

4-FLUORO-2-IODOANILINE

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

## 1.1. Product identifier

Product name: 4-FLUORO-2-IODOANILINE

CAS number: 61272-76-2

Product code: PC3452

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 Ltd                  |
|---------------|--|
|               | Units 3 & 4                            |
|               | Parkway                                |
|               | Denton                                 |
|               | Manchester                             |
|               | M34 3SG                                |
|               | UK                                     |
| Tel:          | 0161 337 9971                          |
| Fax:          | 0161 336 6932                          |
| Email:        | david.tideswell@apolloscientific.co.uk |

## 1.4. Emergency telephone number

## Section 2: Hazards identification

### 2.1. Classification of the substance or mixture

| Classification under CLP:       | Acute Tox. 4: H302+312+332; STOT SE 3: H335; Eye Irrit. 2: H319; Skin Irrit. 2: H315     |
|---------------------------------|--|
| Classification under CHIP:      | Xn: R20/21/22; Xi: R36/37/38   |
| Most important adverse effects: | Harmful if swallowed, in contact with skin or if inhaled. Causes skin irritation. Causes |
|                                 | serious eye irritation. May cause respiratory irritation.                                |

#### 2.2. Label elements

Label elements:

Hazard statements: H302+312+332: Harmful if swallowed, in contact with skin or if inhaled.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

Signal words: Warning

Hazard pictograms: GHS07: Exclamation mark



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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-FLUORO-2-IODOANILINE

**CAS number:** 61272-76-2

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. Wash immediately with plenty of soap and water.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Wash out mouth with water. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

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

Skin contact: There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

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

## Section 5: Fire-fighting measures

#### 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 the substance or mixture

**Exposure hazards:** In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Nitrogen oxides (NOx). Hydrogen fluoride (HF). Hydrogen iodide (HI).

#### 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.

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#### Section 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. 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 containment and cleaning up

**Clean-up procedures:** 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

#### Section 7: Handling and storage

#### 7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. 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, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Light Sensitive. Air sensitive. Store under Argon. Recommended storage temp 2-8 ℃.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): No data available.

#### 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:Protective gloves.Eye protection:Safety glasses. Ensure eye bath is to hand.Skin protection:Protective clothing.

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#### Section 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Yellow

Solubility in water: Not miscible

Boiling point/range °C: 74-76

Relative density: 1.99 g/L

Flash point °C: >110

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.

10.4. Conditions to avoid

Conditions to avoid: Heat. Light. Air.

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). Hydrogen iodide (HI).

#### Section 11: Toxicological information

## 11.1. Information on toxicological effects

#### Relevant hazards for substance:

| Hazard                        | Route       | Basis              |
|-------------------------------|-------------|--------------------|
| Acute toxicity (ac. tox. 4)   | INH DRM ING | Based on test data |
| Skin corrosion/irritation     | DRM         | Based on test data |
| Serious eye damage/irritation | OPT         | Based on test data |
| STOT-single exposure          | INH         | Based on test data |

### Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

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Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest. 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.

12.6. Other adverse effects

Other adverse effects: Water hazard class 1(self-assessment): slightly hazardous for water

## Section 13: Disposal considerations

#### 13.1. Waste treatment methods

 Disposal operations:
 MATERIAL SHOULD BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS

 Disposal of packaging:
 Dispose of as special waste in compliance with local and national regulations Observe

all federal, state and local environmental regulations.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

#### Section 14: Transport information

14.1. UN number

UN number: UN2810

14.2. UN proper shipping name

Shipping name: TOXIC LIQUID, ORGANIC, N.O.S.

14.3. Transport hazard class(es)

Transport class: 6.1

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|----------------------------------|---|-------|---|
| 14.4. Packing group              |   |       |   |
| Packing group:                   | III   |       |   |
| 14.5. Environmental hazards      |   |       |   |
| Environmentally hazardous:       | No Marine pollutant: No   |       |   |
| 14.6. Special precautions for us | ser   |       |   |
| Tunnel code:                     | E   |       |   |
| Transport category:              | 2   |       |   |
| Section 15: Regulatory informa   | ation   |       |   |
|                                  | nmental regulations/legislation specific for the substance or mixture   |       |   |
| 15.2. Chemical Safety Assessm    | ient  |       |   |
| Chemical safety assessment:      | A chemical safety assessment has not been carried out for the substance or the mixture  | _     | _ |
| -                                | by the supplier.  |       |   |
| Section 16: Other information    |   |       |   |
|                                  |   |       |   |
| Other information                |   |       |   |
| Other information:               | This safety data sheet is prepared in accordance with Commission Regulation (EU) No   |       |   |
|                                  | 453/2010.   |       |   |
|                                  | * Data predicted using computational software. Toxtree - Toxic Hazard Estimation by   |       |   |
|                                  | decision tree approach. http://ecb.jrc.ec.europa.eu/qsar/qsar-tools/index.php?  |       |   |
|                                  | c=TOXTREE   |       |   |
|                                  | ~ 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+312+332: Harmful if swallowed, in contact with skin or if inhaled.   |       |   |
|                                  | H315: Causes skin irritation.   |       |   |
|                                  | H319: Causes serious eye irritation.  |       |   |
|                                  | H335: May cause respiratory irritation.   |       |   |
|                                  | R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.<br>R36/37/38: Irritating to eyes, respiratory system and skin. |       |   |
| Legend to abbreviations:         | PNEC = predicted no effect level  |       |   |
| Logona to approximate            | DNEL = derived no effect level  |       |   |
|                                  | LD50 = median lethal dose   |       |   |
|                                  | LC50 = median lethal concentration  |       |   |
|                                  | EC50 = median effective concentration   |       |   |
|                                  | IC50 = median inhibitory concentration  |       |   |
|                                  | dw = dry weight   |       |   |
|                                  | bw = body weight  |       |   |
|                                  |   |       |   |

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cc = closed cup oc = open cup MUS = mouse GPG = guinea pig RBT = rabbit HAM = hamster HMN = human MAM = mammal PGN = pigeon IVN = intravenous SCU = subcutaneous SCU = subcutaneous SKN = skin DRM = dermal OCC = ocular/corneal PCP = phycico-chemical properties The material is intended for researc by those who have been fully trainer

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