Material Safety Data Sheet
Decolorizing Solution. Component of Gram Stain Kits with stabilized and nonstabilized iodine.
MSDS\# 88091

## Section 1 - Chemical Product and Company Identification

MSDS Name: Decolorizing Solution. Component of Gram Stain Kits with stabilized and nonstabilized iodine.
Catalog Numbers: B12527, BP2712-1G, BP2712-250, BP2712-4, BP2712-500
Synonyms: None.

| Company Identification: | Fisher Scientific <br> One Reagent Lane |
| :--- | :--- |
| Fair Lawn, NJ 07410 |  |
| For information in the US, call: | $201-796-7100$ |
| Emergency Number US: | $201-796-7100$ |
| CHEMTREC Phone Number, US: | $800-424-9300$ |

Section 2 - Composition, Information on Ingredients

## Risk Phrases: 113667

| CAS\#: | $67-63-0$ |
| :--- | :--- |
| Chemical Name: | Isopropyl alcohol |
| \%: | 80 |

EINECS\#: 200-661-7
Hazard Symbols: F XI

Risk Phrases: 11366667

| CAS\#: | $67-64-1$ |
| :--- | :--- |
| Chemical Name: | Acetone |
| $\%:$ | 20 |

EINECS\#: 200-662-2

Hazard Symbols: F XI

## Text for R-phrases: see Section 16

Hazard Symbols:


Risk Phrases:

XI F


11366667

Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

Danger! Aspiration hazard if swallowed. Can enter lungs and cause damage. May form explosive peroxides. Extremely flammable liquid and vapor. Vapor may cause flash fire. Breathing vapors may cause drowsiness and dizziness. Causes eye and respiratory tract irritation. Repeated exposure may cause skin dryness or cracking. Target Organs: Central nervous system, eyes, skin.

## Potential Health Effects

Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury.
Prolonged and/or repeated contact may cause defatting of the skin and dermatitis. May cause irritation with pain

Skin:
and stinging, especially if the skin is abraded.
May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system Ingestion: depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal. Possible aspiration hazard.
Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, Inhalation: dizziness, unconsciousness and coma. Inhalation of vapor may cause respiratory tract irritation. May cause narcotic effects in high concentration.
Chronic: Prolonged or repeated skin contact may cause defatting and dermatitis.

## Section 4 - First Aid Measures

Eyes: $\quad$ Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Ingestion:

Inhalation: difficult, give oxygen. If breathing has ceased apply artificial respiration using oxygen and a suitable
Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.
Potential for aspiration if swallowed. Get medical aid immediately. Do not induce vomiting unless directed to naturally, have victim lean forward.
Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is mechanical device such as a bag and a mask.
Notes to
Physician:

General Information:

Extinguishing
Media:

## Section 5 - Fire Fighting Measures

 As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved may explode in the heat of a fire. May form explosive peroxides. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.${ }_{\text {Temperature: }}{ }^{\text {Autoignition }}$ Nopplicable.
Flash Point: -6.7 deg C ( 19.94 deg F)
Explosion
Limits: Lower: 3.5
Explosion
18.0

Limits: Upper:
NFPA Rating: health: 2; flammability: 3; instability: 0 ;
Section 6 - Accidental Release Measures

## General

Information:
Use proper personal protective equipment as indicated in Section 8.
Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up
Spills/Leaks: spills immediately, observing precautions in the Protective Equipment section. Scoop up with a nonsparking tool, then place into a suitable container for disposal. Remove all sources of ignition. Provide ventilation.

## Section 7 - Handling and Storage

Wash thoroughly after handling. Wash thoroughly after handling. Use only in a well-ventilated area. Use sparkproof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Empty containers retain Handling: product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Do not ingest or inhale. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Containers should be dated when

Storage: opened and tested periodically for the presence of peroxides. Should crystals form in a peroxidizable liquid, peroxidation may have occurred and the product should be considered extremely dangerous. In this instance, the
container should only be opened remotely by professionals. All peroxidizable substances should be stored away from heat and light and be protected from ignition sources.

Section 8 - Exposure Controls, Personal Protection


OSHA Vacated PELs: Isopropyl alcohol: 400 ppm TWA; $980 \mathrm{mg} / \mathrm{m} 3$ TWA Acetone: 750 ppm TWA; $1800 \mathrm{mg} / \mathrm{m} 3$ TWA Engineering Controls:

Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Exposure Limits
Personal Protective Equipment
Eyes: Wear chemical splash goggles.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a
Respirators: NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties
Physical State: Liquid
Color: clear, colorless
Odor: Pungent odor.
pH : Not available
Vapor Pressure: 186 mm Hg
Vapor Density: 2.0-2.1(Air=1)
Evaporation Rate: 2.2-14.48 (Butyl acetate $=1$ )
Viscosity: Not available
Boiling Point: 56.1-82 deg C
Freezing/Melting Point: Not available
Decomposition Temperature: Not available
Solubility in water: Complete in water.
Specific Gravity/Density: 0.79 (Water=1)
Molecular Formula: Not applicable.
Molecular Weight: Not available.
Section 10 - Stability and Reactivity

Chemical Stability:
Conditions to Avoid: Ignition sources, excess heat.
Incompatibilities with Other Materials
Hazardous Decomposition
Products classified as peroxidizable..

