

# Material Safety Data Sheet

## Thiophosgene 95-98%

ACC# 53649

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Thiophosgene 95-98%

**Catalog Numbers:** AC151640000, AC151640250, AC151641000

**Synonyms:** Thiocarbonyl Chloride; Carbon Chlorosulfide.

**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
463-71-8	Thiophosgene	95-98	207-341-6

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: red clear liquid.

**Danger!** Toxic if swallowed. Combustible liquid and vapor. Causes severe skin irritation and possible burns. Causes severe eye irritation and possible burns. Causes digestive and respiratory tract irritation. May be harmful if swallowed. Air sensitive. Moisture sensitive.

**Target Organs:** Respiratory system, eyes, skin.

#### Potential Health Effects

**Eye:** Lachrymator (substance which increases the flow of tears). Causes severe eye irritation and possible burns.

**Skin:** May be harmful if absorbed through the skin. Causes severe skin irritation and possible burns.

**Ingestion:** Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed.

**Inhalation:** Causes severe respiratory tract irritation with possible burns. Harmful if inhaled.

**Chronic:** No information found.

### Section 4 - First Aid Measures

**Eyes:** Get medical aid. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

**Skin:** Get medical aid immediately. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation.

**Notes to Physician:** Treat symptomatically and supportively.

### Section 5 - Fire Fighting Measures

**General Information:** Containers can build up pressure if exposed to heat and/or fire. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Contact with moisture or water may generate sufficient heat to ignite nearby combustible materials. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Contact with metals may evolve flammable hydrogen gas. Combustible liquid and vapor.

**Extinguishing Media:** Do NOT use water directly on fire. Most foams will react with the material and release corrosive/toxic gases. Use dry chemical or carbon dioxide.

**Flash Point:** Not available.

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:** N/A

**Upper:** N/A

**NFPA Rating:** (estimated) Health: 3; Flammability: 2; Instability: 1

### 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. Avoid runoff into storm

sewers and ditches which lead to waterways. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Ground and bond containers when transferring material. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Do not ingest or inhale. Handle under an inert atmosphere. Store protected from air. Wash clothing before reuse. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage:** Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep refrigerated. (Store below 4°C/39°F.) Do not store in metal containers. Keep containers tightly closed. Store protected from moisture. Store under nitrogen.

## 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 exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

### Exposure Limits

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

**OSHA Vacated PELs:** Thiophosgene: No OSHA Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** Wear chemical splash goggles and face shield.

**Skin:** Wear appropriate gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to minimize contact with skin.

**Respirators:** Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

## Section 9 - Physical and Chemical Properties

**Physical State:** Clear liquid

**Appearance:** red

**Odor:** sharp odor

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** 4.0

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 73 deg C @ 760.00mmHg

**Freezing/Melting Point:** Not available.

**Decomposition Temperature:** > 200 deg C

**Solubility:** decomposes

**Specific Gravity/Density:** 1.5080g/cm<sup>3</sup>

**Molecular Formula:** CCl<sub>2</sub>S

**Molecular Weight:** 114.98

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures. Air sensitive. Moisture sensitive.

**Conditions to Avoid:** Incompatible materials, moisture, exposure to air, metals, excess heat.

**Incompatibilities with Other Materials:** Acids - bases - alcohols - amines - metals - moist air or water.

**Hazardous Decomposition Products:** Hydrogen chloride, carbon monoxide, oxides of sulfur, carbon dioxide.

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

### RTECS#:

**CAS#** 463-71-8: XN2450000

### LD50/LC50:

**CAS#** 463-71-8:

Draize test, rabbit, eye: 50 ug/24H Severe;

Draize test, rabbit, skin: 500 mg/24H Moderate;

Oral, rat: LD50 = 929 mg/kg;

### Carcinogenicity:

**CAS#** 463-71-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information available.

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Mutagenicity:** No information available.  
**Neurotoxicity:** No information available.  
**Other Studies:**

## Section 12 - Ecological Information

No information available.

## 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:** None listed.

## Section 14 - Transport Information

	US DOT	Canada TDG
<b>Shipping Name:</b>	THIOPHOSGENE	THIOPHOSGENE
<b>Hazard Class:</b>	6.1	6.1
<b>UN Number:</b>	UN2474	UN2474
<b>Packing Group:</b>	II	II

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 463-71-8 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### 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

None of the chemicals in this material have an RQ.

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### 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# 463-71-8 can be found on the following state right to know lists: New Jersey.

### 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

#### Risk Phrases:

R 22 Harmful if swallowed.

R 23 Toxic by inhalation.

R 36/37/38 Irritating to eyes, respiratory system and skin.

#### Safety Phrases:

S 36/37 Wear suitable protective clothing and gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 7 Keep container tightly closed.

S 9 Keep container in a well-ventilated place.

### WGK (Water Danger/Protection)

CAS# 463-71-8: No information available.

**Canada - DSL/NDL**

CAS# 463-71-8 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of D1B, D2B, B3.

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# 463-71-8 is listed on the Canadian Ingredient Disclosure List.

## Section 16 - Additional Information

**MSDS Creation Date:** 8/18/1998

**Revision #4 Date:** 3/27/2006

*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.*