

Material Safety Data Sheet

Tripropylamine, 98%

ACC# 96814

Section 1 - Chemical Product and Company Identification

MSDS Name: Tripropylamine, 98%

Catalog Numbers: AC162690000, AC162690010, AC162690050, AC162695000

Synonyms: Tri-n-propylamine; N,N-Dipropyl-1-propanamine.

Company Identification:

Acros Organics N.V.

One Reagent Lane

Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
102-69-2	Tripropylamine	> 98	203-047-7
142-84-7	Dipropylamine	< 0.2	205-565-9

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colorless clear liquid. Flash Point: 32.5 deg C.

Danger! Causes eye and skin burns. Causes digestive and respiratory tract burns. **Flammable liquid and vapor.** Harmful if swallowed, inhaled, or absorbed through the skin. Hygroscopic (absorbs moisture from the air).

Target Organs: Respiratory system, eyes, skin, mucous membranes.

Potential Health Effects

Eye: Causes eye burns. Low vapor concentrations may cause a temporary visual disturbance known as 'blue haze' or 'halo vision'. Causes redness and pain.

Skin: Harmful if absorbed through the skin. Causes skin burns. Amines have been known to cause skin irritation and sensitization.

Substance is readily absorbed through the skin.

Ingestion: Poison by ingestion. Causes gastrointestinal tract burns.

Inhalation: Harmful if inhaled. Irritation may lead to chemical pneumonitis and pulmonary edema. Causes chemical burns to the respiratory tract. May cause asthma and shortness of breath. May cause light-headedness, drowsiness, anxiety, apprehension, nausea, vomiting and slurred speech.

Chronic: Chronic exposure may cause effects similar to those of acute exposure.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

Ingestion: If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Use water spray to keep fire-exposed containers cool. Flammable liquid and vapor. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Flash Point: 32.5 deg C (90.50 deg F)

Autoignition Temperature: 180 deg C (356.00 deg F)

Explosion Limits, Lower: 0.7 vol %

Upper: 5.6 vol %

NFPA Rating: (estimated) Health: 3; Flammability: 3; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Take precautionary measures against static discharges. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Keep away from heat, sparks and flame. Do not breathe vapor or mist.

Storage: Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Flammables-area.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Tripropylamine	none listed	none listed	none listed
Dipropylamine	none listed	none listed	none listed

OSHA Vacated PELs: Tripropylamine: No OSHA Vacated PELs are listed for this chemical. Dipropylamine: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear chemical splash goggles and face shield.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a 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: Clear liquid

Appearance: colorless

Odor: fishy ammonical

pH: 11.8 (0.1M soln)

Vapor Pressure: 1.51 mm Hg @ 25 deg C

Vapor Density: 4.9(air=1)

Evaporation Rate:Not available.

Viscosity: 0.627 mPa.s

Boiling Point: 156 deg C @ 760 mm Hg

Freezing/Melting Point:-93 deg C

Decomposition Temperature:Not available.

Solubility: Slightly soluble.

Specific Gravity/Density:0.76 g/cm3

Molecular Formula:C9H21N

Molecular Weight:143.27

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Ignition sources, exposure to moist air or water, confined spaces.

Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, aluminum.

Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 102-69-2: TX1575000

CAS# 142-84-7: JL9200000

LD50/LC50:

CAS# 102-69-2:

Inhalation, mouse: LC50 = 3800 mg/m3/2H;

Inhalation, rat: LC50 = 5100 mg/m3/4H;

Oral, rat: LD50 = 96 mg/kg;

Skin, rabbit: LD50 = 570 uL/kg;

CAS# 142-84-7:

Inhalation, mouse: LC50 = 3070 mg/m3/2H;

Inhalation, rat: LC50 = 4400 mg/m3/4H;

Oral, rat: LD50 = 300 mg/kg;

Skin, rabbit: LD50 = 925 mg/kg;

Carcinogenicity:

CAS# 102-69-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 142-84-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No data available.**Teratogenicity:** No data available.**Reproductive Effects:** No data available.**Mutagenicity:** No data available.**Neurotoxicity:** No data available.**Other Studies:****Section 12 - Ecological Information****Ecotoxicity:** No data available. No information available.**Environmental:** No information available.**Physical:** No information available.**Other:** Not readily biodegradable. Do not empty into drains.**Section 13 - Disposal Considerations**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.**RCRA U-Series:**

CAS# 142-84-7: waste number U110 (Ignitable waste).

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	TRIPROPYLAMINE	TRIPROPYLAMINE
Hazard Class:	3	3(8)
UN Number:	UN2260	UN2260
Packing Group:	III	III
Additional Info:		FLASHPOINT 33 C

Section 15 - Regulatory Information**US FEDERAL****TSCA**

CAS# 102-69-2 is listed on the TSCA inventory.

CAS# 142-84-7 is listed on the TSCA inventory.

Health & Safety Reporting List

CAS# 142-84-7: Effective 3/7/86, Sunset 12/5/90

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

CAS# 142-84-7: 5000 lb final RQ; 2270 kg final RQ

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 102-69-2: immediate, fire.

Section 313 No chemicals are reportable under Section 313.**Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 102-69-2 can be found on the following state right to know lists: New Jersey, Pennsylvania, Massachusetts.

CAS# 142-84-7 can be found on the following state right to know lists: New Jersey, Pennsylvania, Massachusetts.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

T C

Risk Phrases:

R 10 Flammable.
R 20/21 Harmful by inhalation and in contact with skin.
R 25 Toxic if swallowed.
R 34 Causes burns.

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 28A After contact with skin, wash immediately with plenty of water.

WGK (Water Danger/Protection)

CAS# 102-69-2: 2
CAS# 142-84-7: 1

Canada - DSL/NDSL

CAS# 142-84-7 is listed on Canada's DSL List.
CAS# 102-69-2 is listed on Canada's NDSL List.

Canada - WHMIS

This product has a WHMIS classification of B2, D1B, E.

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.

Canadian Ingredient Disclosure List

CAS# 102-69-2 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 11/25/1999

Revision #5 Date: 10/03/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability 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 Fisher 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 Fisher has been advised of the possibility of such damages.