

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. |
|---------------------------|------------------------|

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. |
|--------------------------------|---|

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

| <u>Property</u> | <u>Values</u> | <u>Note</u> |
|---|-----------------------------|----------------------|
| 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 No information available
VOC Content (%) 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.

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

DOT Not regulated

IMDG Not regulated

IATA 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

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

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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.

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 | CERLCA (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.