

1. Identification

Product Code **CB7904-12**

Product Name **n-BUTYRALDEHYDE pure**

Molecular Formula $\text{CH}_3\text{CH}_2\text{CH}_2\text{CHO}$ =72.11

CAS Number 123-72-8

Supplier:  **BEECROFT & PARTNERS**
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2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
n-BUTYRALDEHYDE pure	123-72-8	204-646-6	98.0%	F : R11	N/A

3. Hazards Identification

Highly flammable.

4. First Aid Measures

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION.

Skin Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. If discomfort persists OBTAIN MEDICAL ATTENTION.

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 If conscious give plenty of water to drink. Do not induce vomiting. 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.

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. Use water spray to keep fire exposed containers cool.

Unsuitable Media Do not use water jet.

6. Accidental Release Measures

Personal Protection	Ensure no sources of ignition. Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so. Beware : vapour is heavier than air and will tend to accumulate at low spots.
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	Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.
Minor Spillage	Contain and absorb on inert material. Transfer absorbent to container for removal. Allow solvent to evaporate in remote area, then dispose of absorbent as solid chemical waste. Wash area down with copious amounts of water.

7. Storage & Handling

Handling Precautions	Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing. 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	Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge organic vapour respirator, or use self contained breathing apparatus.
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	Unpleasant smell. Stench!
pH	Not available
Boiling point	74.0 °C
Melting point	-97.0 °C
Flash point	-7.0 °C (Closed cup)
Upper Flammable Limit	8.0%
Lower Flammable Limit	1.8%
Auto Ignition	190.0 °C
Explosive properties	Slight.
Oxidising Properties	No.
Vapour Pressure	/20 C 148 hPa
Relative Density	0.8000
Water Solubility	Moderately soluble in water.

10. Stability & Reactivity

Chemical Stability	Stable under normal conditions
Conditions to Avoid	Hot surfaces, naked flames or other sources of ignition.
Materials to Avoid	Oxidising agents, strong bases, strong reducing agents and strong acids.

10. Stability & Reactivity (continued)

Hazardous Burning will produce smoke, carbon monoxide and/or carbon dioxide.
Decomposition Products

11. Toxicological Information

Eyes Both the vapour and liquid may, produce conjunctival irritation and corneal damage.

Skin Both the vapour and liquid may, cause skin burns and severe irritation on prolonged exposure. May cause skin sensitisation.

LD50 Skin rbt 3560 mg/kg

Ingest Moderately toxic by ingestion. Ingestion may cause severe irritation of the mouth, throat and gastro-intestinal tract. May act as a narcotic.

LD50 Ingest Oral Rat 5890 mg/Kg

Inhalation Prolonged exposure to vapour concentrations above the occupational exposure limits may seriously damage the membranes lining the nose, throat and upper respiratory tract. May cause pulmonary oedema on prolonged exposure.

Carcinogenicity No information is available.

Mutagenicity May be a mutagen.

Reproductive Effects No information is available.

Other Information LC50 in rats is 60000ppm, it has good warning properties.

12. Ecological

Small amounts present no specific environmental hazard.

13. Disposal Considerations

Disposal Methods Dispose of in a licensed incinerator for organic solvents. Do not dispose of as domestic waste. Never dispose of into water courses or sewerage systems due to high risk of explosion.

Contaminated Packaging Use a licensed waste disposer. Do not attempt to burn any residual liquids due to risk of explosion.

14. Transport Information

Proper Shipping Name Butyraldehyde
UN Number 1129
UN Classification 3 Flammable liquid
Subsidiary Risk None
Flash Point -7.0 °C (Closed cup)
Packing Group II
Marine pollutant No
ADR Hazard ID 33



15. Regulatory Information

Labelling Highly Flammable.
Classification

Label Symbols

F



Risk & safety Phrases Highly flammable. Keep out of reach of children. Keep container in a well ventilated place. Do not empty in to drains. Take precautionary measures against static discharges.

15. Regulatory Information (continued)

EEC Number

204-646-6

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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