

## SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier**

Product Description:

**2,4-Difluoro-benzamidine; hydrochloride**

Cat No:

**ACI-00232**

CAS No:

**Relevant identified uses of the substance or mixture and uses advised against****Recommended Use:**

Laboratory Chemicals

**Uses advised against:**

No information available

**Details of the supplier of the safety data sheet****Company**

Advanced Chemical Intermediates Limited

The Old Dairy

Tresplatt

Davidstow

Cornwall

PL32 9YD

Tel: +44 (0) 1840 261451

### 2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 4
Acute dermal toxicity	Category 4
Acute Inhalation toxicity – Dusts and mists	Category 4
Skin corrosion/irritation	Category 2
Serious Eye Damage/Eye irritation	Category 2A
Specific target organ systemic toxicity (single exposure)	Category 3

**Classification according to EU Directives 67/548/EEC Or 1999/45/EC**

For the full text of the R phrases mentioned in this section, see section 16

**Symbol(s)**

Xn – Harmful

**R – phrase(s)**

None

**Risk Combination Phrases**

R20/21/22 – Harmful by inhalation, in contact with skin and if swallowed

R36/37/38 – Irritating to eyes, respiratory system and skin

**Label Elements****Signal Word****Warning****Hazard Statements**

H302 – Harmful if swallowed

H315 – Causes skin irritation

H319 – Causes serious eye irritation

H332 – Harmful if inhaled

H312 – Harmful in contact with skin

H335 – May cause respiratory irritation

**Precautionary Statements – EU (S28, 1272/2008)**

P280 – Wear protective gloves/protective clothing/eye protection/face protection

P302 + P352 – IF ON SKIN : Wash with plenty of soap and water

P261 – Avoid breathing dust/fume/gas/mist/vapors/spray

P301 + P312 – IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do, continue rinsing.

**Other Hazards**

No information available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component 2,4-Difluoro-benzamidine; hydrochloride  
CAS No:  
EC No:

### 4. FIRST AID MEASURES

#### Description of first aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes, Obtain medical attention

**Skin Contact** wash off immediately with soap and plenty of water removing all contaminated clothes and shoes, Obtain medical attention

**Ingestion** Clean mouth with water, Obtain medical attention

**Inhalation** Remove from exposure, lie down. Move to fresh air if breathing is difficult, give oxygen if not breathg, give artificial respiration, Obtain medical attention

### 5. FIRE-FIGHTING MEASURES

#### Extinguishing media

#### Suitable Extinguishing Media

Water spray Carbon dioxide (CO2) Dry chemical foam

#### Extinguishing media which ust not be used for safety reasons

No information available

#### Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapours

#### Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

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

Ensure adequate ventilation

#### Environmental precautions

Prevent further leakage or spillage if safe to do so

#### Methods and material for containment and cleaning up

Sweep up or spillage and collect in suitable container for disposal. Use suitable absorbent if required. Do not let this chemical enter the environment

### 7. HANDLING AND STORAGE

#### Precautions for Safe Handling

Avoid contact with skin and eyes. Do not breath dust. Do not breath vapours or spray mist. Do not ingest

#### Conditions for Safe Storage, including and incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control Parameters

Exposure limits	Not applicable
Derived No Effect Level (DNEL)	No information available
Predicted No Effect Concentration (PNEC)	No information available

#### Exposure Controls

##### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to workstation location.

##### Personal Protective Equipment

- |                             |   |
|-----------------------------|---|
| 1. Eye protection           | Goggles   |
| 2. Hand protection          | Protective gloves   |
| 3. Skin and body protection | Wear appropriate protective gloves and clothing to prevent skin exposure  |
| 4. Respiratory protection   | Follow the OSHA respirator regulations found in 29 CFR 1910.134 OR European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. |

##### Hygiene Measures

Handle in accordance with good industrial hygiene practice

##### Environmental Exposure Controls

No information available

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical State	SOLID
Appearance	BEIGE SOLID
Boiling Point/Range	-
Melting Point/Range	100-103c
Flash Point	-
Molecular Formula	C7H7ClF2N2
Molecular Weight	192.60

**10. STABILITY AND REACTIVITY****Reactivity****Chemical Stability**

Stable under normal conditions

**Possibility of Hazardous Reactions**

Hazardous Polymerization

No information available

Hazardous Reactions

No information available

**Conditions to Avoid**

Incompatible products. Heat.

**Incompatible Materials**

Acids, bases, strong oxidizing agents, strong reducing agents,

**Hazardous Decomposition Products**

In combustion emits toxic fumes.

**11. TOXICOLOGICAL INFORMATION****Information on Toxicological Effects****Acute Toxicity****Product Information**

No acute toxicity information available for product

**Component Information****Chronic Toxicity****Carcinogenicity**

There are no known carcinogenic chemicals in product

**Sensitization**

No information available

**Mutagenic Effects**

No information available

**Reproductive Effects**

No information available

**Developmental Effects**

No information available

**Target Organs**

No information available

**Other Adverse Effects**

The toxicological properties have not been fully investigated

**Endocrine Disruptor Information**

None known

**12. ECOLOGICAL INFORMATION****Toxicity****Eco-toxicity Effects**

Do not empty into drains

**Persistence and Degradability**

No information available

**Bio-accumulative Potential**

No information available

**Mobility in Soil**

No information available

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste Treatment Methods****Waste from Residues/Unused Products**

Dispose of in accordance with local regulations

**Contaminated Packaging**

Empty containers should be taken for local recycling, recovery or waste disposal

**14. TRANSPORT INFORMATION****IMDG/IMO**

Not regulated

**ADR**

Not regulated

**IATA**

Not regulated

**15. REGULATORY INFORMATION**

**Safety, health and environmental regulations specific for the substance or the mixture**

**Chemical Safety Assessment**

A Chemical safety assessment has not been carried out.

**International Inventories**

**16. OTHER INFORMATION**

**Text of R phrases mentioned in Section 2 – 3**

R20/21/22 – Harmful by inhalation, in contact with skin and if swallowed

R36-37-38 – Irritating to eyes, respiratory system and skin

**Revision Date** 16-Nov-2010

**Revision Summary** Not Applicable

**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

**Disclaimer**

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