Toys Council

TEST REPORT

NUMBER: HKGH00807390 S1

APPLICANT: TOYSMITH
5110 FRONTAGE ROAD AUBURN,
WA98001
ATTN: BURKE WILLIAMS

DATE: Jan 14, 2009

*THIS IS TO SUPERSEDE REPORT NO.
HKGH00807390 DATED Jan 02, 2009*

SAMPLE DESCRIPTION:

ONE (1) SUBMITTED SAMPLE SAID TO BE **FIZZY TINTS**.

COLOR : #10 RED.

TESTS CONDUCTED:

AS REQUESTED BY THE APPLICANT, FOR DETAILS REFER TO ATTACHED PAGE(S)

FOR AND ON BEHALF OF :
INTERTEK TESTING SERVICES HK LTD.

KAREN S.C. NG
GENERAL MANAGER



PAGE 1 OF 2



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Hong Kong Association for Testing, Inspection and Certification Limited
Hong Kong Toys Council

TEST REPORT

NUMBER: HKGH00807390 S1

TESTS CONDUCTED

1 TOTAL LEAD (Pb) CONTENT

WITH REFERENCE TO US EPA METHOD 6010/6020, BY DRY ASHING AND ACID DIGESTION,
FOLLOWED BY INDUCTIVELY COUPLED PLASMA MASS SPECTROMETRY DETERMINATION.

RESULT : 0.082 ppm

LIMIT : 7.5 ppm

REMARK : ppm = PARTS PER MILLION OR MILLIGRAMS PER KILOGRAM

THE ABOVE LIMIT WAS QUOTED FROM THE CONSENT JUDGEMENT NO. BC-352903
FOR COSMETIC PRODUCT BASED ON THE CALIFORNIA PROPOSITION 65.

DATE SAMPLE RECEIVED : DEC 18, 2008

TESTING PERIOD : DEC 22, 2008 TO DEC 24, 2008

END OF REPORT



PAGE 2 OF 2



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British Standards Institute

Hong Kong Association for Testing, Inspection and Certification Limited
Hong Kong Toys Council

To: FACE ART INDUSTRIAL LIMITED Ref: FC-090-0311
Attention: W.S. LAM. Date: Jan 14, 2009

Re : Report Revision Notification

Intertek Testing Services Report Number HKGH00807390 Dated
Jan 02, 2009

Please be informed that all the content recorded in the above captioned
report will be void. This captioned report is now supersede by a revised
Intertek Testing Services Report, HKGH00807390 S1

Thank you for your attention.

FOR AND ON BEHALF OF :
INTERTEK TESTING SERVICES HK LTD.

KAREN S.C. NG
GENERAL MANAGER

MSDS - Sodium Bicarbonate Baking Soda Tablets

Section 1. Product Identification

Synonyms: Sodium hydrogen carbonate; sodium acid carbonate; baking soda; bicarbonate of soda

Section 2. Product Identification

Sodium Bicarbonate Tablets

CAS Number: 144-55-8

Not hazardous under OSHA Standard CFR 1910.1200

Not a WHMIS controlled substance

Section 3. Hazards Identification

Tablets, can have residual dust

No odor

Not a fire hazard

No significant health or environmental effects associated with this material

WHMIS Rating: Health: 0 Fire: 0 Reactivity: 0

Potential Health Effects

Eye: Not an eye irritant

Skin Contact: Not a skin irritant

Ingestion: Material is practically non-toxic. Small amounts (1-2 tablespoons) swallowed during normal handling operations are not likely to cause injury as long as the stomach is not overly full; swallowing larger amounts may cause injury (see Note in Section 8).

Inhalation: Not known

Sub-chronic Effects/Carcinogenicity: Based on published studies on its effects in animals and humans, sodium bicarbonate is not teratogenic. Only known sub-chronic effect is that of a marked systemic alkalosis. The material is not listed as a carcinogen or potential carcinogen by IARC, OSHA, ACGIH, NTP or NIOSH.

Section 4. First Aid Measures

Eyes: Check for and remove contacts. Flood eyes with clean flowing water, low pressure and lukewarm (not hot) if possible, occasionally lifting eyelids.

Ingestion: If large amounts of this material are swallowed, do not induce vomiting. Administer water if person is conscious. Never give anything by mouth to an unconscious person.

Note to Physician: Large doses may produce systemic alkalosis and expansion in extra cellular fluid volume with oedema.

