

Safety Data Sheet



Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

- Product Name** • Isopropyl Alcohol, Reagent Grade, TSI P/N 8016, 8016M
- Synonyms** • 2-propanol; IPA; Isopropanol; sec-propyl alcohol
- SDS Number/Grade** • Document Number 6010486 Rev A
• Container size: box of x16 bottles, 30ml each. Box contains less than 500ml of liquid.

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

- Relevant identified use(s)** • For use in PortaCount® Respirator Fit Tester and Condensation Particle Counters

1.3 Details of the supplier of the safety data sheet

- Manufacturer** • TSI Incorporated
500 Cardigan Road
Shoreview, MN 55126
United States
answers@tsi.com
www.tsi.com

Telephone (General) • +1-800-874-2811

1.4 Emergency telephone number

- Manufacturer** • +1-800-424-9300 - Chemtrec

Section 2: Hazards Identification

EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 2015/830]

2.1 Classification of the substance or mixture

- CLP** • Flammable Liquids 2 - H225
Eye Irritation 2 - H319
Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336

2.2 Label Elements

CLP

DANGER



- Hazard statements** • H225 - Highly flammable liquid and vapour
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness

Precautionary statements

- Prevention** • P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P233 - Keep container tightly closed.
 P240 - Ground and/or 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 and/or spray.
 P264 - Wash thoroughly after handling.
 P271 - Use only outdoors or in a well-ventilated area.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- Response** • P370+P378 - In case of fire: Use appropriate media for extinction.
 P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P312 - Call a POISON CENTER/doctor if you feel unwell.
 P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P361 - Take off immediately all contaminated clothing.
 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 advice/attention.
- Storage/Disposal** • P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
 P235 - Keep cool.
 P405 - Store locked up.
 P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other Hazards

- CLP**
- According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

Section 3 - Composition/Information on Ingredients

3.1 Substances

| Composition | | | | | |
|-------------------|---|----------------|--|---|----------|
| Chemical Name | Identifiers | % | LD50/LC50 | Classifications According to Regulation/Directive | Comments |
| Isopropyl alcohol | CAS:67-63-0 EC Number:200-661-7 EU Index:603-117-00-0 | 98% TO 100% | Ingestion/Oral-Rat LD50 • 5000 mg/kg Skin-Rabbit LD50 • 12800 mg/kg Inhalation-Rat LC50 • 72600 mg/m ³ | EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3:Narc., H336 | NDA |

3.2 Mixtures

- Material does not meet the criteria of a mixture.

Section 4 - First Aid Measures

4.1 Description of first aid measures

- Inhalation**
- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing.
- Skin**
- In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing. Wash skin with soap and water. Get medical attention if symptoms occur.
- Eye**
- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If easy to do, remove contact lenses, if worn. Get medical attention.
- Ingestion**
- Call a physician or poison control center immediately. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get in the lungs.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to Physician**
- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

- Suitable Extinguishing Media**
- CAUTION: For mixtures containing a high percentage of an alcohol or polar solvent, alcohol-resistant foam may be more effective.
LARGE FIRES: Water spray, fog or alcohol-resistant foam.
SMALL FIRES: Dry chemical, CO₂, water spray or alcohol-resistant foam.

- Unsuitable Extinguishing Media**
- Avoid using direct water stream.

5.2 Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards**
- HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. Containers may explode when heated. Many liquids are lighter than water. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapors may travel to source of ignition and flash back. Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard.

- Hazardous Combustion Products**
- No data available

5.3 Advice for firefighters

- Structural firefighters' protective clothing will only provide limited protection. Wear positive pressure self-contained breathing apparatus (SCBA). Move containers from fire area if you can do it without risk. LARGE FIRES: Cool containers with flooding quantities of water until well after fire is out.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal Precautions**
- CAUTION: Victim may be a source of contamination. Do not walk through spilled material. Use appropriate Personal Protective Equipment (PPE)
- Emergency Procedures**
- As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. LARGE SPILL: Consider initial downwind evacuation for at least 300 meters (1000 feet) ELIMINATE all ignition sources (no

smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Stay upwind. Ventilate closed spaces before entering.

