

Product Code	CB5304-12		
Product Name	2-BROMOBUTANE pure		
Molecular Formula	$\text{CH}_3\text{CHBrCH}_2\text{CH}_3$ =137.02		
CAS Number	78-76-2		
Supplier:	BEECROFT & PARTNERS		
		Northfield Road	
		Rotherham	
		South Yorkshire	
Phone	01709-377881		
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Emergency Telephone	08:30-1700		01709
24hr			
(Have this document to			

2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
2-bromobutane	78-76-2	201-140-7	> 98.0%	R20/21/22, R40	N/A

3. Hazards Identification



Harmful by inhalation, in contact with skin and if swallowed. Limited evidence of carcinogenic effect

4. First Aid Measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open.
Skin	Thoroughly wash off skin with soap and water. Remove contaminated clothing immediately and wash before re-use.
Inhalation	Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.
Ingestion	Wash out the patients mouth thoroughly with water. OBTAIN MEDICAL ATTENTION URGENTLY.

5. Fire Fighting Measures

Hazards	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus. Vapour-air mixtures are explosive.
Extinguishing Media	Water spray, foam, dry powder or carbon dioxide.
Unsuitable Media	Not specified.

6. Accidental Release Measures

Personal Protection	Ensure no sources of ignition. Avoid breathing vapour. Wear goggles, respirator, rubber boots and heavy rubber gloves.
Environmental	Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.
Major Spillage	Cover with an activated carbon adsorbent. Sweep up, place in a bag and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete. Use non-metallic tools only. Ensure no sources of ignition.
Minor Spillage	Cover with an activated carbon adsorbent. Sweep up, place in a bag and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete. Use non-metallic tools only. Ensure no sources of ignition.

7. Storage & Handling

Handling Precautions	All transfer systems should be earthed to prevent accumulation of static electricity. Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing. Use non-metallic tools only. Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.
Storage Conditions	Well ventilated, cool, dry storage . Protect from direct sun and store away from sources of ignition. Keep containers closed when not in use. Keep well separated from oxidising agents.

8.1 Occupational Exposure Limits

No prescribed exposure limits available

8.2 Personal Protection

Respiratory	Wear NIOSH/MSHA-approved respirator.
Hands	Use solvent resistant gloves.
Eyes	Use chemical splash proof glasses or goggles.
Skin	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

9. Physical & Chemical Properties

Appearance	Clear colourless liquid.
Odour	Fresh and characteristic.
pH	Not available
Boiling point	91.0 °C
Melting point	-112.0 °C
Flash point	21.0 °C (Closed cup)
Upper Flammable Limit	Not available
Lower Flammable Limit	Not available
Auto Ignition	Not available
Explosive properties	No.
Oxidising Properties	No.
Vapour Pressure	999.9
Relative Density	Not available
Water Solubility	Not specified.

10. Stability & Reactivity

Chemical Stability	Stable under normal conditions
Conditions to Avoid	Hot surfaces, naked flames or other sources of ignition.
Materials to Avoid	Strong oxidising agents. Alkalis. Magnesium. Potassium. Sodium.
Hazardous Decomposition Products	In combustion emits Carbon dioxide, carbon monoxide and hydrogen bromide.

11. Toxicological Information

Eyes	Both the vapour and liquid may, be irritating to the eyes.
Skin	The liquid may be harmful if absorbed through the skin.
LD50 Skin	Not available
Ingest	The liquid may May be harmful by ingestion.
LD50 Ingest	Not available
Inhalation	The liquid may produce irritation of the eyes, nose, throat and respiratory tract.
Carcinogenicity	Possible Carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

12. Ecological

Small amounts present no specific environmental hazard.

13. Disposal Considerations

Disposal Methods	Burn in a chemical incinerator equipped with afterburners and scrubbers. Exert extra care in igniting as this material is highly flammable.
Contaminated Packaging	Burn in a chemical incinerator equipped with afterburners and scrubbers. Exert extra care in igniting as this material is highly flammable.

14. Transport Information

Proper Shipping Name	2-bromobutane
UN Number	2339
UN Classification	3 Flammable liquid
Subsidiary Risk	None
Flash Point	21.0 °C (Closed cup)
Packing Group	II
Marine pollutant	No
ADR Hazard ID	33



15. Regulatory Information

Labelling	Flammable, Harmful.
Classification	

Risk & safety Phrases	Harmful by inhalation, in contact with skin and if swallowed. Limited evidence of carcinogenic effect Keep away from sources of ignition - No Smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing,gloves and eye/face protection.
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EEC Number	201-140-7
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16. Other Information

Document Information	This document has been prepared in accordance with directive 88/379/EEC. The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment.
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16. Other Information (continued)

Revision Date: 20/11/03.

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