Section 5. Fire Fighting Measures

Flammable Properties

Flashpoint: Not combustible

Method Used: Not applicable

Flammable Limits

LFL: Not applicable

UFL: Not applicable

Extinguishing Media: Non- combustible material. Use extinguishing media appropriate for surrounding fire.

Fire Fighting Instructions: Carbon Dioxide may be generated making necessary the use of a self contained breathing apparatus (SCBA) and full protective equipment (Bunker Gear). Carbon dioxide is an asphyxiant at levels over 5% w/w. Sodium oxide, another thermal decomposition product existing at temperatures above 156F is a respiratory, eye and skin irritant. Avoid inhalation, eye and skin contact with sodium oxide dusts.

Unusual Fire and Explosion Hazards: Not known

Section 6. Accidental Release Measures

Scoop up into dry, clean containers. Wash away uncontaminated residue with water.

Section 7. Handling and Storage

Store in cool, dry areas and away from incompatible substances (see section 10).

Sodium Bicarbonate reacts with acids to yield carbon dioxide gas which can accumulate in confined spaces. Do not enter confined spaces until they have been well ventilated and carbon dioxide and oxygen levels have been determined to be safe.

Section 8. Exposure Controls/Personal Protection

Respiratory Protection: Dust mask required if total dust level exceeds 10 mg/m³

Protective Gloves: General purpose for handling dry product. Impervious gloves when working with solutions.

Eye Protection: Safety glasses when handling bulk material or when dusts are generated

Other Protective Clothing or Equipment: Full cover clothing. Apron where splashing may occur when working with solutions.

Section 9. Physical and Chemical Properties

Appearance: Tablets

Odor: None

Physical State: Solid

pH as is: Not applicable

pH (1% Soln. w/v): 8.2

Vapor Pressure: Not applicable

Vapor Density: Not applicable

Boiling Point: Not applicable

Freezing/Melting Point: Not applicable

Solubility in Water: 8.6 g/100 ml @ 68F

Specific Gravity (Water = 1): 2.2

Apparent Density: (g/cc): Approximately 1

% Volatile: Not applicable

Volatile Organic Compounds: Not applicable

Molecular Weight: 84.02

Section 10. Stability and Reactivity

Chemical Stability: Stable

Conditions to Avoid: Temperatures above 65C (150F)

Incompatibility with Other Materials: Reacts with acids to yield carbon dioxide. Also may yield free caustic in presence of lime dust. (CaO) and moisture (i.e. water, perspiration).

Hazardous Decomposition Products: Heating above 100C may cause dangerous levels of carbon dioxide gas to be present in confined spaces. Avoid inhalation, eye and skin contact with sodium oxide.

Hazardous Polymerization: Not applicable

Section 11. Toxicological Information

Eye Effects: The material was minimally irritating to unwashed eyes and practically non irritating to washed eyes (rabbit).

Skin Effects: Not a skin irritant or dermally toxic. Not a contact sensitizer

Acute Oral Effects: Acute Oral- rat LD = 7.3 g/kg

Acute Inhalation: Lc50 (rat) > 4.74 mg/l

Section 12. Ecological Information

Aquatic Toxicity: Daphids - EC50 = 4100 mg/l Bluegill - LC50 = 7100 mg/l Rainbow Trout - LC50 = mg/l

Persistence: This product is not expected to persist in the environment

Bio Accumulation: This product is not expected to bio-accumulate

Section 13. Disposal Considerations

Bury in a secured landfill in accordance with all local, state and federal environmental regulations.

Empty containers may be incinerated or discarded as general trash.

Section 14 Transportation Information

D.O.T. Shipping Name: Not regulated

Technical Shipping Name: Sodium Bicarbonate

D.O.T. Hazard Class: None

Section 15. Regulatory Information

Clean Air Act Section 611: Material neither contains nor is it manufactured with ozone depleting substances (ODS).

Federal Water Pollution Control Act (40 CDR 401,15): Material contains no intentionally added or detectable (contaminant) levels of EPA priority toxic pollutants.

Food and Drug Administration: Generally Recognized As Safe (GRAS) direct food additive (21 CFR 184.1736)

OSHA: Not hazardous under 29 CFR 1910.1200

RCRA: Not a hazardous material or a hazardous waste by listing or characteristic

Disclaimer

This information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. We make no warranty of any kind, expressed or implied, concerning the safe use of this material in your process or combination with any other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. This material may be released from gas, liquid or solid materials made directly or indirectly from it. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards.

