



SAFETY DATA SHEET

n-Propyl Bromide

Version: 1.0

Revision Date: 03/31/2015

Print Date: 09/14/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: n-Propyl Bromide

Product Use Description: Chemical intermediate

Company: Chemtura Corporation
199 Benson Road
Middlebury, CT
06749
United States of America

Telephone: (US) +1 866-430-2775

Emergency telephone number: CHEMTREC: (24 hours) 800-424-9300
:
Chemtura Corporation Emergency Response: CHEMTURA : 800-292-5898

For additional emergency telephone numbers see section 16 of the Safety Data Sheet.

Prepared by Product Safety Department
(US) +1 866-430-2775

MSDSRequest@chemtura.com

Recommended use of the chemical and restrictions on use

Recommended use : Chemical intermediate

Restrictions on use : For industrial use only.

SECTION 2. HAZARDS IDENTIFICATION

Form	liquid
Colour	colourless to light yellow
Odour	strong characteristic

GHS Classification

Skin irritation : Category 2
Eye irritation : Category 2A
Reproductive toxicity : Category 1B
Specific target organ toxicity - single exposure : Category 3 (Respiratory system, Central nervous system)
Specific target organ toxicity - repeated exposure : Category 1 (Respiratory system)
Acute aquatic toxicity : Category 3



SAFETY DATA SHEET

n-Propyl Bromide

Version: 1.0

Revision Date: 03/31/2015

Print Date: 09/14/2015

GHS Label element

Signal word : **Danger**

Hazard pictograms :

Hazard statements : H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H360 May damage fertility or the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.
H402 Harmful to aquatic life.

Other hazards : None

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear eye protection/ face protection.
P280 Wear protective gloves.
P281 Use personal protective equipment as required.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
Disposal:



SAFETY DATA SHEET

n-Propyl Bromide

Version: 1.0

Revision Date: 03/31/2015

Print Date: 09/14/2015

P501 Dispose of contents/ container to an approved waste disposal plant.

Carcinogenicity:

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
1-bromopropane	106-94-5	>= 90 - <= 100 %

SECTION 4. FIRST AID MEASURES

- If inhaled : Remove to fresh air.
Call a physician or poison control centre immediately.
- In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes.
If skin irritation persists, call a physician.
- In case of eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- If swallowed : DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Rinse mouth with water.
Get medical attention immediately.
- Most important symptoms and effects, both acute and delayed : toxic effects for reproduction
irritant effects
- Notes to physician : For specialist advice physicians should contact the Poisons Information Service.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water mist



SAFETY DATA SHEET

n-Propyl Bromide

Version: 1.0

Revision Date: 03/31/2015

Print Date: 09/14/2015

Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry powder
Sand

Unsuitable extinguishing media : High volume water jet

Specific hazards during firefighting : Fire Hazard
Burning produces noxious and toxic fumes.
Do not allow run-off from fire fighting to enter drains or water courses.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Full protective flameproof clothing

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Remove all sources of ignition.
Ensure adequate ventilation.
Avoid skin contact with leaking liquid (danger of frostbite).

Environmental precautions : Should not be released into the environment.

Methods and materials for containment and cleaning up : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid prolonged contact.
Keep away from fire, sparks and heated surfaces.
Avoid inhalation, ingestion and contact with skin and eyes.
Do not use sparking tools.

Conditions for safe storage : Keep away from fire, sparks and heated surfaces.
Keep containers tightly closed in a dry, cool and well-ventilated place.

Materials to avoid : Oxidizing agents, Zinc, Alkali metals, Aluminium, Bases

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters



SAFETY DATA SHEET

n-Propyl Bromide

Version: 1.0

Revision Date: 03/31/2015

Print Date: 09/14/2015

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
1-bromopropane	106-94-5	TWA	10 ppm	ACGIH

Engineering measures : Use only in an area equipped with flame proof exhaust ventilation.
Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Respiratory protection : Respirator with a vapour filter (EN 141)

Hand protection
Remarks

: Impervious gloves Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Replace when worn.

