

SILVER FERN CHEMICAL, INC. Safety Data Sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Isopropylamine

Index-No. : 612-007-00-1

CAS-No. : 75-31-0

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

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Silver Fern Chemical, Inc.

2226 Queen Anne Avenue North

Suite C

Seattle, WA 98109 USA

Telephone : 1-866-282-3384

1.4 Emergency telephone number: INFO-TRAC +1-800-535-5053; Outside USA & Canada +1-352-323-3500

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 1), H224

Acute toxicity, Oral (Category 3), H301

Acute toxicity, Inhalation (Category 3), H331

Acute toxicity, Dermal (Category 3), H311

Skin corrosion (Category 1A), H314

Serious eye damage (Category 1), H318

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Short-term (acute) aquatic hazard (Category 3), H402

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



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Signal word	Danger
Hazard statement(s) H224 H301 + H311 + H331 H314 H318 H335 H402	Extremely flammable liquid and vapour. Toxic if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation. Harmful to aquatic life.
Precautionary statement(s) P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 P240 P241	Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting equipment.
P242 P243 P261 P264	Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling.
P270 P271 P273	Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment.
P280 P301 + P310 + P330	Wear protective gloves/ protective clothing/ eye protection/ face protection. IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P301 + P310 + P330 P301 + P330 + P331	Rinse mouth. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310 P305 + P351 + P338 +	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes.
P310	Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P362 P370 + P378	Take off contaminated clothing and wash before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403 + P233 P403 + P235 P405 P501	Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : 2-Aminopropane

Molecular weight : 59.11 g/mol CAS-No. : 75-31-0 EC-No. : 200-860-9



Index-No. : 612-007-00-1

Component	Classification	Concentration				
2-Aminopropane						
	Flam. Liq. 1; Acute Tox. 3; Skin Corr. 1A; Eye Dam. 1; STOT SE 3; Aquatic Acute 3; H224, H301, H331, H311, H314, H318, H335, H402	<= 100 %				

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NOx)

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

SILVER FERN

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wetbrushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): 3: Flammable liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

•						
Component	CAS-No.	Value	Control	Basis		
			parameters			
2-Aminopropane	75-31-0	TWA	5 ppm	USA. ACGIH Threshold Limit Values (TLV)		
	Remarks	Upper Respiratory Tract irritation Eye damage				

STEL	10 ppm	USA. ACGIH Threshold Limit Values (TLV)	
Upper Respiratory Tract irritation Eye damage			
See Appendix D - Substances with No Established RELs			
TWA	5 ppm 12 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants	
The value in mg/m3 is approximate.			
PEL	5 ppm 12 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)	
STEL	10 ppm 24 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)	

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Splash contact

Material: Fluorinated rubber Minimum layer thickness: 0.7 mm Break through time: 60 min

Material tested: Vitoject® (KCL 890 / Aldrich Z677698, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail

sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.



Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance Form: liquidb) Odour amine-like

c) Odour Threshold No data available

d) pH 13 at 700 g/l at 20 °C (68 °F)

e) Melting point/range: < -90 °C (< -130 °F) at 1,013.25 hPa -

point/freezing point ISO 3016

f) Initial boiling point 33 - 34 °C 91 - 93 °F - lit. and boiling range

q) Flash point -18 °C (-0.40 °F) - closed cup

h) Evaporation rate No data availablei) Flammability (solid, No data available

gas)

explosive limits

j) Upper/lower Lower explosion limit: 4.2 %(V) at 43.1 hPa flammability or

k) Vapour pressure 634.1 hPa at 20 °C (68 °F) 2,222.2 hPa at 55 °C(131 °F)

I) Vapour density 2.04 - (Air = 1.0)

m) Relative density 0.688 g/cm3 at 20 °C (68 °F)

n) Water solubility soluble

o) Partition coefficient: log Pow: -0.5 at 25 °C (77 °F) n-octanol/water

p) Auto-ignition 355 °C (671 °F) at 1,016 hPa temperature

q) Decomposition No data available temperature

r) Viscosity 0.47 mm2/s at 20 °C (68 °F) -

s) Explosive properties No data availablet) Oxidizing properties No data available

9.2 Other safety information

Surface tension 68.5 mN/m at 20 °C (68 °F)

Relative vapour 2.04 - (Air = 1.0)

density

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Vapours may form explosive mixture with air.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)

Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 170 mg/kg LC50 Inhalation - Rat - 4 h - 8.7 mg/l (OECD Test Guideline 403) LD50 Dermal - Rat - > 400 mg/kg No data available

Skin corrosion/irritation

Skin - Rabbit

Result: Causes severe burns. - 3 min

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Corrosive - 24 h (OECD Test Guideline 405)

Respiratory or skin sensitisation

Maximisation Test - Guinea pig Does not cause skin sensitisation. (OECD Test Guideline 406)

Germ cell mutagenicity

Ames test



Salmonella typhimurium

Result: negative

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

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.

OSHA: No component of this product present at levels greater than or equal to 0.1% is

on OSHA's list of regulated carcinogens.

Reproductive toxicity

No data available No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: NT8400000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish LC50 - Salmo salar (Atlantic salmon) - 40 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 47.4 mg/l - 48 h

Toxicity to algae static test EC50 - Desmodesmus subspicatus (green algae) - 18.9

mg/l - 72 h

Toxicity to bacteria Respiration inhibition EC50 - activated sludge - > 1,000 mg/l - 30

min

(OECD Test Guideline 209)

12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 35 d

Result: 70 - 80 % - Readily biodegradable.

(OECD Test Guideline 301F)

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

Harmful to aquatic life.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Do not empty into drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN number: 1221 Class: 3 (8) Packing group: I

Proper shipping name: Isopropylamine

Reportable Quantity (RQ): Poison Inhalation Hazard: No

IMDG

UN number: 1221 Class: 3 (8) Packing group: I EMS-No: F-E, S-C

Proper shipping name: ISOPROPYLAMINE

IATA

UN number: 1221 Class: 3 (8) Packing group: I

Proper shipping name: Isopropylamine

SECTION 15: Regulatory information

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This 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 Hazards

Fire Hazard, Acute Health Hazard



Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

2-Aminopropane

CAS-No. 75-31-0

Revision Date 2013-02-08

SECTION 16: Other information

DISCLAIMER OF RESPONSIBILITY

The information on this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.

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