Section 1 Chemical Product and Company Identification

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HOME SCIENCE TOOLS

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

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 ISOPROPYL ALCOHOL, 90%**Synonyms** Isopropanol, 90% Solution

Section 2 Hazards Identification

Signal word: DANGER**Pictograms:** GHS02 / GHS07**Target organs:** Central nervous system, Liver, Kidneys.**GHS Classification:**

Flammable liquid (Category 2)

Eye irritation (Category 2)

STOT-SE (Category 3)

GHS Label information: Hazard statement(s):

H225: Highly flammable liquid and vapour.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

Precautionary statement(s):

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233: Keep container tightly closed.

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P261: Avoid breathing mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

P312: Call a POISON CENTER or doctor if you feel unwell.

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

P370+P378: In case of fire: Use dry chemical, alcohol foam, carbon dioxide or water spray to extinguish.

P403+P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up.

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

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
Isopropyl alcohol	67-63-0	90%	200-661-7
Water	7732-18-5	10%	231-791-2

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. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES 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: 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. Vapors formed from this product are heavier than air and may travel along the ground to a distant source of ignition and flash back instantly. Flame may not be visible in daylight.

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: Remove all sources of ignition. 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.

Section 7 Handling & Storage

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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. Keep away from ignition sources.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Isopropanol	TWA: 200 ppm / STEL: 400 ppm	TWA: 400 ppm / 980 mg/m ³	TWA: 400 ppm / STEL: 500 ppm

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/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Clear, colorless liquid. Odor: Aromatic odor. Odor threshold: Data not available. pH: Data not available. Melting / Freezing point: -90°C (-130°F)* Boiling point: 82°C (179.6°F)* Flash point: 18.3°C (65°F) CC *	Evaporation rate (Butyl acetate = 1): >1 Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: 2% / 12% * Vapor pressure (mm Hg): 33 mm @20°C * Vapor density (Air = 1): 2.1 * Relative density (Specific gravity): 0.786-0.79 @ 20°C * Solubility(ies): Complete in water.	Partition coefficient: (n-octanol / water): Data not available Auto-ignition temperature: 399°C (750°F) ASTM-E659-78 Decomposition temperature: Data not available. Viscosity: Data not available. Molecular formula: Mixture Molecular weight: Mixture
---	--	--

*Pure Isopropanol

Section 10 Stability & Reactivity

Chemical stability: Stable

Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperatures, heat, sparks, open flame and other sources of ignition.

Incompatible materials: Strong oxidizing materials, caustics, aluminums, metals, nitroform, oleum, chlorinated compounds can react vigorously with this alcohol.

Hazardous decomposition products: Oxides of carbon.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 4396 mg/kg ; Inhalation-rat LC50: 72.6 mg/L/4 hours ; Dermal-rat LD50: 12,000 mg/kg

Skin corrosion/irritation: Skin-rabbit - Slight irritant.

Serious eye damage/irritation: Eyes-rabbit - Irritating.

Respiratory or skin sensitization: Not sensitizing

Germ cell mutagenicity: Data not available

Carcinogenicity: Data not available

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

IARC classified: 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: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

STOT-repeated exposure: Data not available

Aspiration hazard: Yes

Potential health effects:

Inhalation: Inhalation of high vapor concentrations may cause central nervous system depression resulting in dizziness, drowsiness, nausea, vomiting, inability to concentrate and irritation of the throat. Continued inhalation may result in unconsciousness and death.

Ingestion: Aspiration hazard. Liquid can directly enter the lungs (aspirated) when swallowed or vomited. Serious lung damage and possible fatal chemical pneumonia can develop if this occurs.

Skin: Prolonged or repeated contact may cause irritation and drying, cracking and defatting of the skin which can lead to dermatitis.

Eyes: Contact causes burning sensation, redness, swelling, and/or blurred vision.

Signs and symptoms of exposure: See Potential health effects above.

Additional information: RTECS #: NT8050000 [Isopropanol]

Section 12 Ecological Information

Toxicity to fish: Pimephales promelas (Fish, fresh water) LC50: 9640 mg/L/96 hours [Isopropanol]

Toxicity to daphnia and other aquatic invertebrates: Artemia salina (Crustacea), EC50 = >10,000 mg/L/24 hours [Isopropanol]

Toxicity to algae: Scenedesmus quadricauda (Algae), LOEC50 = 1,800 mg/L/7 days [Isopropanol]

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 (US DOT / CANADA TDG)

UN/NA number: UN1219

Shipping name: Isopropanol solution

Hazard class: 3

Packing group: II

Reportable Quantity: No

Marine pollutant: No

Exceptions: Limited quantity equal to or less than 1 L

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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	CERCLA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Isopropyl alcohol	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

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.

