



Safety Data Sheet

Issue Date: 01-Nov-2012

Revision Date: 17-Dec-2014

Version 1

1. IDENTIFICATION

Product Identifier

Product Name SK-172

Other means of identification

SDS # SK-172

UN/ID No UN1219

Recommended use of the chemical and restrictions on use

Recommended Use Solvent cleaner.

Details of the supplier of the safety data sheet

Supplier Address

StartKleen
193 Wall Street Road
Gunter, Texas 75058

Emergency Telephone Number

Company Phone Number Information: 903-207-1079, 7AM - 6PM M-F
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Blue liquid

Physical State Liquid

Odor Alcohol

Classification

| | |
|--|------------|
| Serious eye damage/eye irritation | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Flammable Liquids | Category 2 |

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed
May be harmful if inhaled

Signal Word

Danger

Hazard Statements

Causes serious eye irritation
May cause drowsiness or dizziness
Highly flammable liquid and vapor



Precautionary Statements - Prevention

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
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge
 Wear protective gloves/protective clothing/eye protection/face protection

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 ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 If skin irritation persists: Get medical advice/attention
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Immediately call a poison center or doctor/physician
 IN CASE OF FIRE: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool
 Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No | Weight-% |
|-------------------|---------|----------|
| Isopropyl Alcohol | 67-63-0 | 100 |

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

| | |
|---------------------|--|
| Eye Contact | 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. |
| Skin Contact | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If irritation persists, seek medical attention. |
| Inhalation | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician. |
| Ingestion | Do not induce vomiting. Drink 1 or 2 glasses of water. Immediately call a poison center or doctor/physician. Never give anything by mouth to an unconscious person. |

Most important symptoms and effects**Symptoms**

Causes serious eye irritation. May cause pain disproportionate to the level of irritation to eye tissues. May cause moderate corneal injury. Vapor may cause eye irritation experienced as mild discomfort or redness. Prolonged skin exposure is not likely to cause significant irritation; may cause drying and flaking of skin. Accidental ingestion of small amounts as a result of normal handling are not likely to cause injury; however, swallowing large amounts may cause injury including central nervous system depression, nausea, and vomiting. Signs and symptoms of excessive ingestion may include facial flushing, low blood pressure, and irregular heartbeat. In poorly ventilated areas, vapors or mist may accumulate and cause respiratory irritation. Prolonged, excessive inhalation exposure may cause adverse effects. Excessive exposure (400 ppm) to isopropanol may cause eye, nose, or throat irritation. Incoordination, confusion, hypotension, hypothermia, circulatory collapse, respiratory arrest, and death may follow a longer duration or higher levels of exposure. Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

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

Maintain adequate ventilation and oxygenation of the patient. The decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying stomach. Hemodialysis may be of benefit if substantial amounts have been ingested and the patient is showing signs of intoxication. Consider hemodialysis for patients with persistent hypotension or coma unresponsive to standard therapy (Isopropanol levels >400-500 mg/dl). No specific antidote. Treatment of exposure should be directed at the control of symptoms and clinical condition of the patient. Skin contact may aggravate preexisting dermatitis; use recommended protective equipment listed in Section 8.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Do not use direct water stream. Straight or direct water streams may not be effective to extinguish fire. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Highly flammable liquid and vapor. Container may vent and/or rupture due to fire. When product is stored in closed containers, a flammable atmosphere can develop. Electrically ground and bond all equipment. Flammable mixtures of this product are readily ignited even by static discharge. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas. Ignition and/or flash back may occur. Flammable concentrations of vapor can accumulate at temperatures above the flash point.

Sensitivity to Static Discharge Take precautionary measures against static discharge.

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. Keep people away. Isolate fire and deny unnecessary entry. Stay upwind. Keep out of low areas where gases (fumes) can accumulate. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Eliminate ignition sources. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Move container from fire area if it can be done without risk.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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|----------------------------------|--|
| Personal Precautions | Use personal protection recommended in Section 8. |
| Environmental Precautions | Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS. |

Methods and material for containment and cleaning up

| | |
|--------------------------------|--|
| Methods for Containment | Prevent further leakage or spillage if safe to do so. A vapor suppressing foam may be used to reduce vapors. |
| Methods for Clean-Up | Contain and collect with an inert absorbent and place into an appropriate container for disposal. |

7. HANDLING AND STORAGE

Precautions for safe handling

| | |
|--------------------------------|---|
| Advice on Safe Handling | Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. 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. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion proof equipment. Use only non-sparking tools. Take precautionary measures against static discharges. Do not flame, cut, braze weld or melt empty containers. Never use air pressure for transferring product. |
|--------------------------------|---|

Conditions for safe storage, including any incompatibilities

| | |
|-------------------------------|--|
| Storage Conditions | Keep container tightly closed and store in a cool, dry and well-ventilated place. Protect from direct sunlight. Protect from exposure to air. Store away from incompatible materials. Store locked up. |
| Incompatible Materials | Aldehydes. Halogenated organics. Halogens. Strong acids. Strong oxidizers. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|------------------------------|-------------------------------|---|---|
| Isopropyl Alcohol 67-63-0 | STEL: 400 ppm TWA: 200 ppm | TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³ | IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³ |

Appropriate engineering controls

| | |
|-----------------------------|---|
| Engineering Controls | Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers. |
|-----------------------------|---|

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------|---|
| Eye/Face Protection | Wear chemical goggles. If exposure causes eye discomfort, use a full-face respirator. |
| Skin and Body Protection | Chemical resistant protective gloves. Suitable protective clothing. |
| Respiratory Protection | Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use an approved respirator. When respiratory protection is required, use an approved positive-pressure self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus. In confined or poorly ventilated areas, use an approved self-contained breathing apparatus or positive pressure air line with auxiliary self-contained air supply. The following should be effective types of air-purifying respirators: organic vapor cartridge. |

