

## 1: Identification of substance / mixture

### 1. Product Identifier

Substance

Product Name **Dibromoacetonitrile**  
Product Code 001049  
CAS Number 3252-43-5  
Other Names Dibromomethylcyanide  
IUPAC  
MFCD Number MFCD00001856  
EC/EINECS 221-843-2  
REACH Number Index-No

### 2. Relevant identified uses of the substance or mixture and uses advised against

Research and Development

### 3. Details of the supplier of the safety data sheet

Fluorochem Ltd  
Unit 14, Graphite Way  
Hadfield  
Derbyshire  
SK13 1QH  
UK

Telephone: +44(0)1457 860111  
Fax: +44(0)1457 892799  
Email: sds@fluorochem.co.uk



### 4. Emergency telephone number

+44(0)7855 268577 -

## 2. Hazards Identification

### 1. Classification of the substance or mixture

H301	Acute Tox. 3	
H319	Eye Irrit. 2	
H400	Aquatic Acute 1	

### 2. Label elements

Signal Word **Danger**



### Hazard Statements

H301	Toxic if swallowed.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.

### Precautionary Phrases

P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### 3. Other Hazards

Additional precautionary phrases are located throughout the safety data sheet

## 3. Composition / Information on Ingredients

### 1. Substances

Product Name	Hazards	Concentration
Dibromoacetonitrile		
CAS Number: 3252-43-5 EC/EINECS: 221-843-2	H301, H319, H400 Acute Tox. 3, Aquatic Acute 1, Eye Irrit. 2	<=100%

## 4. First Aid Measures

### 1. Description of first aid measures

- Skin Contact* Wash immediately with plenty of soap and water.  
Transfer to hospital if there are burns or symptoms of poisoning.
- Eye Contact* P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337 + P313: If eye irritation persists: Get medical advice/attention.  
Bathe the eye with running water for 15 minutes.  
Consult a doctor.
- Ingestion* P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
Wash out mouth with water.  
Consult a doctor.
- Inhalation* Supply fresh air; consult a doctor in case of complaints.

### 2. Most important symptoms and effects

There may be irritation and redness.

### 3. Indication of any immediate medical attention

No additional measures required

## 5. Firefighting measures

### 1. Extinguishing Media

- Suitable* Carbon dioxide.  
Alcohol or polymer foam.  
Dry chemical powder.
- Unsuitable* no data

### 2. Special Hazards arising from the substance or mixture

In combustion toxic fumes may form.

### 3. Advice for Fire Fighters

- Wear self-contained breathing apparatus.  
Wear protective clothing to prevent contact with skin and eyes.

## 6. Accidental Release Measures

### 1. Personal Precautions

- Evacuate the area immediately.  
Do not attempt to take action without suitable protective clothing – see section 8 of SDS.

### 2. Environmental Precautions

- Do not discharge into drains or rivers.  
Contain the spillage using bunding.

### 3. Methods & Materials

- Mix with sand or vermiculite.  
Transfer to a closable, labelled salvage container for disposal by an appropriate method.

### 4. Preventing the occurrence of secondary hazards.

No Special Measures Required

## 7. Handling and Storage

### 1. Personal Precautions

*Safe Handling* Ensure there is sufficient ventilation of the area.  
P264: Wash hands thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.  
P273: Avoid release to the environment.

*Protection against explosions and fires* normal measures for preventive fire protection

### 2. Conditions for safe storage, including any incompatibilities

*Managing Storage Risks* Store in cool, well ventilated area.  
Keep container tightly closed.

*Storage Controls* No special requirements

*Maintaining Integrity* Keep in tightly closed container in cool area away from direct sunlight or heat sources.

*Other advice* no further information available

### 3. Specific End Uses

The end use(s) have not been fully determined. The substance is supplied for Research and Development purposes by professionals only.

## 8. Exposure Controls/Personal Protection

### 1. Control Parameters

No Data Available

### 2. Exposure Controls

*General protective and hygiene measures* P280: Wear protective gloves/protective clothing/eye protection/face protection.  
Wash hands during breaks and at the end of handling the material  
Immediately remove any contaminated clothing

*Engineering measures* Ensure there is sufficient ventilation of the area.

*Eye / Face Protection* Safety Glasses with side-shields.

*Hand protection* Protective gloves.

*Respiratory protection* Use breathing protection with high concentrations

*Skin protection* Handle with gloves.  
Gloves must be inspected prior to use.  
Use proper glove removal technique to avoid skin contact with this product.  
Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practice.  
Wash and dry hands.  
Protective clothing.

