

## \*\*\*\* MATERIAL SAFETY DATA SHEET \*\*\*\*

Urethane, 97%

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

MSDS Name: Urethane, 97%

Catalog Numbers:

32554-0000, 32554-0500, 32554-2500

Synonyms:

Ethyl carbamate

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
51-79-6	Urethane	97%	200-123-1		

Hazard Symbols: T

Risk Phrases: 45

## \*\*\*\* SECTION 3 - HAZARDS IDENTIFICATION \*\*\*\*

## EMERGENCY OVERVIEW

May cause cancer.

## Potential Health Effects

## Eye:

Causes eye irritation.

## Skin:

Causes skin irritation. If absorbed, causes symptoms similar to those of ingestion.

## Ingestion:

Harmful if swallowed. May cause central nervous system depression, kidney damage, and liver damage. Symptoms may include: headache, excitement, fatigue, nausea, vomiting, stupor, and coma.

## Inhalation:

Causes respiratory tract irritation. May cause effects similar to those described for ingestion.

## Chronic:

May cause cancer in humans.

## \*\*\*\* 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:

Induce vomiting. Never give anything by mouth to an unconscious

person. 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. Will burn if involved in a fire.

Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or chemical foam.

\*\*\*\* 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.

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

Handling:

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.

\*\*\*\* SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION \*\*\*\*

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

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 minimize contact with skin.

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:	Crystalline powder
Color:	white
Odor:	Not available.
pH:	Not available.
Vapor Pressure:	Not available.
Viscosity:	Not available.
Boiling Point:	182 - 184 deg C @ 760.00mm Hg
Freezing/Melting Point:	47 - 51 deg C

Autoignition Temperature: Not available.  
Flash Point: 92 deg C ( 197.60 deg F)  
Explosion Limits, lower: Not available.  
Explosion Limits, upper: Not available.  
Decomposition Temperature:  
Solubility in water: slightly soluble in olive oil  
Specific Gravity/Density:  
Molecular Formula: H2NCO2C2H5  
Molecular Weight: 89.09

## \*\*\*\* SECTION 10 - STABILITY AND REACTIVITY \*\*\*\*

Chemical Stability:  
Stable under normal temperatures and pressures.  
Conditions to Avoid:  
Incompatible materials.  
Incompatibilities with Other Materials:  
Strong oxidizing agents, strong acids, strong bases, aldehydes (e.g. acetaldehyde, acrolein, chloral hydrate, formaldehyde), salol, thymol.  
Hazardous Decomposition Products:  
Nitrogen oxides, carbon monoxide, carbon dioxide.  
Hazardous Polymerization: Will not occur.

## \*\*\*\* SECTION 11 - TOXICOLOGICAL INFORMATION \*\*\*\*

RTECS#:  
CAS# 51-79-6: FA8400000  
LD50/LC50:  
CAS# 51-79-6: Oral, mouse: LD50 = 2500 mg/kg; Oral, rat: LD50 = 1809 mg/kg.  
Carcinogenicity:  
Urethane -  
California: carcinogen; initial date 1/1/88  
NTP: Suspect carcinogen  
OSHA: Possible Select carcinogen  
IARC: Group 2B carcinogen  
Other:  
See actual entry in RTECS for complete information.

## \*\*\*\* SECTION 12 - ECOLOGICAL INFORMATION \*\*\*\*

Ecotoxicity:  
Invertebrate toxicity: LC50 *Xenopus laevis* 5580 mg/l  
EC50 *Xenopus laevis* 1800 mg/l [Dawson, D.A. et al . Drug Chem. Toxicol. 1989, 12(1), 67-78]

## \*\*\*\* SECTION 13 - DISPOSAL CONSIDERATIONS \*\*\*\*

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

## \*\*\*\* SECTION 14 - TRANSPORT INFORMATION \*\*\*\*

IATA  
No information available.  
IMO  
No information available.  
RID/ADR  
No information available.

USA RQ: CAS# 51-79-6: 100 lb final RQ; 45.4 kg final RQ

## \*\*\*\* SECTION 15 - REGULATORY INFORMATION \*\*\*\*

European/International Regulations  
European Labeling in Accordance with EC Directives  
Hazard Symbols: T

Risk Phrases:

R 45 May cause cancer.

Safety Phrases:

S 53 Avoid exposure - obtain special instructions before use.

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# 51-79-6: 1

United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits

Canada

CAS# 51-79-6 is listed on Canada's DSL List.

CAS# 51-79-6 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 51-79-6: OEL-FINLAND;Carcinogen

OEL-GERMANY;Carcinogen

OEL-SWEDEN;Carcinogen

OEL-SWITZERLAND;Carcinogen

US FEDERAL

TSCA

CAS# 51-79-6 is listed on the TSCA inventory.

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

MSDS Creation Date: 10/14/1998 Revision #0 Date: Original.

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 way 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.

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