

MATERIAL SAFETY DATA SHEET
4-(TERT-BUTYL)BENZYL BROMIDE 97%

Section 1 - Chemical Product and Company Identification

MSDS Name:	4-(TERT-BUTYL)BENZYL BROMIDE 97%
Catalog Numbers:	11.95
Synonyms:	1-Bromomethyl-4- <i>tert</i> -butylbenzene
Company Identification:	Tau-Chem, Ltd. Nobelova 34, P.O. Box 29 836 05 Bratislava, Slovak Republic Phone: +421 2 44 452 252 Fax: +421 2 44 457 645
Relevant identified uses of substance or mixture and uses advised against	
Identified uses	Laboratory chemicals, Manufacture of substances
POISON CENTER:	National Toxicological Information Centre Limbová 5, 833 05 Bratislava,
Emergency Numbers Slovakia:	Phone: +421 2 54 774 166 Fax: +421 2 54 774 605

Section 2 - Hazards Identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008


Skin corrosion (Category 1B)

Classification according to Regulation (EC) No 1272/2008

Causes burns.

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

Label elements

Pictogram	
Signal word	Danger
Hazard statement(s)	
H314	Causes severe skin burns and eye damage.
Precautionary statement(s)	
P280	Wear protective gloves/ protective clothing/ eye protection/face protection.
P260	Do not <u>breathe dust</u> .
P270	Do not eat, drink or smoke when using this product.
P301+P312	IF <u>SWALLOWED</u> : Call a <u>POISON CENTER</u> or doctor/physician if you feel unwell.
P303 + P361 + P353	IF ON <u>SKIN</u> (or hair): Remove/Take off immediately all contaminated clothing. Rinse <u>skin</u> 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.

P310	Continue rinsing.
P405	Immediately call a <u>POISON CENTER</u> or doctor/physician.
P501	Store locked up.
	Dispose of contents/container in accordance with local/regional/national/international regulation (to be specified).

According to European Directive 67/548/EEC as amended

Hazard symbol(s)

C Corrosive.

R-phrases(s)

R34 Causes burns.

S-phrases(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S45 In case of accident or if you feel unwell, seek medical advice immediately. (Show the label where possible)

Other hazards Lachrymator.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
18880-00-7	4-(TERT-BUTYL)BENZYL BROMIDE	97	242-643-1

Classification Skin Corr. 1B
H314,
C, R34

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4 - 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 of water for at least 15 minutes and consult a physician.
If swallowed:	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5 - Fire Fighting Measures

Suitable extinguishing media:	Do not use water directly on fire. Use foam, dry chemical, or carbon dioxide.
Special protective equipment for fire-fighters:	Wear self contained apparatus breathing apparatus for fire fighting if necessary.

Section 6 - Accidental Release Measures

Personal precautions:	Avoid breathing of dust. Use personal protective equipment. Ensure adequate ventilation.
Environmental precautions:	Prevent further spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleaning up	Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container for disposal.

Section 7 - Handling and Storage

Precautions for safe handling:	Avoid contact with skin and eyes. Avoid formation and breathing of dust. Provide appropriate exhaust ventilation at places, where dust is formed. Normal measures of preventive fire protection.
Conditions for safe storage:	Store in a tightly closed container. Store in a cool, dry place. Corrosives area.

Section 8 - Exposure Controls, Personal Protection

Personal protective equipment:

Respiratory protection:	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Hand 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 gloves outer surface) to avoid skin contact with this product. Dispose off contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Eye protection:	Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)
Skin and body protection:	Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Section 9 - Physical and Chemical Properties

Appearance

Form:	Clear liquid
Colour:	Colourless to light yellow
Safety data:	
pH	Not available
Boiling Point:	93 - 94 °C at 2.0 hPa – lit.

Melting Point:	8 - 12 °C – lit.
Flash Point:	110 °C – closed cup
Ignition temperature:	Not available
Explosion Limits: Lower:	Not available
Explosion Limits: Upper:	Not available
Specific Gravity/Density:	1.236 g/cm ³
Refractive Index:	1.5445 – 1.5465
Molecular Formula:	C ₁₁ H ₁₅ Br
Molecular Weight:	227.14 g/mol

Section 10 - Stability and Reactivity

Chemical Stability:	Stabile under recommended storage conditions.
Conditions to Avoid:	No data available.
Materials to avoid:	Strong oxidizing agents, strong bases.
Hazardous Decomposition Products	Hazardous decomposition products under fire conditions. – Carbon oxides, hydrogen bromide(g).

Section 11 - Toxicological Information

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	No data available.
Specific target organ toxicity – repeated exposure	No data available
Aspiration hazard	No data available
Potential health effect:	
Inhalation	May be harmful if inhaled.
Ingestion	Harmful if swallowed. Causes burns.
Skin	Causes skin burns.
Eyes	Causes eye burns.

Signs and Symptoms of Exposure

Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. May cause burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. 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

Toxicity:	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
PBT and vPvB assessment	No data available
Other adverse effects	No data available

Section 13 - Disposal Considerations

Product	Dissolve and mix material with combustive solvent and burn 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

	IATA	IMDG	RID/ADR
Proper shipping name:	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.
Hazard Class:	8	8	8
UN Number:	3265	3265	3265
Packing Group:	II	II	II
		EMS-No: F-A, S-B	
		Marine pollutant: No	

Section 15 - Regulatory Information

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

Section 16 - Other Information

Text of H-code(s) and R-phrase(s) mentioned in Section 3

Skin Corr.	Skin corrosion.
H314	Causes severe skin burns and eye damage.
C	Corrosive.
R34	Causes burns.

MSDS Creation Date: 8/4/2008

Revision #1 Date: 18/01/2011

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.