



Safety Data Sheet

Issue Date: 02-Aug-2012

Revision Date: 08-Nov-2013

Version 1

1. IDENTIFICATION

Product Identifier

Product Name Diisopropyl Ether-99

Other means of identification

SDS # NC-027
UN/ID No UN1159

Recommended use of the chemical and restrictions on use

Recommended Use For industrial use.

Details of the supplier of the safety data sheet

Supplier Address

Neuchem Inc.
2062 Union Street, Suite 300
San Francisco, CA 94123 USA
www.neuchem.com

Emergency Telephone Number

Company Phone Number Phone: 415-345-9353
Fax: 415-345-9350
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Colorless liquid

Physical State Liquid

Odor Ether-like

Classification

Specific target organ toxicity (single exposure)	Category 3
Flammable Liquids	Category 2

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed

Signal Word

Danger

Hazard Statements

May cause respiratory irritation. May cause drowsiness or dizziness
Highly flammable liquid and vapor



Precautionary Statements - Prevention

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
 Keep cool

Precautionary Statements - Response

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 IF INHALED: 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
 IN CASE OF FIRE: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS
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Chemical Name	CAS No	Weight-%
Isopropyl ether	108-20-3	>=99

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Skin Contact	Wash off immediately with plenty of water. Take off contaminated clothing. Wash contaminated clothing before reuse.
Inhalation	Remove to fresh air. Get medical attention if you feel unwell.
Ingestion	Call a physician or Poison Control Center.

Most important symptoms and effects

Symptoms	Overexposure by inhalation may cause CNS depression- drowsiness, dizziness, confusion or loss of coordination.
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Indication of any immediate medical attention and special treatment needed

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

Suitable Extinguishing Media

Dry powder. Water spray (fog). Alcohol resistant foam. Carbon dioxide (CO₂).

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Highly flammable liquid and vapor.

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. Cool containers exposed to fire with water.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Ensure adequate ventilation.

Environmental Precautions Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

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 Avoid breathing vapors or mists. Use only in well-ventilated areas. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Use spark-proof tools and explosion-proof equipment. Ground/bond container and receiving equipment. Take precautionary measures against static discharges. Vapors are heavier than air and may travel along the floor and in the bottom of containers. Check open containers for peroxides after 3 months. It is recommended to inertise the containers when opening.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. It is urgently recommended to ensure that the oldest stored material is used first (first in-first out). Storage period: 6 months; Storage temperature: <25°C.

Incompatible Materials Oxygen. Acids. Amines. Oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl ether 108-20-3	STEL: 310 ppm TWA: 250 ppm	TWA: 500 ppm TWA: 2100 mg/m ³ (vacated) TWA: 500 ppm (vacated) TWA: 2100 mg/m ³	IDLH: 1400 ppm TWA: 500 ppm TWA: 2100 mg/m ³

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tight sealing safety goggles.

Skin and Body Protection Consult the glove manufacturer for the most appropriate glove material.

Respiratory Protection No respiratory protection is necessary during normal use conditions. In the case of insufficient ventilation or if exposure limits are exceeded, use a suitable NIOSH/MSHA respiratory device.

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	Ether-like
Appearance	Colorless liquid	Odor Threshold	No data available
Color	Colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not applicable	
Melting Point/Freezing Point	-85.89 °C / -122.6 °F	
Boiling Point/Boiling Range	68.3 °C / 155 °F	
Flash Point	-28 °C / -18.4 °F	
Evaporation Rate	No data available	
Flammability (Solid, Gas)	n/a-liquid	
Upper Flammability Limits	21.0% (V)	
Lower Flammability Limit	1.4% (V)	
Vapor Pressure	175 hPa	@20°C
Vapor Density	1.42	@ 20°C (68°F)
Specific Gravity	Not determined	
Water Solubility	3.11 g/L	
Solubility in other solvents	Not determined	
Partition Coefficient	log Pow: 2.4	@ 20°C (68°F)
Auto-ignition Temperature	405 °C / 761 °F	Method DIN 51794
Decomposition Temperature	No decomposition if used as directed. Distills without decomposition at atmospheric pressure.	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	0.331 mPa s	@ 68°F (20°C)
Explosive Properties	Not an explosive	
Oxidizing Properties	No data available	
Additional Information	Refractive index: 1.367-1.369 @ 20°C, ISO 5661	
Density	0.723 g/cm ³	

10. STABILITY AND REACTIVITY

Reactivity

Vapors may form explosive mixtures with air.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

May form explosive peroxides.

Conditions to Avoid

Direct heating, dirt, chemical contamination, sunlight, UV or ionizing radiation.

Incompatible Materials

Oxygen. Acids. Amines. Oxidizing agents.

Hazardous Decomposition Products

Peroxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Avoid contact with eyes.
Skin Contact	Avoid contact with skin.
Inhalation	Avoid breathing vapors or mists.
Ingestion	May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Isopropyl ether 108-20-3	= 4700 mg/kg (Rat)	= 20000 mg/kg (Rabbit)	-

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 This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

STOT - single exposure May cause respiratory irritation. May cause drowsiness or dizziness.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Isopropyl ether 108-20-3		91.7: 96 h Pimephales promelas mg/L LC50 flow-through 7000: 96 h Lepomis macrochirus mg/L LC50 static	EC50 = 500 mg/L 5 min	190: 48 h Daphnia magna mg/L EC50

Persistence/Degradability

Not readily biodegradable. 11% in 5 days.

Bioaccumulation

Bioconcentration Factor (BCF): 4.67-6. Bioaccumulation is unlikely.

Mobility

Chemical Name	Partition Coefficient
Isopropyl ether 108-20-3	1.52

Other Adverse Effects

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT) This substance is not considered to be very persistent nor very bioaccumulating (vPvB)

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 ether 108-20-3	Ignitable Reactive

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	UN1159
Proper Shipping Name	Diisopropyl ether
Hazard Class	3
Packing Group	II

IATA

UN/ID No	UN1159
Proper Shipping Name	Diisopropyl ether
Hazard Class	3
Packing Group	II

IMDG

UN/ID No	UN1159
Proper Shipping Name	Diisopropyl ether
Hazard Class	3
Packing Group	II

15. REGULATORY INFORMATION

International Inventories

TSCA	Listed
DSL	Listed
EINECS	On inventory
ENCS	On inventory
IECSC	Listed
KECL	On inventory
PICCS	On inventory
AICS	On inventory

Legend:

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

SARA 313

Not determined

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Isopropyl ether 108-20-3	X	X	X

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

Not determined

Flammability

Not determined

Instability

Not determined

Special Hazards

Not determined

HMIS**Health Hazards**

Not determined

Flammability

Not determined

Physical Hazards

Not determined

Personal Protection

Not determined

Issue Date: 02-Aug-2012**Revision Date:** 08-Nov-2013**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