

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

**Cyclopentyl Bromide, 98%
ACROS32994**

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

MSDS Name: Cyclopentyl Bromide, 98%

Catal. Number: AC111600500

Synonyms: AC111600000, AC111600500, AC111602500

Company Identification (Europe): Acros Organics N.V.

Janssen Pharmaceutica/lecan 3a

Company Identification (USA): Acros Organics

One Reagent Unit

For information in Europe call: 0032(0) 14575211

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

For information in Europe call: 0032(0) 14575209

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

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

CAS#	Chemical Name	%	EINECS#
137-43-9	Cyclopentyl Bromide	98	205-294-6

Risk Phrases: 10

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

EMERGENCY OVERVIEW

Appearance: clear, colorless. Flash Point: 35 deg C.

Warning: Flammable liquid. The toxicological properties of this

material have not been fully investigated. May cause eye and skin

irritation. May cause respiratory and digestive tract irritation.

Target Organs: None known.

Potential Health Effects

Eye: May cause eye irritation. The toxicological properties of this

material have not been fully investigated.

Skin: May cause skin irritation. The toxicological properties of this

material have not been fully investigated.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and

diarrhea. The toxicological properties of this substance have not

been fully investigated.

Inhalation: May cause respiratory tract irritation. The toxicological properties

of this substance have not been fully investigated. Vapors may cause

dizziness or suffocation.

Chronic: No information found.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes: Flush eyes with plenty of water for at least 15 minutes.

Skin: occasionally lifting the upper and lower eyelids. Get medical aid.

Get medical aid. Flush skin with plenty of soap and water for at

least 15 minutes while removing contaminated clothing and shoes. Wash

clothing before reuse.

Do NOT induce vomiting. 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.

Inhalation: Remove from exposure to fresh air immediately. If not breathing,

give artificial respiration. If breathing is difficult, give oxygen.

Get medical aid.

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. Vapors may form an explosive mixture with air.

During a fire, irritating and highly toxic gases may be generated by

thermal decomposition or combustion. This material is involved in a fire,

Use water spray to keep fire exposed containers cool. Containers may

explode in the heat of a fire. Flammable Liquid.

E extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or

alcohol-resistant foam. For large fires, use water spray, fog or

alcohol-resistant foam. Use water spray to cool fire-exposed

containers. Water may be ineffective. Do NOT use straight streams of

water.

Autotank Temperature: Not available.

Flash Point: 35 deg C (95.00 deg F)

NFPA Rating: (estimated) Health: 3; Reactivity:

Explosion Limits, Lower: N/A

Upper: N/A

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated

Spills/Leaks: in Section 8.

Absorb spill with inert material, (e.g., dry sand or earth), then

place into a chemical waste container. Clean up spills immediately,

observing precautions in the Protective Equipment section. 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 liquid. Use correct tools and explosion-proof

equipment. Avoid contact with eyes, skin, and clothing. Empty

containers retain product residue (liquid and/or vapor), and can be

dangerous. Keep container tightly closed. Avoid contact with heat,

sparks and flame. Avoid ingestion and inhalation. 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 tightly closed container. Store in a cool, dry,

well-ventilated area away from incompatible substances.

Flammables-area.

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

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Cyclopentyl Bromide	none listed	none listed	none listed

OSHA Vacated PELs:

Cyclopentyl Bromide

No OSHA Vacated PELs are listed for this chemical.

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 29CFR

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: Liquid

Appearance: clear, colorless

Odor: None reported.

PH: Not reported.

Vapor Pressure: 5.1

Evaporation Rate: Not available.

Viscosity: Not available.

Freezing/Melting Point: 137 - 139 deg C @ 760.00mm Hg

Decomposition Temperature: Not available.

Solubility: Insoluble

DATE: 10/11/99
INDEX: D9280626

ACCT: 416870001
CAT NO: AC111600500

PAGE: 3

Specific Gravity/Density: 1.3900g/cm3
Molecular Formula: C5H9Br
Molecular Weight: 149.03

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

Chemical Stability:
Stable under normal temperatures and pressures.

Conditions to Avoid:
Incompatible materials, ignition sources, excess heat, strong oxidizing agents.

Interactions with Other Materials:
Oxidizing agents.

Hazardous Decomposition Products:
Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, hydrogen bromide.

Hazardous Polymerization: Has not been reported.

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

RTECS:
CAS# 137-43-9 unlisted.
LD50:
LC50:
Not available.

Carcinogenicity:
Cyclopentyl Bromide -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology:
No information available.

Teratogenicity:
No information available.

Reproductive Effects:
No information available.

Neurotoxicity:
No information available.

Mutagenicity:
No information available.

Other Studies:
No data available.

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

Ecotoxicity:
Not available.

Environmental Fate:
Not available.

Physical/Chemical:
Not available.

Other:
Not available.

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

Dispose of in a manner consistent with federal, state, and local regulations.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

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

US DOT
Shipping Name: FLAMMABLE LIQUIDS, N.O.S.
Hazard Class: 3
UN Number: UN1993
Packing Group: III

IMO
Shipping Name: FLAMMABLE LIQUID, N.O.S.
Hazard Class: 3
UN Number: 1993
Packing Group: III

IATA
Shipping Name: FLAMMABLE LIQUID, N.O.S.*
Hazard Class: 3
UN Number: 1993
Packing Group: III

RID/ADR
Shipping Name: FLAMMABLE LIQUID, N.O.S.
Dangerous Goods Code: 3(31C)
UN Number: 1993

Canadian TD
Shipping Name: FLAMMABLE LIQUID NOS (CYCLOPENTYL BROMIDE)
Hazard Class: 3
UN Number: UN1993
Other Information: FP 35 C

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL
TSCA

DATE: 10/11/99
INDEX: D9280626

ACCT: 416870001
CAT NO: AC111600500

PAGE: 4

CAS# 137-43-9 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.

SARA
Section 302 (RQ)
None of the chemicals in this material have an RQ.
Section 302 (TPQ)
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
Cyclopentyl Bromide is not present on state lists from CA, PA, MN, California, NJ
None of the chemicals in this product are listed.
European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: Not available.
Risk Phrases:
R 10 Flammable.

Safety Phrases:
S 16 Keep away from sources of ignition - No smoking.
S 33 Take precautionary measures against static discharges.
S 37 Wear suitable gloves.
S 43 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 9 Keep container in a well-ventilated place.
S 28A After contact with skin, wash immediately with plenty of water.
S50A Do not mix with acids.

WGK (Water Danger/Protection)
None of the chemicals in this product are listed on the DSL/NDSL list.
CAS# 137-43-9: No information available.
Canada
None of the chemicals in this product are listed on the DSL/NDSL list.
CAS# 137-43-9 is not listed on Canada's Ingredient Disclosure List.
Exposure Limits

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

MSDS Creation Date: 11/03/1992 Revision #3 Date: 10/15/1998

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.