6.2 Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Stop leak if you can do it without risk.
Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
Use clean non-sparking tools to collect absorbed material.
A vapor suppressing foam may be used to reduce vapors.
All equipment used when handling the product must be grounded.
LARGE SPILLS: Dike far ahead of liquid spill for later disposal.
LARGE SPILLS: Water spray may reduce vapor; but may not prevent ignition in closed spaces.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

- Keep away from heat, sparks, and flame. Keep from direct sunlight. Do not use sparking tools. Take precautionary measures against static charges. All equipment used when handling the product must be grounded. Wear appropriate personal protective equipment, avoid direct contact. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Store in a tightly closed container. Store in a cool/low-temperature, well-ventilated place. Ground and bond container and receiving equipment. Keep away from food, drink and animal feeding stuffs.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

| Exposure Limits/Guidelines | | | | | | |
|--------------------------------|----------|--|--|--------------------------------|--|--|
| | Result | Austria | Belgium | Czech Republic | Denmark | Estonia |
| Isopropyl alcohol (67-63-0) | Ceilings | Not established | Not established | 1000 mg/m ³ Ceiling | Not established | Not established |
| | TWAs | Not established | 200 ppm TWA; 500 mg/m ³ TWA | 500 mg/m ³ TWA | 200 ppm TWA; 490 mg/m ³ TWA | 150 ppm TWA; 350 mg/m ³ TWA |
| | MAKs | 200 ppm TWA [TMW] (short time value for large casting); 500 mg/m ³ TWA [TMW] (short time value for large casting) | Not established | Not established | Not established | Not established |
| | | 800 ppm STEL [KZW] (4 X 15 min); 2000 mg/m ³ STEL [KZW] (4 X 15 min); 800 ppm STEL [KZW] (STEL | | | | |

| | | | | | | |
|--|-------|--|---|-----------------|-----------------|--|
| | STELs | for large casting valid till 12/31/2013, 4 X 30 min); 2000 mg/m ³ STEL [KZW] (STEL for large casting valid till 12/31/2013, 4 X 30 min) | 400 ppm STEL; 1000 mg/m ³ STEL | Not established | Not established | 250 ppm STEL; 600 mg/m ³ STEL |
|--|-------|--|---|-----------------|-----------------|--|

Exposure Limits/Guidelines (Con't.)

| | Result | Finland | France | Germany DFG | Germany TRGS | Greece |
|--------------------------------|----------|--|--|--|--|---|
| Isopropyl alcohol (67-63-0) | TWAs | 200 ppm TWA (listed under Propanol); 500 mg/m ³ TWA (listed under Propanol) | Not established | Not established | 200 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2); 500 mg/m ³ TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2) | 400 ppm TWA; 980 mg/m ³ TWA |
| | STELs | 250 ppm STEL; 620 mg/m ³ STEL | 400 ppm STEL [VLCT]; 980 mg/m ³ STEL [VLCT] | Not established | Not established | 500 ppm STEL; 1225 mg/m ³ STEL |
| | Ceilings | Not established | Not established | 400 ppm Peak; 1000 mg/m ³ Peak | Not established | Not established |
| | MAKs | Not established | Not established | 200 ppm TWA MAK; 500 mg/m ³ TWA MAK | Not established | Not established |

Exposure Limits/Guidelines (Con't.)

| | Result | Hungary | Iceland | Ireland | Latvia | Norway |
|--------------------------------|----------|----------------------------------|--|-----------------|----------------------------|--|
| Isopropyl alcohol (67-63-0) | TWAs | 500 mg/m ³ TWA [AK] | 200 ppm TWA; 490 mg/m ³ TWA | 200 ppm TWA | Not established | 100 ppm TWA; 245 mg/m ³ TWA |
| | STELs | 2000 mg/m ³ STEL [CK] | Not established | 400 ppm STEL | 600 mg/m ³ STEL | Not established |
| | Ceilings | Not established | 400 ppm Ceiling; 980 mg/m ³ Ceiling | Not established | Not established | Not established |

Exposure Limits/Guidelines (Con't.)

| | Result | Poland | Portugal | Russia | Slovak Republic | Slovenia |
|--------------------------------|----------|-------------------------------------|-----------------------|-----------------------------------|--|---|
| Isopropyl alcohol (67-63-0) | STELs | 1200 mg/m ³ STEL [NDSCh] | 400 ppm STEL [VLE-CD] | 50 mg/m ³ STEL (vapor) | Not established | 800 ppm STEL; 2000 mg/m ³ STEL |
| | TWAs | 900 mg/m ³ TWA [NDS] | 200 ppm TWA [VLE-MP] | 10 mg/m ³ TWA (vapor) | 200 ppm TWA; 500 mg/m ³ TWA | 200 ppm TWA; 500 mg/m ³ TWA |
| | Ceilings | Not established | Not established | Not established | 1000 mg/m ³ Ceiling | Not established |

