

**** MATERIAL SAFETY DATA SHEET ****

Phenyl isocyanate, 99%

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Phenyl isocyanate, 99%

Catalog Numbers:

13069-0000, 13069-0010, 13069-0050, 13069-1000, 13069-2500

Synonyms:

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

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

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

For information in Europe, call: 0032(0) 14575211

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

For emergencies in Europe, call: 0032(0) 14575299

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#	Haz Symbols	Risk Phrases
103-71-9	Phenyl isocyanate	99%	203-137-6		

Hazard Symbols: T+

Risk Phrases: 10 22 26 34 42/43

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Flammable. Harmful if swallowed. Very toxic by inhalation. Causes burns. May cause sensitization by inhalation and skin contact. Moisture sensitive.

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. May cause sensitization by skin contact.

Ingestion:

Harmful if swallowed. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. Causes gastrointestinal tract burns.

Inhalation:

May be fatal if inhaled. Causes chemical burns to the respiratory tract. May cause burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

Chronic:

Repeated or prolonged exposure may cause allergic reactions in sensitive individuals.

**** 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:

Get medical aid immediately. Wash mouth out with 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:

**** 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 can travel to a source of ignition and flash back. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Vapors mixed with air can explode when ignited. Flammable liquid and vapor.

Extinguishing Media:

Use foam, dry chemical, or carbon dioxide.

**** 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.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:

Use spark-proof tools and explosion proof equipment. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

Storage:

Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Corrosives area. 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 ventilation to keep airborne concentrations low.

Personal Protective Equipment

Eyes:

Wear chemical 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. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State: Clear liquid

Color: colorless to light yellow
Odor: Not available.
pH: Not available.
Vapor Pressure: 2.5 mbar @ 20 deg C
Viscosity: Not available.
Boiling Point: 162 - 163 deg C
Freezing/Melting Point: -31.3 deg C
Autoignition Temperature: 645 deg C (1,193.00 deg F)
Flash Point: 51 deg C (123.80 deg F)
Explosion Limits, lower: Not available.
Explosion Limits, upper: Not available.
Decomposition Temperature: Not available.
Solubility in water: Decomposes.
Specific Gravity/Density: 1.095
Molecular Formula: C7H5NO
Molecular Weight: 119.12

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, exposure to moist air or water.

Incompatibilities with Other Materials:

Strong oxidizing agents, acids, bases, alcohols, amines.

Hazardous Decomposition Products:

Hydrogen cyanide, carbon monoxide, oxides of nitrogen, carbon dioxide.

Hazardous Polymerization: Will not occur.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:

CAS# 103-71-9: DA3675000

LD50/LC50:

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

LD50 = 196 mg/kg; Oral, rat: LD50 = 800 mg/kg; Skin, rabbit: LD50 =

7130 mg/kg; Skin, rat: LD50 = 5 mL/kg.

Not available.

Carcinogenicity:

Phenyl isocyanate -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

See actual entry in RTECS for complete information.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity:

Fish: *Leuciscus idus*: LC50: 50 mg/l; 48h; .

Other

Readily biodegradable.

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

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

**** SECTION 14 - TRANSPORT INFORMATION ****

IATA

Shipping Name: PHENYL ISOCYANATE

Hazard Class: 6.1

UN Number: 2487

Packing Group: I

IMO

Shipping Name: PHENYL ISOCYANATE

Hazard Class: 6.1

UN Number: 2487

Packing Group: I
RID/ADR
Shipping Name: PHENYL ISOCYANATE
Hazard Class: 6.1
UN Number: 2487
Packing group: I

**** 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 34 Causes burns.
R 42/43 May cause sensitization by inhalation and skin contact.

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.
S 23 Do not inhale gas/fumes/vapour/spray.
S 24 Avoid contact with skin.
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 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# 103-71-9: 2

United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits

Canada

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

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

Exposure Limits

US FEDERAL

TSCA

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

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 7/16/1996 Revision #1 Date: 5/24/2002

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