

4-(DIFLUOROMETHYL)-2-(TRIFLUOROMETHYL)BENZONITRILE

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Revision No: 2

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: 4-(DIFLUOROMETHYL)-2-(TRIFLUOROMETHYL)BENZONITRILE

CAS number: 1807192-90-0

Product code: PC32953

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

1.3. Details of the supplier of the safety data sheet

Company name: Apollo Scientific Itd

| Units 3 & 4 |
|-------------|
| Parkway |
| Denton |
| Manchester |
| M34 3SG |
| UK |

Tel: 01616411420

Email: alan.myers@apolloscientific.co.uk

1.4. Emergency telephone number

Emergency tel: -

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Acute Tox. 4: H302+H312+H332; Skin Corr. 1B: H314 Most important adverse effects: Harmful if swallowed, in contact with skin or if inhaled Causes severe skin burns and

eye damage.

2.2. Label elements

| H302+H312+H332: Harmful if swallowed, in contact with skin or if inhaled |
|--|
| H314: Causes severe skin burns and eye damage. |
| GHS05: Corrosion |
| GHS07: Exclamation mark |
| |



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 Signal words:
 Danger

 Precautionary statements:
 P271: Use only outdoors or in a well-ventilated area.

 P260: Do not breathe vapours.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: 4-(DIFLUOROMETHYL)-2-(TRIFLUOROMETHYL)BENZONITRILE

CAS number: 1807192-90-0

Section 4: First aid measures

4.1. Description of first aid measures

| Skin contact: | Remove all contaminated clothes and footwear immediately unless stuck to skin. |
|---------------|--|
| | Drench the affected skin with running water for 10 minutes or longer if substance is still |
| | on skin. Transfer to hospital if there are burns or symptoms of poisoning. |

- **Eye contact:** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.
 - Ingestion: Wash out mouth with water. Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.
 - Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact: Corneal burns may occur. May cause permanent damage.

- **Ingestion:** Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.
- **Inhalation:** There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

4.3. Indication of any immediate medical attention and special treatment needed

Section 5: Fire-fighting measures

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| 5.1. Extinguishing media | | |
| Extinguishing media: | Carbon dioxide, dry chemical powder, foam. Suitable extinguishing media for the | |
| | surrounding fire should be used. Use water spray to cool containers. | |
| 5.2. Special hazards arising from | n the substance or mixture | |
| Exposure hazards: | Corrosive. In combustion emits toxic fumes of carbon dioxide / carbon monoxide. | |
| | Nitrogen oxides (NOx). Hydrogen fluoride (HF). | |
| 5.3. Advice for fire-fighters | | |
| Advice for fire-fighters: | Wear self-contained breathing apparatus. Wear protective clothing to prevent contact | |
| | with skin and eyes. | |
| ection 6: Accidental release m | easures | |
| 6.1. Personal precautions, prote | ctive equipment and emergency procedures | |
| Personal precautions: | Notify the police and fire brigade immediately. If outside keep bystanders upwind and | |
| | away from danger point. Mark out the contaminated area with signs and prevent access | |
| | to unauthorised personnel. Do not attempt to take action without suitable protective | |
| | clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the | |
| | escape of liquid. | |
| 6.2. Environmental precautions | | |
| Environmental precautions: | Do not discharge into drains or rivers. Contain the spillage using bunding. | |
| 6.3. Methods and material for co | ontainment and cleaning up | |
| Clean-up procedures: | Clean-up should be dealt with only by qualified personnel familiar with the specific | |
| | substance. Absorb into dry earth or sand. Transfer to a closable, labelled salvage | |
| | container for disposal by an appropriate method. | |
| 6.4. Reference to other sections | | |
| ection 7: Handling and storage | 9 | |
| 7.1. Precautions for safe handlin | Iq | |
| | Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. | |
| Handling requirements. | Do not handle in a confined space. Avoid the formation or spread of mists in the air. Only | |
| | use in fume hood. | |
| 7.2. Conditions for safe storage, | | |
| | ······································ | |
| | | |
| Storage conditions: | Store in a cool, well ventilated area. Keep container tightly closed. Must only be kept in original packaging. PACK IN NALGENE. | |

Specific end use(s): No data available.

