SAFETY DATA SHEET
5-BROMO-1-PENTENE 97%

Section 1 - Chemical Product and Company Identification

1.1 Product identifiers

Product name**:**	5-BROMO-1-PENTENE 97%
CAS-No.	1119-51-3
EINECS-No.	214-281-4
Index-No.	Not listed
Catalog Numbers:	99.57
Synonyms:	3-Pentenylbromide;4-Pentenyl bromide

1.2 Relevant identified uses of substance or mixture and uses advised against

Identified uses	Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company**:**	TAU-CHEM, Ltd. Nobelova 34, P.O. Box 29 836 05 Bratislava, Slovak Republic
Telephone	+421 2 44 452 252
Fax	+421 2 44 457 645
POISON CENTER:	National Toxicological Information Centre Limbová 5, 833 05 Bratislava,
1.4 Emergency telephone:	+421 2 54 774 166

Section 2 - Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 3)
Skin irritation (Category 2)
Eye irritation (Category 2)
Specific target organ toxicity – single exposure (Category 3)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Flammable. Irritating to eyes, respiratory system and skin.

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008 [CLP]

Pictogram

Signal word	Warning
Hazard statement(s)	
H226	Flammable liquid and vapor.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
Precautionary statement(s)	
P261	Avoid breathing dust/fumes/gas/mist/vapor/spray.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P235	Store in a well-ventilated place. Keep cool.

Hazard symbol(s)

According to European Directive 67/548/EEC as amended

Hazard symbol(s)	
Xi	Irritant.
F	Flammable
R-phrase(s)	
R10	Flammable.
R36/37/38	Irritating to eyes, respiratory system and skin.
S-phrase(s)	
S26	In case of contact wit eyes, rinse immediately with plenty of water and seek medical advice.
S36	Wear suitable protective clothing.
2.3 Other hazards	None.

Section 3 - Composition, Information on Ingredients

3.1 Substances

CAS#	Chemical Name:	%	EINECS#
1119-51-3	5-BROMO-1-PENTENE	97	214-281-4

Formula	C_5H_9Br
Molecular weight	149.03 g/mol

Section 4 - First Aid Measures

4.1 Description of first aid measures

General advice:	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled:	If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.
In case of skin contact:	Wash off with soap and plenty of water. Consult a physician.
In case eye contact:	Rinse thoroughly with plenty f water for at least 15 minutes and consult a physician.
If swallowed:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

4.3 Indication of any immediate medical attention and special treatment needed

No date available

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable extinguishing media:

For small (incipient) fires, use media such as “alcohol” foam, dry chemical or carbon dioxide. For large fires apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all after containers with flooding quantities of water.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen bromide gas.

5.3 Advice for firefighters

Wear self-contained apparatus breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened container.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so.

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert non-combustive absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

Section 7 - Handling and Storage

7.1 Precautions for safe handling:
Avoid contact with skin and eyes. Avoid inhalation or vapor or mist. Keep away from sources of ignition – No smoking. Take measures to prevent build up of electrostatic charge.

7.2 Conditions for safe storage
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Handle and opened container with care. Recommended storage temperature: 2-8 °C. Light sensitive.

7.3 Specific end uses

No data available

Section 8 - Exposure Controls, Personal Protection

8.1 Control parameters

Component with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

General industrial hygiene practice

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN 166. Use equipment for eye protection tested and approved under appropriate

Skin and protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove´s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

Respiratory protection

Where protection from nuisance levels of dust are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

Section 9 - Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

a)	Appearance	Form: Liquid
		Colour: colourless to light yellow
b)	Odour	No data available
c)	Odour Threshold	No data available

d)	pH	No data available
e)	Melting point/freezing point	No data available
f)	Initial boiling point and boiling point range:	126 -127 °C at 1020 hPa
g)	Flash Point:	31 °C closed cup
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapour pressure	No data available
l)	Vapour density	No data available
m)	Relative density	1.260 g/cm^3
n)	Water solubility	No data available
o)	Partition coefficient: n-octanol/water	No data available
p)	Autoignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosives properties	No data available
t)	Oxidizing properties	No data available

9.2 Other safety information

No data available

Section 10 - Stability and Reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

No data available

10.3 Possibility of hazardous reaction

No data available

10.4 Conditions to Avoid

Heat, flames and sparks, light.

10.5 Incompatible materials

Strong oxidizing agents, strong bases.

10.6 Hazardous Decomposition Products

Other decomposition products – no data available

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Acute toxicity	No data available
Skin corrosion/irritation	No data available

Serious eye damage/eye irritation	No data available
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	No data available

Carcinogenicity:

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

Reproductive toxicity:	No data available
Specific target organ toxicity – single exposure	Inhalation – May cause respiratory irritation.
Specific target organ toxicity – repeated exposure	No data available
Aspiration hazard	No data available
Potential health effect:	
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Eyes	May cause eye irritation

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: No data available

Section 12 – Ecological Information

12.1 Toxicity	No data available
12.2 Persistence and degradability	No data available
12.3 Bioaccumulative potential	No data available
12.4 Mobility in soil	No data available
12.5 PBT and vPvB assessment	No data available
12.6 Other adverse effects	No data available

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product	This combustive material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging	Dispose of as unused product.

Section 14 - Transport Information

14.1 UN number

ADR/RID: 1993 IMDG: 1993 IATA: 1993

14.2 UN proper shipping name

ADR/RID: FLAMMABLE LIQUID, N.O.S.
IMDG: FLAMMABLE LIQUID, N.O.S.
IATA: FLAMMABLE LIQUID, N.O.S.

14.3 Transport hazard class

ADR/RID: 3 IMDG: 3 IATA: 3

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: no IMDG: Marine pollutant: no IATA: no

14.6 Special precautions for user

No data available

Section 15 - Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available

15.6 Chemical Safety Assessment

No data available

Section 16 - Other Information

SDS version: 2 **Revision Date:** 18/01/2012

Further information

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
Disclaimer:
The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.