Exposure Limits/Guidelines (Con't.)

| | Result | Spain | Sweden | Switzerland | United Kingdom |
|--|--------|---|--|---|---|
| | MAKs | Not established | Not established | 200 ppm TWA [MAK]; 500 mg/m ³ TWA [MAK] | Not established |
| | STELs | 400 ppm STEL [VLA-EC]; 1000 mg/m ³ STEL [VLA-EC] | 250 ppm Indicative STLV; 600 mg/m ³ Indicative STLV | 400 ppm STEL [KZW]; 1000 mg/m ³ STEL [KZW] | 500 ppm STEL; 1250 mg/m ³ STEL |

| | | | | | |
|--------------------------------|------|---|--|-----------------|--|
| Isopropyl alcohol (67-63-0) | TWAs | 200 ppm TWA [VLA-ED] (the partial or complete commercialization or use of this substance as a phytosanitary or biocide compound is prohibited); 500 mg/m ³ TWA [VLA-ED] (the partial or complete commercialization or use of this substance as a phytosanitary or biocide compound is prohibited) | 150 ppm LLV; 350 mg/m ³ LLV | Not established | 400 ppm TWA; 999 mg/m ³ TWA |
|--------------------------------|------|---|--|-----------------|--|

8.2 Exposure controls

Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Use explosion-proof electrical/ventilating/lighting/equipment.

Personal Protective Equipment

Respiratory

- Follow the respirator regulations found in HSE 282/28 or European Standard EN 149. Use a European Standard EN 149 or HSE 282/28 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear protective eyewear (goggles, face shield, or safety glasses).

Skin/Body

- Wear chemical resistant gloves.

Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Additional Protection Measures

- An eye wash and safety shower must be available in the immediate work area.

Key to abbreviations

LLV = Limit Level Value is the exposure limit for 8-hour work day

MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration

STEL = Short Term Exposure Limits are based on 15-minute exposures

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

| Material Description | | | |
|-----------------------------------|-------------------------------|------------------------------|---------------------------------|
| Physical Form | Liquid | Appearance/Description | Clear liquid with solvent odor. |
| Color | Clear | Odor | Solvent |
| Odor Threshold | Data lacking | | |
| General Properties | | | |
| Boiling Point | 82 °C(179.6 °F) | Melting Point/Freezing Point | -88.5 °C(-127.3 °F) |
| Decomposition Temperature | Data lacking | pH | Data lacking |
| Specific Gravity/Relative Density | = 0.79 @ 20 °C(68 °F) Water=1 | Water Solubility | Miscible |
| Viscosity | Data lacking | Explosive Properties | Data lacking |
| Oxidizing Properties: | Data lacking | | |
| Volatility | | | |
| Vapor Pressure | 6 kPa @ 25 °C(77 °F) | Vapor Density | 2.1 Air=1 |
| Evaporation Rate | 2.8 n-Butyl Acetate = 1 | | |

Flammability

| | | | |
|---------------------------|--------------------------------|--------------|------------------|
| Flash Point | 12 °C(53.6 °F) CC (Closed Cup) | UEL | 12.7 % |
| LEL | 2 % | Autoignition | 399 °C(750.2 °F) |
| Flammability (solid, gas) | Data lacking | | |

Environmental

| | | | |
|-------------------------------------|--------------|--|--|
| Octanol/Water Partition coefficient | Data lacking | | |
|-------------------------------------|--------------|--|--|

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity**10.1 Reactivity**

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Heat, sparks, flames, sunlight.

10.5 Incompatible materials

- Strong oxidizing agents. Acetylene. Acids. Chlorine. Hydrogen peroxide (H2O2). Ethylene Oxide. Sulfuric Acid. Isocyanates. Aluminum.

10.6 Hazardous decomposition products

- Thermal decomposition may release oxides of carbon.