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Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures:Ensure there is sufficient ventilation of the area.Respiratory protection:Self-contained breathing apparatus must be available in case of emergency.Hand protection:Impermeable gloves.Eye protection:Tightly fitting safety goggles. Ensure eye bath is to hand.Skin protection:Impermeable protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| State: | Oil | | |
|-------------------------------|--------------------|------------------------------|--------------------|
| Evaporation rate: | No data available. | | |
| Oxidising: | No data available. | | |
| Solubility in water: | No data available. | | |
| Viscosity: | No data available. | | |
| Boiling point/range°C: | No data available. | Melting point/range°C: | No data available. |
| Flammability limits %: lower: | No data available. | upper: | No data available. |
| Flash point°C: | No data available. | Part.coeff. n-octanol/water: | No data available. |
| Autoflammability°C: | No data available. | Vapour pressure: | No data available. |
| Relative density: | No data available. | pH: | No data available. |
| VOC g/l: | No data available. | | |

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

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10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Nitrogen oxides

(NOx). Hydrogen fluoride (HF).

Section 11: Toxicological information

11.1. Information on toxicological effects

Relevant hazards for product:

| Hazard | Route | Basis |
|-------------------------------|-------------|-----------------------|
| Acute toxicity (ac. tox. 4) | INH DRM ING | Hazardous: calculated |
| Skin corrosion/irritation | DRM | Hazardous: calculated |
| Serious eye damage/irritation | OPT | Hazardous: calculated |

Symptoms / routes of exposure

Skin contact: Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact: Corneal burns may occur. May cause permanent damage.

Ingestion: Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

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| 12.6. Other adverse effects | | | |
| Other adverse effects: | No data available. | | |
| ection 13: Disposal considerat | ions | | |
| 13.1. Waste treatment methods | | | |
| Disposal operations: | Transfer to a suitable container and arrange for collection by specialised disposal | | |
| Disposal operations. | company. MATERIAL SHOULD BE DISPOSED OF IN ACCORDANCE WITH LOCAL, | | |
| | STATE AND FEDERAL REGULATIONS | | |
| Disposal of packaging: | | | |
| Disposal of packaging: | Dispose of as special waste in compliance with local and national regulations Observe | | |
| ND. | all federal, state and local environmental regulations. | | |
| ND: | The user's attention is drawn to the possible existence of regional or national | | |
| | regulations regarding disposal. | | |
| ection 14: Transport information | on | | |
| 14.1. UN number | | | |
| UN number: | UN3265 | | |
| 14.2. UN proper shipping name | | | |
| | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. | | |
| 14.3. Transport hazard class(es) | | | |
| Transport class: | | | |
| 14.4. Packing group | 0 | | |
| | | | |
| Packing group: | III | | _ |
| 14.5. Environmental hazards | | | |
| Environmentally hazardous: | No Marine pollutant: No | | |
| 14.6. Special precautions for us | er | | |
| Tunnel code: | E | | |
| Transport category: | | | |
| ection 15: Regulatory informat | | | |
| | | | |
| 15.1. Safety, health and environ | nental regulations/legislation specific for the substance or mixture | | |
| Specific regulations: | Not applicable. | | |
| 15.2. Chemical Safety Assessme | ent | | |
| | | | |
| Chemical safety assessment: | A chemical safety assessment has not been carried out for the substance or the mixture | | |

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Section 16: Other information Other information Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830. * Data predicted using computational software. The OECD QSAR-Toolbox for grouping chemicals into categories. Developed by LMC bulgaria. http://echa.europa.eu/support/oecd-qsar-toolbox ~ Data predicted using computational software ACD/ToxSuite v 2.95.1 Copyright 1994-2009 ACD/labs, Copyright 2001-2009 Pharma Algorithms, Inc, Advanced Chemistry Development, Inc (ACD/Labs). http://www.acdlabs.com/products/pc admet/tox/tox/ Phrases used in s.2 and s.3: H302+H312+H332: Harmful if swallowed, in contact with skin or if inhaled H314: Causes severe skin burns and eye damage. Legal disclaimer: .The material is intended for research purposes only and should be handled exclusively by those who have been fully trained in safety, laboratory and chemical handling procedures. The above information is believed to be correct to the best of our knowledge. The above information is believed to be correct to the best of our knowledge at the date of its publication, but should not be considered to be all inclusive. It should be used only as a guide for safe handling, storage, transportation and disposal. We cannot guarantee that the hazards detailed in this document are the only hazards that exist for this product. This is not a warranty and Apollo Scientific Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.