*Other personal protection advice* no data

## 9. Physical and Chemical Properties

### 1. Physical and Chemical Properties

Appearance	Liquid
Odour	No Data Available
Odour threshold	No Data Available
PH	No Data Available
Melting point / Freezing point	No Data Available
Initial boiling point and boiling range	67-69°C

Flash point	No Data Available
Evaporation rate	No Data Available
Flammability(solid,gas)	No Data Available
Upper/lower flammability or explosive limits	No Data Available
Vapour pressure	No Data Available
Vapour density	No Data Available
Relative density	2.296
Solubility(ies):	No Data Available
Partition coefficient: n-octanol/water	No Data Available
Auto-ignition temperature	No Data Available
Decomposition temperature	No Data Available
Viscosity	No Data Available
Explosive properties	No Data Available
Oxidising properties	No Data Available

## 2. Other Information

No additional information available

## 10. Stability and Reactivity

### 1. Reactivity

no unusual reactivity

### 2. Stability

Stable under normal conditions.

### 3. Possibility of Hazardous Reactions

no hazardous reactions known

### 4. Conditions to Avoid

no specific conditions to avoid

### 5. Incompatible Materials

Oxidising agents.  
Strong reducing agents.  
Strong acids.  
Strong bases.

### 6. Hazardous Decomposition Products

In combustion emits toxic fumes.  
In combustion emits toxic fumes of carbon dioxide / carbon monoxide.  
In combustion emits toxic fumes of nitrogen oxides.  
In combustion emits toxic fumes of hydrogen bromide.

## 11. Toxicology information

### 1. Information

<i>Acute Toxicity</i>	Oral LD50 (rat) 245mg/kg
<i>Skin corrosion/irritation</i>	irritant for skin and mucous membranes
<i>Serious eye Damage/irritation</i>	irritant effect Lachrymator
<i>Respiratory or skin sensitisation</i>	No sensitizing effect known
<i>Germ Cell mutagenicity</i>	not known
<i>Carcinogenicity</i>	not known
<i>Reproductive toxicity</i>	

not known

*STOT-single exposure* not known

*STOT-repeated exposure* not known

*Aspiration hazard* not known

## 2. Additional

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.  
No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH

## 12. Ecological Information

### 1. Toxicity

Toxicity to fish:  
LC50 - Pimephales promelas (fathead minnow) - 0.55mg/l - 96h

### 2. Persistence and degradability

not known

### 3. Bio-Accumulative Potential

not known

### 4. Mobility and Soil

not known

### 5. Results of PBT & vPvB assessment

not known

### 6. Other adverse effects

Water hazard class 2 (self assessment); hazardous for water.  
Very toxic to aquatic life.

## 13. Disposal Considerations

### 1. Waste Treatment Methods

*Disposal Operations*

*Disposal of Packaging* Disposal must be made according to official regulations.

## 14. Transport Information

### Air (ICAO)

1. **UN Number:** 3276
2. **Shipping Name:** Nitriles, liquid, toxic, n.o.s.
3. **Transport hazard class(es):** : 6.1 Sub Class :



4. **Packing group:** III
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk:**

### Road (ADR)

1. **UN Number:** 3276
2. **Shipping Name:** NITRILES, LIQUID, TOXIC, N.O.S (Dibromoacetonitrile).
3. **Transport hazard class(es):** : 6 Sub Class :



4. **Packing group:** III  
5. **Environmental hazards:**  
6. **Special Precautions for user:**  
7. **Transport in bulk:**

## Sea (IMDG)

1. **UN Number:** 3276  
2. **Shipping Name:** Nitriles, liquid, toxic, n.o.s.  
3. **Transport hazard class(es) :** 6.1 Sub Class :



4. **Packing group:** III  
5. **Environmental hazards:**  
6. **Special Precautions for user:**  
7. **Transport in bulk:** IBCINS: IBC03  
IBCPPROV: -  
UNTANKINS: -  
TANKPROV: TP1, TP28

## 15. Safety, health, environmental and national regulations

### 1. Safety, health, environmental and national regulations:

product is not subject to any additional regulations or provisions

### 2. Safety Assessment

No Chemical Safety Assessment

## 16. Other Information

### 1. Other Information:

ADR: Accord European sur le transport des marchandises Dangereuses par Route(European Agreement concerning the International Carriage of Dangerous Goods by road)  
RID:Reglement International concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the International Air Transport Association  
ICAO:International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the ICAO  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
CAS:Chemical Abstracts Service

### 2. Associated risk phrases according to European directive 67/548/EEC

### 3. Disclaimer

The product listed is for research and development purposes only and not for human or animal use. As such, in most cases, the toxicological, ecological and physicochemical properties have not been fully determined and the product should be treated with respect and always handled under suitable conditions by appropriately qualified personnel. The responsible party shall use this datasheet only in conjunction with other sources of information gathered by them, and should make an independent judgement of suitability, to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance with this material safety data sheet, or in combination with any other product or process, is the responsibility of the user.