



Material Safety Data Sheet

Triphosgene

MSDS# 97949

Section 1 - Chemical Product and Company Identification

MSDS Name: Triphosgene
Catalog Numbers: AC258950000, AC258950050, AC258950100, AC258950250
Synonyms: Bis(trichloromethyl)carbonate.

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticaaan 3a
2440 Geel, Belgium

Company Identification: (USA) Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11
Emergency Number, Europe: +32 14 57 52 99
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#: 32315-10-9
Chemical Name: Triphosgene
%: 99
EINECS#: 250-986-3

Hazard Symbols: T+



Risk Phrases: 26 29 34

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Water-reactive. Lachrymator (substance which increases the flow of tears). May be fatal if inhaled. Causes burns by all exposure routes. Can decompose violently at elevated temperatures. Contact with water liberates toxic gas. Target Organs: Respiratory system, gastrointestinal system, eyes, skin.

Potential Health Effects

Eye: Causes eye burns. Lachrymator (substance which increases the flow of tears).

Skin: Causes skin burns. May be harmful if absorbed through the skin.

Ingestion: Causes gastrointestinal tract burns. May be harmful if swallowed.

Inhalation: May be fatal if inhaled. Causes chemical burns to the respiratory tract. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. May cause burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

Chronic: No information found.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Do not induce vomiting. Get medical aid immediately. Call a poison control center.

Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. SPEED IS ESSENTIAL, OBTAIN MEDICAL AID IMMEDIATELY. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to Physician:

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. Exposure to heat may promote violent decomposition. Water reactive. Material will react with water and may release a flammable and/or toxic gas.

Extinguishing Media: Use foam, dry chemical, or carbon dioxide. DO NOT USE WATER!

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: ; Special Hazard: -W-

Section 6 - Accidental Release Measures

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

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Avoid generating dusty conditions. Provide ventilation. Do not expose spill to water. Do not get water inside containers. Evacuate unnecessary personnel. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Do not allow water to get into the container because of violent reaction. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use and store under nitrogen. Do not allow contact with water. Use only in a chemical fume hood.

Storage: Store in a tightly closed container. Store in a dry area. Corrosives area. Water free area. Keep refrigerated. (Store below 4°C/39°F.) Store protected from moisture. Store under nitrogen.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Triphosgene	none listed	none listed	none listed

OSHA Vacated PELs: Triphosgene: None listed

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a
Respirators: 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: Crystals

Color: white

Odor: none reported

pH: Not available

Vapor Pressure: 16 mbar @ 90 deg C

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: 203 - 206 deg C @ 760 mmHg

Freezing/Melting Point: 77 - 81 deg C

Decomposition Temperature: Not available

Solubility in water: Insoluble

Specific Gravity/Density: 1.780

Molecular Formula: C3Cl6O3

Molecular Weight: 296.75

Section 10 - Stability and Reactivity

Chemical Stability:	Moisture sensitive. Can decompose violently at elevated temperatures. Reacts with water. Heat sensitive
Conditions to Avoid:	Incompatible materials, dust generation, exposure to moist air or water, heat.
Incompatibilities with Other Materials	Strong oxidizing agents, acids, strong bases, amines, iron oxide, activated carbon.
Hazardous Decomposition Products	Hydrogen chloride, chlorine, phosgene, carbon monoxide, oxides of phosphorus, carbon dioxide.
Hazardous Polymerization	Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 32315-10-9: None listed

LD50/LC50: RTECS: Not available.

Carcinogenicity: Triphosgene - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: The toxicological properties have not been fully investigated. The hazards associated with phosgene may be seen in this product.

Section 12 - Ecological Information

Other: Do not empty into drains.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S.

Hazard Class: 6.1

UN Number: UN2928

Packing Group: I

Canada TDG

Shipping Name: Not available

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T+

Risk Phrases:

R 26 Very toxic by inhalation.

R 29 Contact with water liberates toxic gas.

R 34 Causes burns.

Safety Phrases:

S 9 Keep container in a well-ventilated place.

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).

WGK (Water Danger/Protection)

CAS# 32315-10-9: Not available

Canada

Canadian WHMIS Classifications: D1A, E, F

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.

CAS# 32315-10-9 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 32315-10-9 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 6/15/1998

Revision #8 Date 7/20/2009

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 the company 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 the company has been advised of the possibility of such damages.