Oxides of carbon.

Stable at room temperature in closed containers under normal storage and handling conditions. This material may be sensitive to peroxide formation.

Strong reducing agents, Isopropanol is susceptible to autoxidation and therefore should be

Hazardous Polymerization Will not occur.
Section 11 - Toxicological Information

| RTECS\#: | CAS\# 67-63-0: NT8050000 |
| :---: | :---: |
|  | CAS\# 67-64-1: AL3150000 |
|  | RTECS: |
|  | CAS\# 67-63-0: Draize test, rabbit, eye: 100 mg Severe; |
|  | Draize test, rabbit, eye: 10 mg Moderate; |
|  | Draize test, rabbit, eye: $100 \mathrm{mg} / 24 \mathrm{H}$ Moderate; |
|  | Draize test, rabbit, skin: 500 mg Mild; |
|  | Inhalation, mouse: LC50 $=53000 \mathrm{mg} / \mathrm{m} 3$; |
|  | Inhalation, rat: LC50 $=16000 \mathrm{ppm} / 8 \mathrm{H}$; |
|  | Inhalation, rat: LC50 $=72600 \mathrm{mg} / \mathrm{m3}$; |
|  | Oral, mouse: LD50 $=3600 \mathrm{mg} / \mathrm{kg}$; |
|  | Oral, mouse: LD50 $=3600 \mathrm{mg} / \mathrm{kg}$; |
|  | Oral, rabbit: LD50 $=6410 \mathrm{mg} / \mathrm{kg}$; |
|  | Oral, rat: LD50 $=5045 \mathrm{mg} / \mathrm{kg}$; |
|  | Oral, rat: LD50 $=5000 \mathrm{mg} / \mathrm{kg}$; |
| LD50/LC50: | Skin, rabbit: LD50 $=12800 \mathrm{mg} / \mathrm{kg}$; |
|  | RTECS: |
|  | CAS\# 67-64-1: Dermal, guinea pig: LD50 $=>9400 \mathrm{uL} / \mathrm{kg}$; |
|  | Draize test, rabbit, eye: 20 mg Severe; |
|  | Draize test, rabbit, eye: $20 \mathrm{mg} / 24 \mathrm{H}$ Moderate; |
|  | Draize test, rabbit, eye: 10 uL Mild; |
|  | Draize test, rabbit, skin: $500 \mathrm{mg} / 24 \mathrm{H}$ Mild; |
|  | Inhalation, mouse: LC50 $=44 \mathrm{gm} / \mathrm{m} 3 / 4 \mathrm{H}$; |
|  | Inhalation, rat: LC50 $=50100 \mathrm{mg} / \mathrm{m} 3 / 8 \mathrm{H}$; |
|  | Oral, mouse: LD50 $=3 \mathrm{gm} / \mathrm{kg}$; |
|  | Oral, rabbit: LD50 $=5340 \mathrm{mg} / \mathrm{kg}$; |
|  | Oral, rat: LD50 $=5800 \mathrm{mg} / \mathrm{kg}$; |
|  | - |
| Carcinogenicity: | Isopropyl alcohol - IARC: Group 3 (not classifiable) <br> Acetone - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65 |
| Other: |  |

Section 12 - Ecological Information
Ecotoxicity:

## Not available

Section 13 - Disposal Considerations
Dispose of in a manner consistent with federal, state, and local regulations.
Section 14 - Transport Information
US DOT
Shipping Name: FLAMMABLE LIQUIDS, N.O.S.
Hazard Class: 3
UN Number: UN1993
Packing Group: II
Canada TDG
Shipping Name: FLAMMABLE LIQUID NOS (ISOPROPONAL, ACETONE)
Hazard Class: 3
UN Number: UN1993
Packing Group: II

USA RQ: CAS\# 67-64-1: 5000 lb final RQ; 2270 kg final RQ
Section 15 - Regulatory Information
European/International Regulations
European Labeling in Accordance with EC Directives

Hazard Symbols: XI F
Risk Phrases:
R 11 Highly flammable.
R 36 Irritating to eyes.
R 66 Repeated exposure may cause skin dryness or cracking.
R 67 Vapours may cause drowsiness and dizziness.
Safety Phrases:
S 7 Keep container tightly closed.
S 9 Keep container in a well-ventilated place.
S 16 Keep away from sources of ignition - No smoking.
S 24/25 Avoid contact with skin and eyes.
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

## WGK (Water Danger/Protection)

CAS\# 67-63-0: 1
CAS\# 67-64-1: 0

## Canada

CAS\# 67-63-0 is listed on Canada's DSL List CAS\# 67-64-1 is listed on Canada's DSL List Canadian WHMIS Classifications: D2B, B2
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
CAS\# 67-63-0 is listed on Canada's Ingredient Disclosure List
CAS\# 67-64-1 is listed on Canada's Ingredient Disclosure List
US Federal
TSCA
CAS\# 67-63-0 is listed on the TSCA
Inventory.
CAS\# 67-64-1 is listed on the TSCA
Inventory.
Section 16 - Other Information
MSDS Creation Date: 7/23/1999
Revision \#8 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

