

# Material Safety Data Sheet

## Trichloroacetyl isocyanate

ACC# 97214

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Trichloroacetyl isocyanate

**Catalog Numbers:** AC202900000, AC202900100

**Synonyms:** None.

**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
3019-71-4	Trichloroacetyl isocyanate	>97	221-165-7

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: clear, colorless to pale yellow liquid. Flash Point: 65 deg C.

**Warning!** May cause allergic respiratory reaction. Causes eye, skin, and respiratory tract irritation. Harmful if swallowed, inhaled, or absorbed through the skin. **Combustible liquid and vapor.**

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

#### Potential Health Effects

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

**Skin:** Organic isocyanates can cause local irritation and allergic reactions.

**Ingestion:** Harmful if swallowed.

**Inhalation:** At high concentrations, isocyanates affect mucous membranes of the respiratory tract and may lead to fatal pulmonary edema. Exposure to low and often even unmeasurable isocyanate concentration results in sensitization. Impaired lung functions (decreased ventilatory capacity) has been associated with overexposure to isocyanate.

**Chronic:** Chronic overexposure to isocyanates has been reported to cause lung damage, including decreased lung function, which may be permanent.

### 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.

**Skin:** In case of contact, immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical aid if symptoms occur. Wash clothing before reuse.

**Ingestion:** If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

**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. Use water spray to keep fire-exposed containers cool. Containers may explode when heated. Combustible liquid and vapor.

**Extinguishing Media:** Use carbon dioxide or dry chemical.

**Flash Point:** 65 deg C ( 149.00 deg F)

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:**Not available.

**Upper:** Not available.

**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. Remove all sources of ignition. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Use only with adequate ventilation. Keep away from heat and flame. Do not breathe vapor or mist. Isocyanates react with water to form CO<sub>2</sub> gas. This gas can cause sealed containers to expand and possibly rupture.

**Storage:** Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture. Store protected from light. Refrigeration has been recommended.

## 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 ventilation to keep airborne concentrations low.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Trichloroacetyl isocyanate	none listed	none listed	none listed

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

### Personal Protective Equipment

**Eyes:** Wear chemical splash goggles.

**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:** Liquid

**Appearance:** clear, colorless to pale yellow

**Odor:** pungent odor

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 80-85 deg C @ 20 mm Hg

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

**Decomposition Temperature:** Not available.

**Solubility:** decomposes

**Specific Gravity/Density:** 1.59 g/cm<sup>3</sup>

**Molecular Formula:** C<sub>3</sub>Cl<sub>3</sub>N<sub>2</sub>O<sub>2</sub>

**Molecular Weight:** 188.40

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Ignition sources, moisture, excess heat.

**Incompatibilities with Other Materials:** Strong oxidizing agents, strong bases, acids, amines, alcohols, water.

**Hazardous Decomposition Products:** Hydrogen chloride, hydrogen cyanide, nitrogen oxides, carbon monoxide, carbon dioxide.

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

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 3019-71-4 unlisted.

**LD50/LC50:**

Not available.

**Carcinogenicity:**

CAS# 3019-71-4: 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

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>	DOT regulated - small quantity provisions apply (see 49CFR173.4)	ISOCYANATES, TOXIC, N.O.S.
<b>Hazard Class:</b>		6.1
<b>UN Number:</b>		UN2206
<b>Packing Group:</b>		II

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 3019-71-4 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# 3019-71-4 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

### 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 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.  
R 36/37/38 Irritating to eyes, respiratory system and skin.  
R 42 May cause sensitization by inhalation.

#### Safety Phrases:

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

#### WGK (Water Danger/Protection)

CAS# 3019-71-4: No information available.

#### Canada - DSL/NDSL

CAS# 3019-71-4 is listed on Canada's DSL List.

#### Canada - WHMIS

This product has a WHMIS classification of B3, D2A, D1A.

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

## Section 16 - Additional Information

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

**Revision #3 Date: 2/22/2005**

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