SAFETY DATA SHEET

Issuing Date No data available

Revision Date 13-May-2015

Revision Number 2



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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name permanent marker black ink

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Pens

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name Wenzhou Aihao Pen Trade Co., Ltd

Supplier Address No.128, Wenchang Road, Longwan Zone
Wenzhou
Zhejiang
325011
CN

Supplier Phone Number Phone:86-13524536325
Contact Phone86-021-68622126

Supplier Email 732314056@qq.com

Emergency telephone number

2. HAZARDS IDENTIFICATION


Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Germ cell mutagenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3



GHS Label elements, including precautionary statements**Emergency Overview**

Signal word	Danger
Hazard Statements Causes skin irritation Causes serious eye damage Suspected of causing genetic defects May cause drowsiness or dizziness	
	
Appearance Black	Physical state Solid containing liquid
	Odor Alcohol

Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
 Specific treatment (see supplemental first aid instructions on this label)

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Immediately call a POISON CENTER or doctor/physician

Skin

IF ON SKIN: Wash with plenty of soap and water
 If skin irritation occurs: Get medical advice/attention
 Take off contaminated clothing and wash before reuse

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity

10.6% of the mixture consists of ingredient(s) of unknown toxicity

Other information

May be harmful if swallowed

Toxic to aquatic life with long lasting effects

Interactions with Other Chemicals

Use of alcoholic beverages may enhance toxic effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%	Trade Secret
Third Party Formulation (TP # 1196598)	Proprietary	30 - 60	*
Third Party Formulation (TP # 1196598)	Proprietary	15 - 40	*
Third Party Formulation (TP # 1196598)	Proprietary	1 - 5	*
Third Party Formulation (TP # 1196598)	Proprietary	1 - 5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

First aid measures**General Advice**

Show this safety data sheet to the doctor in attendance.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Do not rub affected area. Seek immediate medical attention/advice.

Skin contact

Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

Inhalation

Remove to fresh air. Get medical attention immediately if symptoms occur.

Ingestion

Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.

Self-protection of the first aider

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed**Most Important Symptoms and Effects**

Burning sensation. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Indication of any immediate medical attention and special treatment needed**Notes to Physician**

Treat symptomatically.



5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Uniform Fire Code

Irritant: Solid

Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact No.

Sensitivity to Static Discharge No.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.

Other Information

Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions

Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

Incompatible Products Strong acids. Strong oxidizing agents. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Third Party Formulation (TP # 1196598)	STEL: 100 ppm TWA: 50 ppm	(vacated) TWA: 100 ppm (vacated) TWA: 360 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 540 mg/m ³	TWA: 100 ppm TWA: 360 mg/m ³ STEL: 150 ppm STEL: 540 mg/m ³
Third Party Formulation (TP # 1196598)	TWA: 100 ppm	TWA: 200 ppm TWA: 500 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 500 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 625 mg/m ³	IDLH: 800 ppm TWA: 200 ppm TWA: 500 mg/m ³ STEL: 250 ppm STEL: 625 mg/m ³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992) See section 15 for national exposure control parameters

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection None required for consumer use. If there is a risk of contact: Tight sealing safety goggles.

Skin and body protection None required for consumer use. Wear protective gloves and protective clothing. Long sleeved clothing. Impervious gloves.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or

smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical state	Solid containing liquid	Odor	Alcohol
Appearance	Black	Odor Threshold	No information available
Color	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH	No data available	None known	
Melting / freezing point	No data available	None known	
Boiling point / boiling range	No data available	None known	
Flash Point	No data available	None known	
Evaporation Rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limit in Air			
Upper flammability limit	No data available		
Lower flammability limit	No data available		
Vapor pressure	No data available	None known	
Vapor density	No data available	None known	
Specific Gravity	No data available	None known	
Water Solubility	Difficult solubility	None known	
Solubility in other solvents	No data available	None known	
Partition coefficient: n-octanol/water	No data available	None known	
Autoignition temperature	No data available	None known	
Decomposition temperature	No data available	None known	
Kinematic viscosity	No data available	None known	
Dynamic viscosity	No data available	None known	
Explosive properties	No data available		
Oxidizing properties	No data available		

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

None known based on information supplied.

