



## MATERIAL SAFETY DATA SHEET (MSDS)

### SECTION 1: Identification

#### 1.1 Product identifiers

**Product Name :** 2,6-Difluorobenzonitrile

**Cat No.:** A10454

**CAS No. :** 1897-52-5

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

**Recommended uses :** Laboratory chemicals

**Uses advised against:** Food, drug, pesticide or biocidal product use.

#### 1.3 Details of the supplier of the safety data sheet

**Company :** Krishna Solvechem Limited.  
B/503, Sahayog, S. V. Road,  
Kandivali (West), Mumbai – 400067. India.

**Telephone :** +91-22-6123 0222

**Email :** exports@kscl.co.in

#### 1.4 Emergency telephone number

**Emergency Phone :** +91-8657457330

### SECTION 2: Hazards identification

#### 2.1 Classification

**This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)**

Acute oral and dermal toxicity	(Category 4)
Acute inhalation toxicity – Dusts and Mists	(Category 4)
Skin Corrosion/Irritation	(Category 2)
Serious Eye Damage/Eye Irritation	(Category 2)
Specific target organ toxicity (single exposure)	(Category 3)
Target Organs - Respiratory system.	

#### 2.2 Label elements

**Pictogram :**



**Signal word** Warning

**Hazard statement (s)** Harmful if swallowed, in contact with skin or if inhaled



**Precautionary  
statement (s)**

**Prevention**

Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area

**Inhalation :**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell

**IF ON SKIN (or hair):**

If skin irritation occurs: Get medical advice/attention  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse

**Eyes:**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

**Ingestion:**

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth

**Storage:**

Store locked up Store in a well-ventilated place.  
Keep container tightly closed



	<b>Disposal:</b> Dispose of contents/container to an approved waste disposal plant
<b>Hazards not otherwise classified (HNOC)</b>	None identified

### SECTION 3: Composition / information on ingredients

**3.1**

Component	CAS-No	Weight %
Benzonitrile, 2,6-difluoro-	1897-52-5	97

### SECTION 4: First aid measures

**4.1 Description of first aid measures**

<b>If inhalation :</b>	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
<b>In case of skin contact :</b>	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
<b>In case of eye contact :</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Ingestion :</b>	Clean mouth with water and drink afterwards plenty of water.
<b>4.2 Most important symptoms and effects :</b>	No information available
<b>4.3 Notes to Physician :</b>	Treat symptomatically

### SECTION 5: Firefighting effects

**5.1 Extinguishing media**

<b>Suitable extinguishing media :</b>	Water spray, carbon dioxide (CO <sub>2</sub> ), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.
<b>Unsuitable Extinguishing Media: :</b>	No information available
<b>5.2 Flash Point :</b>	80 °C / 176 °F
<b>Method :</b>	No information available



<b>Autoignition Temperature:</b>	No information available
<b>Explosion Limits:</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available
<b>Specific Hazards Arising from the Chemical :</b>	Flammable. Vapors may form explosive mixtures with air. Combustible material. Containers may explode when heated.
<b>Hazardous Combustion Products :</b>	Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ). Gaseous Hydrogen fluoride (HF). Nitrogen oxides (NO <sub>x</sub> )

<b>5.4 Protective Equipment and Precautions for Firefighters:</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.			
<b><u>NFPA:</u></b>	<b>Health</b>	<b>Flammability</b>	<b>Instability</b>	<b>Physical hazards</b>
	2	1	0	N/A

## SECTION 6: Accidental release measures

<b>6.1 Personal precautions, protective equipment and emergency procedures</b>	Remove all sources of ignition. Take precautionary measures against static discharges
<b>6.2 Environmental precautions</b>	See section 12 for additional Ecological Information
<b>6.3 Methods and materials for containment and cleaning up</b>	Sweep up and shovel into suitable containers for disposal. Remove all sources of ignition.

## SECTION 7: Handling and storage

<b>7.1 Precautions for safe handling</b>	Avoid contact with skin and eyes. Do not breathe dust. Keep away from open flames, hot surfaces and sources of ignition.
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## 7.2 Conditions for safe storage

Keep in a dry, cool and well-ventilated place. Refer product specification and/or product label for specific storage temperature requirement. Keep container tightly closed. Keep away from heat, sparks and flame. Keep containers tightly closed in a dry, cool and well-ventilated place.

