Right to Know Hazardous Substance Fact Sheet

Emergency Responders Quick Reference

Common Name: **1-BROMOPROPANE**

Synonyms: Propyl Bromide
CAS No: 106-94-5
Molecular Formula: C_3H_7Br
RTK Substance No: 4198
Description: Clear, colorless, liquid with a sweet odor

HAZARD DATA

Hazard Rating

2 - Health

3 - Fire

1 - Reactivity

DOT#: UN 2344

ERG Guide #: 129

Hazard Class: 3 (Flammable)

Firefighting

1-Bromopropane is a FLAMMABLE LIQUID.

Use dry chemical, CO_2, water spray or alcohol-resistant foam as extinguishing agents.

POISONOUS GASES ARE PRODUCED IN FIRE, including *Hydrogen Bromide*.

CONTAINERS MAY EXPLODE IN FIRE.

Use water spray to keep fire-exposed containers cool.

Vapors may travel to a source of ignition and flash back.

Vapor is heavier than air and may travel a distance to cause a fire or explosion far from the source.

Flow or agitation may generate electrostatic charges.

Reactivity

1-Bromopropane is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE) and STRONG BASES (such as SODIUM HYDROXIDE and POTASSIUM HYDROXIDE).

1-Bromopropane may accumulate static electricity when being filled into properly grounded containers.

Grounding and bonding may not be sufficient to remove static electricity.

SPILL/LEAKS

Isolation Distance:

Small Spill: 60 meters (200 feet)

Large Spill: 270 meters (900 feet)

Fire: 80 meters (1/2 mile)

Absorb liquids in vermiculite, dry sand, earth, or a similar material and deposit in sealed containers.

Keep **1-Bromopropane** out of confined spaces, such as sewers, because of the possibility of an explosion.

DO NOT wash into sewer.

1-Bromopropane may bioaccumulate.

PHYSICAL PROPERTIES

Odor Threshold:	Sweet odor
Flash Point:	72ºF (21ºC)
LEL:	4.6%
UEL:	7.8%
Auto Ignition Temp:	914ºF (490ºC)
Vapor Density:	4.3 (air = 1)
Vapor Pressure:	143 mm Hg at 77ºF (25ºC)
Specific Gravity:	1.35 (water = 1)
Water Solubility:	Slightly soluble
Boiling Point:	160ºF (71ºC)
Melting Point:	-166ºF (-110ºC)
Molecular Weight:	123

EXPOSURE LIMITS

ACGIH: 10 ppm, 8-hr TWA

The Protective Action Criteria values are:

PAC-1 = 0.3 ppm

PAC-2 = 120 ppm

PAC-3 = 700 ppm

PROTECTIVE EQUIPMENT

Gloves: Silver Shield®/4H® and Viton

Coveralls: DuPont Tychem® LV, Responder® and TK; Kappler® Zytron® 500; and Saint-Gobain ONESuit® TEC for *Aliphatic Halogen compounds*

Respirator:
>10 ppm - Supplied air
>30 ppm - SCBA

HEALTH EFFECTS

Eyes: Irritation

Skin: Irritation, drying and cracking with redness

Inhalation: Nose, throat and lung irritation with coughing, wheezing and shortness of breath

Headache, dizziness and lightheadedness

FIRST AID AND DECONTAMINATION

Remove the person from exposure.

Flush eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn.

Remove contaminated clothing and wash contaminated skin with soap and water.

Begin artificial respiration if breathing has stopped and CPR if necessary.

Transfer to a medical facility.