Section 11 - Toxicological Information**11.1 Information on toxicological effects**

| Components | |
|---------------------------------|--|
| Isopropyl alcohol (98% TO 100%) | 67 - 63 -0 |
| | <p>Acute Toxicity: Ingestion-Oral-Rat LD50 • 5000 mg/kg; Behavioral:General anesthetic; Inhalation-Rat LC50 • 16000 ppm 8 Hour(s); Inhalation-Guinea Pig TClO • 980 mg/m³ 24 Hour(s); Sense Organs and Special Senses:Ear:Other; Behavioral:General anesthetic; Lungs, Thorax, or Respiration:Other changes; Skin-Rabbit LD50 • 12800 mg/kg;</p> <p>Irritation: Eye-Rabbit • 100 mg • Severe irritation; Skin-Rabbit • 500 mg • Mild irritation;</p> <p>Multi-dose Toxicity: Inhalation-Mouse TClO • 5000 ppm 6 Hour(s) 13 Week(s)-Intermittent; Behavioral:General anesthetic; Behavioral:Ataxia; Liver:Changes in liver weight; Inhalation-Rat TClO • 500 mg/m³ 4 Hour(s) 122 Day(s)-Intermittent; Liver:Multiple effects; Kidney, Ureter, and Bladder:Other changes; Nutritional and Gross Metabolic:Gross Metabolite Changes:Weight loss or decreased weight gain; Inhalation-Rat TClO • 20 mg/m³ 24 Hour(s) 90 Day(s)-Continuous; Brain and Coverings:Other degenerative changes; Lungs, Thorax, or Respiration:Other changes; Liver:Multiple effects; Inhalation-Rat TClO • 1000 mg/m³ 6 Hour(s) 4 Week(s)-Intermittent; Sense Organs and Special Senses:Eye:Optic nerve neuropathy; Inhalation-Rat TClO • 100 mg/m³ 4 Hour(s) 17 Week(s)-Intermittent; Kidney, Ureter, and Bladder:Other changes in urine composition; Blood:Changes in serum composition (e.g., TP, bilirubin cholesterol); Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:True cholinesterase;</p> <p>Mutagen: Cytogenetic analysis • Inhalation-Rat • 1030 µg/m³ 16 Week(s)-Intermittent;</p> <p>Reproductive: Inhalation-Rat TClO • 10000 ppm 7 Hour(s)(1-19D preg); Reproductive Effects:Effects on Fertility:Pre-implantation mortality; Reproductive Effects:Effects on Fertility:Post-implantation mortality; Reproductive Effects:Effects on Embryo or Fetus:Fetal death; Inhalation-Rat TClO • 3500 ppm 7 Hour(s)(1-19D preg); Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Inhalation-Rat TClO • 7000 ppm 7 Hour(s)(1-19D preg); Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system</p> |

| GHS Properties | Classification |
|-------------------------------|---|
| Acute toxicity | EU/CLP • Data lacking |
| Skin corrosion/Irritation | EU/CLP • Data lacking |
| Serious eye damage/Irritation | EU/CLP • Eye Irritation 2 |
| Skin sensitization | EU/CLP • Data lacking |
| Respiratory sensitization | EU/CLP • Data lacking |
| Aspiration Hazard | EU/CLP • Data lacking |
| Carcinogenicity | EU/CLP • Data lacking |
| Germ Cell Mutagenicity | EU/CLP • Data lacking |
| Toxicity for Reproduction | EU/CLP • Data lacking |
| STOT-SE | EU/CLP • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects |
| STOT-RE | EU/CLP • Data lacking |

Potential Health Effects

Inhalation

- Acute (Immediate)**
 - May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death. May cause irritation to the mucous membranes and upper respiratory tract.
- Chronic (Delayed)**
 - No data available.

Skin

- Acute (Immediate)**
 - May cause irritation.
- Chronic (Delayed)**
 - No data available.

Eye

- Acute (Immediate)**
 - Causes serious eye irritation.
- Chronic (Delayed)**
 - No data available.

Ingestion

- Acute (Immediate)**
 - May cause irritation. May cause nausea, stomach pain and vomiting.
- Chronic (Delayed)**
 - No data available.

Key to abbreviations

LC = Lethal Concentration

LD = Lethal Dose

TC = Toxic Concentration

Section 12 - Ecological Information

12.1 Toxicity

- Material data lacking.

12.2 Persistence and degradability

- Expected to be readily biodegradable.

12.3 Bioaccumulative potential

- Material data lacking.

12.4 Mobility in Soil

- This product is partly soluble in water. May spread in the aquatic environment.

12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

- The product components are no classified as environmentally hazardous. However, this does not exclude the possibly that large or frequent spill can have a harmful or damaging effect on the environment.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

| | 14.1 UN number | 14.2 UN proper shipping name | 14.3 Transport hazard class(es) | 14.4 Packing group | 14.5 Environmental hazards |
|-----------|----------------|------------------------------|---------------------------------|--------------------|----------------------------|
| DOT | UN1219 | Isopropyl alcohol | 3 | II | NDA |
| TDG | UN1219 | ISOPROPYL ALCOHOL | 3 | II | NDA |
| IMO/IMDG | UN1219 | ISOPROPYL ALCOHOL | 3 | II | NDA |
| IATA/ICAO | UN1219 | Isopropyl alcohol | 3 | II | NDA |

14.6 Special precautions for user

- None specified.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

- Data lacking.

