



Material Safety Data Sheet

Phenyl isocyanate, 99%

MSDS# 96959

Section 1 - Chemical Product and Company Identification

MSDS Name: Phenyl isocyanate, 99%
Catalog Numbers: AC130690000, AC130690010, AC130690050, AC130691000, AC130692500, AC130695000
Synonyms: Phenyl Isocyanate; Isocyanic Acid, Phenyl Ester; Phenylcarbimide; Phenyl Carbonimide.

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#: 103-71-9
Chemical Name: Phenyl isocyanate
%: 99
EINECS#: 203-137-6

Hazard Symbols: T+



Risk Phrases: 10 22 26 36/37/38 42

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Flammable liquid and vapor. Causes skin irritation. May cause allergic respiratory reaction. Water-reactive. Lachrymator (substance which increases the flow of tears). May be harmful if swallowed. Causes severe eye irritation. Causes digestive and respiratory tract irritation. May be fatal if inhaled. Target Organs: Lungs.

Potential Health Effects

Eye: Causes severe eye irritation. Vapors may cause eye irritation. Lachrymator (substance which increases the flow of tears).

Skin: Causes skin irritation.

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

Inhalation: May be fatal if inhaled. Causes respiratory tract irritation. May cause allergic respiratory reaction.

Chronic: Prolonged inhalation may cause respiratory tract inflammation and lung damage. Repeated exposure may cause allergic respiratory reaction (asthma).

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 flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.
Ingestion:	If victim is conscious and alert, give 2-4 cupfuls of milk or water. 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.
Notes to Physician:	
Antidote:	Always have a cyanide antidote kit on hand when working with cyanide compounds. Get medical advice to use.

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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Flammable liquid and vapor.
Extinguishing Media:	Do NOT use alcohol foams. DO NOT USE WATER! Do NOT get water inside containers. Do NOT use straight streams of water. For small fires, use dry chemical, carbon dioxide, or water spray. Cool containers with flooding quantities of water until well after fire is out.
Autoignition Temperature:	Not applicable.
Flash Point:	41.3 deg C (106.34 deg F)
Explosion Limits: Lower:	Not available
Explosion Limits: Upper:	Not available
NFPA Rating:	health: 3; flammability: 2; 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. Clean up spills immediately, observing precautions in the Protective Equipment section. Scoop up with a nonsparking tool, then place into a suitable container for disposal. Remove all sources of ignition. Do not expose spill to water.

Section 7 - Handling and Storage

Handling:	Wash thoroughly after handling. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep away from heat, sparks and flame. Do not get on skin or in eyes. Do not ingest or inhale. Do not allow contact with water. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.
Storage:	Keep away from sources of ignition. Store in a cool, dry place. Keep container closed when not in use. Keep under an argon blanket. Keep away from water. Flammables-area.

Section 8 - Exposure Controls, Personal Protection

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

OSHA Vacated PELs: Phenyl isocyanate: None listed

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure

limits.

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.

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

Color: clear, colorless

Odor: Acrid odor.

pH: Not available

Vapor Pressure: 1 mm Hg @ 10 F

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: 162-163 C

Freezing/Melting Point: -48 deg C (-54.40°F)

Decomposition Temperature: Not available

Solubility in water: Reacts with water. (Decomposes)

Specific Gravity/Density: 1.0960

Molecular Formula: C7H5NO

Molecular Weight: 119.0411

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: High temperatures, mechanical shock, incompatible materials, ignition sources, exposure to moist air or water.

Incompatibilities with Other Materials: Not available

Hazardous Decomposition Products: Hydrogen cyanide, nitrogen oxides, carbon monoxide, carbon dioxide, nitrogen gas.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 103-71-9: DA3675000

RTECS:

CAS# 103-71-9: Inhalation, rat: LC50 = 22 mg/m³/4H;

Oral, mouse: LD50 = 196 mg/kg;

LD50/LC50: Oral, rat: LD50 = 800 mg/kg;

Skin, rabbit: LD50 = 7130 mg/kg;

Skin, rat: LD50 = 5 mL/kg;

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Other: Inhalation, rat: LD50=22mg/m³/4H, Oral, rat:

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

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: No information available.

Section 13 - Disposal Considerations

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

Section 14 - Transport Information

US DOT

Shipping Name: PHENYL ISOCYANATE

Hazard Class: 6.1

UN Number: UN2487

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 10 Flammable.

R 22 Harmful if swallowed.

R 26 Very toxic by inhalation.

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

R 42 May cause sensitization by inhalation.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 28A After contact with skin, wash immediately with plenty of water.

S 38 In case of insufficient ventilation, wear suitable respiratory equipment.

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# 103-71-9: 2

Canada

CAS# 103-71-9 is listed on Canada's DSL List

Canadian WHMIS Classifications: B3, D1A, 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.

CAS# 103-71-9 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 103-71-9 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 12/11/1997

Revision #5 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.