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

| | | | |
|-----------------------|-------------|-----------------------|----------------|
| Physical State | Liquid | Odor | Alcohol |
| Appearance | Blue liquid | Odor Threshold | Not determined |
| Color | Blue | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|-------------------------------------|-------------------------|-------------------------|
| pH | Not test data available | |
| Melting Point/Freezing Point | -89 °C / -128 °F | |
| Boiling Point/Boiling Range | 82 °C / 180 °F | (at 760 mm Hg) |
| Flash Point | 12 °C / 54 °F | Tag Closed Cup |
| Evaporation Rate | Not determined | |
| Flammability (Solid, Gas) | Liquid-Not applicable | |
| Upper Flammability Limits | 12.0% | |
| Lower Flammability Limit | 2.0% | |
| Vapor Pressure | 33 mmHg @ 20°C | |
| Vapor Density | 2.1 | (Air=1) |
| Specific Gravity | 0.787 @ 20°C | (Water = 1) |
| Water Solubility | 100% @ 20°C | |
| Solubility in other solvents | Not determined | |
| Partition Coefficient | Not determined | |
| Auto-ignition Temperature | 399 °C / 750 °F | |
| Decomposition Temperature | Not determined | |
| Kinematic Viscosity | Not determined | |
| Dynamic Viscosity | 2.4 cPs @ 20°C | |
| Explosive Properties | Not determined | |
| Oxidizing Properties | Not determined | |

10. STABILITY AND REACTIVITY**Reactivity**

Not reactive under normal conditions.

Chemical Stability

Thermally stable at typical use temperatures.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.**Conditions to Avoid**

Keep separated from incompatible substances. Keep away from heat, sparks and open flame. Keep out of reach of children.

Incompatible Materials

Aldehydes. Halogenated organics. Halogens. Strong acids. Strong oxidizers.

Hazardous Decomposition Products

Decomposition products depend upon temperature, air supply, and the presence of other materials.

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

Eye Contact Causes serious eye irritation.

Skin Contact Avoid contact with skin.

Inhalation May be harmful if inhaled. May cause drowsiness or dizziness.

Ingestion May be harmful if swallowed.

Component Information

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|------------------------------|----------------------|---|-------------------------|
| Isopropyl Alcohol 67-63-0 | = 4396 mg/kg (Rat) | = 12800 mg/kg (Rat) = 12870 mg/kg (Rabbit) | = 72.6 mg/L (Rat) 4 h |

Information on physical, chemical and toxicological effects**Symptoms** Please see section 4 of this SDS for symptoms.**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Carcinogenicity** Group 3 IARC components are "not classifiable as human carcinogens".

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|------------------------------|-------|---------|-----|------|
| Isopropyl Alcohol 67-63-0 | | Group 3 | | X |

Legend*IARC (International Agency for Research on Cancer)**Group 3 IARC components are "not classifiable as human carcinogens"**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**X - Present***STOT - single exposure** May cause drowsiness or dizziness.**Numerical measures of toxicity**

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

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

Component Information

| Chemical Name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|------------------------------|--|---|----------------------------|-------------------------------------|
| Isopropyl Alcohol 67-63-0 | 1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50 | 9640: 96 h Pimephales promelas mg/L LC50 flow-through 11130: 96 h Pimephales promelas mg/L LC50 static 1400000: 96 h Lepomis macrochirus µg/L LC50 | | 13299: 48 h Daphnia magna mg/L EC50 |

Persistence/Degradability

Material is readily biodegradable.

Bioaccumulation

Not determined.

Mobility

| Chemical Name | Partition Coefficient |
|------------------------------|-----------------------|
| Isopropyl Alcohol 67-63-0 | 0.05 |

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

- Disposal of Wastes** 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 Status

| Chemical Name | California Hazardous Waste Status |
|------------------------------|-----------------------------------|
| Isopropyl Alcohol 67-63-0 | Toxic Ignitable |

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT
UN/ID No UN1219
Proper Shipping Name Isopropanol
Hazard Class 3
Packing Group II

IATA
UN/ID No UN1219
Proper Shipping Name Isopropanol
Hazard Class 3
Packing Group II

IMDG
UN/ID No UN1219
Proper Shipping Name Isopropanol
Hazard Class 3
Packing Group II

15. REGULATORY INFORMATION

International Inventories

| Chemical Name | TSCA | DSL | NDSL | EINECS | ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|-------------------|---------|-----|------|---------|--------|---------|-------|---------|-------|------|
| Isopropyl Alcohol | Present | X | | Present | | Present | X | Present | X | X |

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*
- AICS - Australian Inventory of Chemical Substances*

US Federal Regulations

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).

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

SARA 313

| Chemical Name | CAS No | Weight-% | SARA 313 - Threshold Values % |
|-----------------------------|---------|----------|-------------------------------|
| Isopropyl Alcohol - 67-63-0 | 67-63-0 | 100 | 1.0 |

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)

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 |
|------------------------------|------------|---------------|--------------|
| Isopropyl Alcohol 67-63-0 | X | X | X |

16. OTHER INFORMATION**NFPA****Health Hazards**

1

Flammability

3

Instability

0

Special Hazards

Not determined

HMIS**Health Hazards**

Not determined

Flammability

Not determined

Physical Hazards

Not determined

Personal Protection

Not determined

Issue Date: 01-Nov-2012

Revision Date: 17-Dec-2014

Revision Note: New format

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