Section 15 - Regulatory Information

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

| Inventory | | | |
|-------------------|---------|-----------|-----------|
| Component | CAS | EU EINECS | EU ELNICS |
| Isopropyl alcohol | 67-63-0 | Yes | No |

Bulgaria

Environment

Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - 30 Minute

- | | | |
|---------------------|---------|-----------------|
| • Isopropyl alcohol | 67-63-0 | 0.6 mg/m3 MAHCL |
|---------------------|---------|-----------------|

Croatia

Environment

Croatia - Air Quality - Limit Values of Pollutants in Air

- | | | |
|---------------------|---------|------------|
| • Isopropyl alcohol | 67-63-0 | Not Listed |
|---------------------|---------|------------|

Germany**Environment****Germany - TA Luft - Emission Limits for Organic Substances**

| | | |
|---------------------|---------|------------|
| • Isopropyl alcohol | 67-63-0 | Not Listed |
|---------------------|---------|------------|

Greece**Environment****Greece - Water Quality - Industrial Emission Limit Values (ELVs) - Daily**

| | | |
|---------------------|---------|------------|
| • Isopropyl alcohol | 67-63-0 | Not Listed |
|---------------------|---------|------------|

Luxembourg**Labor****Luxembourg - Protection of Workers Exposure to Chemical Agents**

| | | |
|---------------------|---------|------------|
| • Isopropyl alcohol | 67-63-0 | Not Listed |
|---------------------|---------|------------|

Other Agency Information**Other****AIHA - Emergency Response Planning Guidelines - ERPG-1 Values**

| | | |
|---------------------|---------|------------|
| • Isopropyl alcohol | 67-63-0 | Not Listed |
|---------------------|---------|------------|

AIHA - Emergency Response Planning Guidelines - ERPG-2 Values

| | | |
|---------------------|---------|------------|
| • Isopropyl alcohol | 67-63-0 | Not Listed |
|---------------------|---------|------------|

AIHA - Emergency Response Planning Guidelines - ERPG-3 Values

| | | |
|---------------------|---------|------------|
| • Isopropyl alcohol | 67-63-0 | Not Listed |
|---------------------|---------|------------|

AIHA - Odor Threshold Values

| | | |
|---------------------|---------|----------------------------|
| • Isopropyl alcohol | 67-63-0 | 1 ppm odor threshold value |
|---------------------|---------|----------------------------|

Slovak Republic**Labor****Slovak Republic - Selected Chemical Agents and Usages Which are Not Permitted**

| | | |
|---------------------|---------|------------|
| • Isopropyl alcohol | 67-63-0 | Not Listed |
|---------------------|---------|------------|

Environment**Slovak Republic - Waste Regulations - List of Harmful Substances**

| | | |
|---------------------|---------|------------|
| • Isopropyl alcohol | 67-63-0 | Not Listed |
|---------------------|---------|------------|

United Kingdom**Environment****United Kingdom - Pollution Inventory - Form PI 1 - Part 2 - Thresholds for Releases to Air**

| | | |
|---------------------|---------|------------|
| • Isopropyl alcohol | 67-63-0 | Not Listed |
|---------------------|---------|------------|

Other**United Kingdom - Major Accidents - Toxic Equivalent Factors (TEF)**

| | | |
|---------------------|---------|------------|
| • Isopropyl alcohol | 67-63-0 | Not Listed |
|---------------------|---------|------------|

United Kingdom - Major Accidents - Qualifying Quantities for Accident Prevention

| | | |
|---------------------|---------|------------|
| • Isopropyl alcohol | 67-63-0 | Not Listed |
|---------------------|---------|------------|

United Kingdom - Major Accidents - Qualifying Quantities for Safety Reporting

| | | |
|---|---------|------------|
| • Isopropyl alcohol | 67-63-0 | Not Listed |
| United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review | | |
| • Isopropyl alcohol | 67-63-0 | Not Listed |

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

| | |
|--|---|
| Revision Date | • 19/January/2017 |
| Last Revision Date | • 17/January/2017 |
| Preparation Date | • 17/January/2017 |
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Key to abbreviations

NDA = No Data Available