Eye protection : Safety glasses with side-shields
Tightly fitting safety goggles

Skin and body protection : impervious clothing

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
Keep away from food, drink and animal feedingstuffs.
Provide adequate ventilation.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Color : colourless to light yellow

Odor : strong characteristic

Odour Threshold : No data available

pH : Not applicable

Melting point/range : -110 °C

Boiling point/boiling range : 70 - 71 °C (1,013 hPa)

Evaporation rate : 6

Flash point :
Method: Tag closed cup



SAFETY DATA SHEET

n-Propyl Bromide

Version: 1.0

Revision Date: 03/31/2015

Print Date: 09/14/2015

	does not flash
Upper explosion limit	: 9.7 %(V)
Lower explosion limit	: 3.6 %(V)
Vapour pressure	: 190.65 hPa (25 °C)
Relative vapour density	: 4.3
Relative density	: 1,353 (25 °C)
<u>Solubility(ies)</u>	
Water solubility	: 2.5 g/l (20 °C)
	No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: Pow: 2.1
	No data available
Auto-ignition temperature	: 490 °C
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: 0.52 mPa.s (20 °C)
Viscosity, kinematic	: No data available
Explosive properties	: Not explosive

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: Will not occur.
Conditions to avoid	: Extremes of temperature and direct sunlight. Exposure to moisture. Heat, flames and sparks. Contamination
Incompatible materials	: Oxidizing agents



SAFETY DATA SHEET

n-Propyl Bromide

Version: 1.0

Revision Date: 03/31/2015

Print Date: 09/14/2015

Zinc
Alkali metals
Aluminium
Bases

Hazardous decomposition products : Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).
Bromine

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity (Product) : LD50: 4,260 mg/kg
Species: Rat

Acute inhalation toxicity (Product) : LC50: 253 mg/l
Exposure time: 0.5 h
Species: Rat
Remarks: Irritating to respiratory system.
Dizziness

Acute dermal toxicity (Product) : LD50: > 2,000 mg/kg
Species: Rat

Eye irritation (Product) : Remarks: Irritating to eyes.

Aspiration toxicity (Product) : No aspiration toxicity classification

Genotoxicity in vitro (Product) : Ames test
positive

Further information (Product) : May impair fertility.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish (Product) : LC50: 67.3 mg/l
Exposure time: 96 h
Species: Fish



SAFETY DATA SHEET

n-Propyl Bromide

Version: 1.0

Revision Date: 03/31/2015

Print Date: 09/14/2015

Elimination information (persistence and degradability)

Bioaccumulation (Product) : Remarks:
Bioaccumulation is unlikely.

Mobility (Product) : Remarks:
No data available

Biodegradability (Product) : Result: No data available

Further information on ecology

Ecotoxicology Assessment

Results of PBT assessment (Product)

This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

Additional ecological information (Product) : Do not allow material to contaminate ground water system.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of as hazardous waste in compliance with local and national regulations.
Dispose of wastes in an approved waste disposal facility.

SECTION 14. TRANSPORT INFORMATION

DOT

Not dangerous goods

IATA

UN number : 2344
Description of the goods : Bromopropanes
Class : 3
Packing group : II
Environmentally hazardous : no

IMDG

UN number : 2344
Description of the goods : BROMOPROPANES
Class : 3
Packing group : II



SAFETY DATA SHEET

n-Propyl Bromide

Version: 1.0

Revision Date: 03/31/2015

Print Date: 09/14/2015

EmS Number 1 : F-E
EmS Number 2 : S-D
Marine pollutant : no

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA304 Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard
Chronic Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65 WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

1-bromopropane 106-94-5
2-bromopropane 75-26-3

The components of this product are reported in the following inventories:

US.TSCA On TSCA Inventory
DSL All components of this product are on the Canadian DSL.
AICS On the inventory, or in compliance with the inventory
NZIoC Not in compliance with the inventory
ENCS On the inventory, or in compliance with the inventory
KECI On the inventory, or in compliance with the inventory
PICCS On the inventory, or in compliance with the inventory
IECSC On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

Further information

Other Emergency Phone Number

Latin America:	Brazil	+55 113 711 9144
----------------	--------	------------------



SAFETY DATA SHEET

n-Propyl Bromide

Version: 1.0

Revision Date: 03/31/2015

Print Date: 09/14/2015

	All other countries	+44 (0) 1235 239 670
Mexico:		+52 555 004 8763

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.