## SECTION 8: Exposure controls/personal protection

### 8.1 Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### Engineering Measures

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

### 8.2 Exposure controls

#### Personal protective equipment -

##### Eye / Face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

##### Skin protection and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

##### 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 and safety practice..

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance	Beige solid
b) Odour	Odorless
c) Odour Threshold	No information available
d) pH	No information available
e) Melting point / freezing point	30 - 32 °C / 86 - 89.6 °F
f) Initial boiling point and	197 - 198 °C / 386.6 - 388.4 °F



<b>boiling range</b>	
<b>g) Flash point</b>	80 °C / 176 °F
<b>h) Evaporation rate</b>	No information available
<b>i) Flammability (solid, gas)</b>	Not applicable
<b>j) Upper/lower flammability or explosive limits</b>	No data available No data available
<b>k) Vapour pressure</b>	No information available
<b>l) Vapour density</b>	Not applicable
<b>m) Specific Gravity</b>	No information available
<b>n) Solubility</b>	No data available
<b>o) Partition coefficient: n octanol/water</b>	No data available
<b>p) Auto-ignition temperature</b>	No information available
<b>q) Decomposition temperature</b>	No information available
<b>r) Viscosity</b>	No information available
<b>s) Molecular formula</b>	C7 H3 F2 N
<b>t) Molecular Weight</b>	139.1

### SECTION 10: Stability and Reactivity

<b>10.1 Reactive Hazard :</b>	None known, based on information available
<b>10.2 Chemical stability :</b>	Stable
<b>10.3 Possibility of hazardous reactions :</b>	None under normal processing.
<b>10.4 Conditions to avoid :</b>	Keep away from open flames, hot surfaces and sources of ignition. Incompatible products.
<b>10.5 Incompatible materials:</b>	Strong oxidizing agents, Strong bases
<b>10.6 Hazardous decomposition products :</b>	Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Gaseous Hydrogen fluoride (HF), Nitrogen oxides (NO <sub>x</sub> )
<b>10.7 Hazardous Polymerization</b>	Hazardous polymerization does not occur

## SECTION 11: Toxicological information

### 11.1

#### Information on toxicological effects

#### Acute toxicity:

#### Product Information:

#### Component Information

#### Toxicologically Synergistic Products

No information available

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Irritation :

No information available

#### Sensitization:

No information available

#### Carcinogenicity :

The table below indicates whether each agency has Any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Benzonitrile, 2,6-difluoro-	1897-52-5	Not listed	Not listed	Not listed	Not listed	Not listed

#### Mutagenic Effects:

No information available.

#### Reproductive Effects:

No information available.

#### Developmental Effects :

No information available.

#### Teratogenicity:

No information available.

#### STOT - single exposure :

Respiratory system

#### STOT - repeated exposure:

None known

#### Aspiration hazard :

No information available.

#### Symptoms / effects, both acute and delayed:

No information available

#### Endocrine Disruptor Information :

No information available

#### Other Adverse Effects :

The toxicological properties have not been fully investigated.



## SECTION 12: Ecological information

### 12.1

#### Ecotoxicity:

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Do not empty into drains.

**12.2 Persistence and degradability:** No information available

**Bioaccumulation/ Accumulation** No information available

**12.3 Mobility:** No information available

## SECTION 13: Disposal considerations

**13.1 Waste treatment methods:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## SECTION 14: Transport information

### 14.1 UN number :

DOT : UN2811                      TDG : UN2811  
IATA : UN2811                    IMDG : UN2811

### 14.2 UN proper shipping name

**IMDG :** Toxic solid, organic, n. o. s.

**IATA :** TOXIC SOLID, ORGANIC, N. O. S.\*

**14.3 Transport hazard class(es)**      DOT: 6.1                      TDG: 6.1                      IMDG: 6.1                      IATA: 6.1

**14.4 Packaging group:**                      DOT: III                      TDG: III                      IMDG: III                      IATA: III

## SECTION 15: Regulatory information

### 15.1 United states of America Inventory:

Component	CAS-No	TSCA	TSCA Inventory notification Active/Inactive	TSCA - EPA Regulatory Flags
Benzonitrile, 2,6-difluoro-	1897-52-5	X	ACTIVE	-

**Legend:**







**U.S. Department of Homeland Security** - This product does not contain the any DHS Chemicals.

**Other International Regulations**

**Mexico – Grade**

No information available

**SECTION 16: Other information**

<b>16.1 Prepared By:</b>	Regulatory affairs Krishna Solvechem Limited
<b>Email:</b>	exports@kscl.co.in
<b>Creation Date:</b>	23-Mar-2012
<b>Revision Date:</b>	19-Mar-2023
<b>Print Date:</b>	19-Mar-2023
<b>Revision Summary:</b>	This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 C F R 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**16.2 Disclaimer:**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.