Incompatible materials

Strong acids. Strong oxidizing agents. Strong bases.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. May cause drowsiness and dizziness.
Eye contact	Specific test data for the substance or mixture is not available. Expected to be an irritant based on components. Severely irritating to eyes. Causes serious eye damage. May cause burns. May cause irreversible damage to eyes.
Skin contact	Specific test data for the substance or mixture is not available. Expected to be an irritant based on components. Irritating to skin. Prolonged contact may cause redness and irritation.
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Third Party Formulation (TP # 1196598)	= 5200 mg/kg (Rat)	= 13 g/kg (Rabbit)	= 54.6 mg/L (Rat) 4 h > 24 mg/L (Rat) 1 h
Third Party Formulation (TP # 1196598)	= 1870 mg/kg (Rat)	-	> 13548 ppm (Rat) 4 h
Third Party Formulation (TP # 1196598)	= 1219 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms

Erythema (skin redness). May cause redness and tearing of the eyes. May cause blindness. Burning. Inhalation of high vapor concentrations may cause symptoms like

headache, dizziness, tiredness, nausea and vomiting.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects There is no data available for this product. Contains a known or suspected mutagen.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Third Party Formulation (TP # 1196598)		Group 3		

*IARC (International Agency for Research on Cancer)
Group 3 - Not Classifiable as to Carcinogenicity in Humans*

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Chronic Toxicity Contains a known or suspected mutagen. Possible risk of irreversible effects. Carcinogenic potential is unknown.

Target Organ Effects Respiratory system. Eyes. Skin. May affect the genetic material in germ cells (sperm and eggs). Central Nervous System (CNS). Gastrointestinal tract (GI).

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)

2,458.00 mg/kg

ATEmix (dermal)

23,718.00 mg/kg (ATE)

ATEmix (inhalation-dust/mist)

99.60 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Third Party Formulation (TP # 1196598)		96h LC50: = 20.8 g/L (Pimephales promelas) 96h LC50: 4600 - 10000 mg/L (Leuciscus idus)		48h EC50: = 23300 mg/L
Third Party Formulation (TP # 1196598)		96h LC50: = 4480 mg/L (Pimephales promelas)	EC50 = 17700 mg/L 5 min EC50 = 45000 mg/L 5 h EC50 = 8686 mg/L 15 min EC50 = 980 mg/L 12 h	48h EC50: 3339 - 3977 mg/L 48h EC50: = 3642 mg/L
Third Party Formulation (TP # 1196598)	72h EC50: = 36 mg/L (Desmodesmus subspicatus)	96h LC50: = 5.6 mg/L (Cyprinus carpio)		48h EC50: = 5.2 mg/L

Persistence and Degradability

No information available.

Bioaccumulation

Chemical Name	Log Pow
Third Party Formulation (TP # 1196598)	-0.437
Third Party Formulation (TP # 1196598)	0.34
Third Party Formulation (TP # 1196598)	2

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging

Dispose of contents/containers in accordance with local regulations.

California Hazardous Waste Codes 331

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Third Party Formulation (TP # 1196598)	Toxic Ignitable



14. TRANSPORT INFORMATION

DOT	NOT REGULATED
Proper Shipping Name	NON REGULATED
Hazard Class	N/A
TDG	Not regulated
MEX	Not regulated
ICAO	Not regulated
IATA	Not regulated
Proper Shipping Name	NON REGULATED
Hazard Class	N/A
IMDG/IMO	Not regulated
Hazard Class	N/A
Marine Pollutant	Product is a marine pollutant according to the criteria set by IMDG/IMO
RID	Not regulated
ADR	Not regulated
ADN	Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

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

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material



US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Third Party Formulation (TP # 1196598)	X	X	X		
Third Party Formulation (TP # 1196598)	X	X	X		

International Regulations**Mexico****National occupational exposure limits**

Component	Carcinogen Status	Exposure Limits
Third Party Formulation (TP # 1196598) (15 - 40)		Mexico: TWA 200 ppm Mexico: TWA 500 mg/m ³ Mexico: STEL 250 ppm Mexico: STEL 625 mg/m ³

Mexico - Occupational Exposure Limits - Carcinogens

Canada**WHMIS Hazard Class**

Not determined

16. OTHER INFORMATION

NFPA	Health Hazards 2	Flammability 0	Instability 0	Physical and Chemical Hazards -
HMIS	Health Hazards 3 *	Flammability 0	Physical Hazard 0	Personal Protection
				X

Chronic Hazard Star Legend * = Chronic Health Hazard

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Disclaimer

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

End of Safety Data Sheet

