

# **MATERIAL SAFETY DATA SHEET (MSDS)**

**SECTION 1: Identification** 

1.1 Product identifiers

Product Name: 3,5-Difluoroaniline

Cat No.: AC311420000; AC311420010; AC311420100; AC311420500

**CAS No.:** 372-39-4a

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)

129 6: 1: 2526:2266		
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



Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation

Precautionary statement (s)

**Prevention** 

Wash face, hands and any exposed skin thoroughly after handling

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

Do not eat, drink or smoke when using this product 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

### Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

#### Storage:

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



Disposal:

Dispose of contents/container to an approved waste disposal

plant

Hazards not otherwise classified (HNOC)

None identified

# **SECTION 3: Composition / information on ingredients**

#### 3.1

Component	CAS-No	Weight %	
3,5-Difluoroaniline	372-39-4	97	

# **SECTION 4: First aid measures**

4.1	Description of first aid measures				
	If inhalation :	Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.			
	In case of skin contact:	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.			
	In case of eye contact :	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.			
	Ingestion:	Do NOT induce vomiting. Call a physician or poison control center immediately.			
4.2	Most important symptoms and effects:	No information available			
4.3	Notes to Physician :	Treat symptomatically			

# **SECTION 5: Firefighting effects**

#### 5.1 **Extinguishing media**

Suitable extinguishing media Water spray, carbon dioxide (CO2), dry chemical, alcohol-

resistant foam. Water mist may be used to cool closed

containers.

**Unsuitable Extinguishing** 

Media:

No information available

75 °C / 167 °F 5.2 Flash Point:

> Method: No information available



**Autoignition Temperature:** 

No information available

**Explosion Limits:** 

UpperNo data availableLowerNo data available

**Sensitivity to Mechanical** 

**Impact** 

No information available

Sensitivity to Static No information available

Discharge

**Specific Hazards Arising from** 

the Chemical:

Combustible material. Containers may explode when heated.

**Hazardous Combustion** 

**Products:** 

Carbon monoxide (CO). Carbon dioxide (CO2). Nitrogen oxides

(NOx). Gaseous hydrogen fluoride (HF)

5.4 Protective Equipment and

**Precautions for Firefighters:** 

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

full protective gear.

NFPA:

Health	Flammability	Instability	Physical hazards
2	2	0	N/A

### **SECTION 6: Accidental release measures**

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

Ensure adequate ventilation. Use personal protective equipment as required. Remove all sources of ignition. Take precautionary measures against static discharges. Avoid dust formation

#### 6.2 Environmental precautions

See section 12 for additional Ecological Information

#### 6.3 Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment. Remove all sources of ignition. Avoid dust formation.

### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Ensure adequate ventilation. Wear personal protective equipment/face protection. Avoid contact with skin and eyes. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from open flames, hot surfaces and sources of ignition. Minimize dust generation and accumulation. Wash hands before breaks and immediately after handling the product.



### 7.2 Conditions for safe storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame. Incompatible Materials. Acids. Strong oxidizing agents. Acid anhydrides. Acid chlorides. Chloroformates.

## 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 FN166

#### 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 Off white low melting solid				
	b) Odour No information available				
	c) Odour Threshold No information available				
	d) pH No information available				
	e) Melting point / freezing 37 - 41 °C / 98.6 - 105.8 °F point				
	f) Initial boiling point and 82 °C / 179.6 °F @ 20 mmHg				



boiling range	
	75 00 / 407 05
g) Flash point	75 °C / 167 °F
h) Evaporation rate	Not applicable
i) Flammability (solid, gas)	No information available
j) Upper/lower	No data available
flammability or	No data available
explosive limits	
k) Vapour pressure	No information available
I) Vapour density	Not applicable
m) Specific Gravity	No information available
n) Solubility	No information available
o) Partition coefficient: n octanol/water	No data available
p) Auto-ignition	No information available
temperature	
q) Decomposition	No information available
temperature	
r) Viscosity	Not applicable
s) Molecular formula	C6 H5 F2 N
t) Molecular Weight	129.11

	SECTION 10: Stability and Reactivity				
10.1	<b>0.1 Reactive Hazard :</b> None known, based on information available				
10.2	Chemical stability:	Stable under normal conditions.			
10.3	0.3 Possibility of hazardous None under normal processing. reactions:				
10.4	.0.4 Conditions to avoid: Keep away from open flames, hot surfaces and sources of ignition. Incompatible products. Avoid dust formation				
10.5	.0.5 Incompatible materials: Acids, Strong oxidizing agents, Acid anhydrides, Acid chlorides, Chloroformates				
10.6	10.6 Hazardous decomposition Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx), Gaseous hydrogen fluoride (HF)				
10.7	Hazardous Polymerization	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 ha

Any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
3,5-	372-39-	Not listed	Not	Not listed	Not listed	Not listed
Difluoroaniline	4		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 empty into drains.			
12.2 Persiste	ence and degradability:	Persistence is unlikely based on information available.		
Bioaccu Accumu	imulation/ ulation	No information available		
12.3 Mobility	y:	Will likely be mobile in the environment due toits volatility.		

# **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

14.2 ON proper snipping name						
DOT	:	Toxic solid, organic, n. o. s.				
TDG	:	Toxic solid, organic, n. o. s.				
IMD	G :	Toxic solid, organic, n. o. s.				
IATA	:	TOXIC SOLID, ORGANIC, N. O. S.*				
14.3 Trans	sport hazard class(es)	DOT: 6.1 TDG: 6.1 IMDG: 6.1 IATA: 6.1				
14.4 Pack	aging 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
3,5- Difluoroaniline	372-39- 4	X	ACTIVE	PMN;S;5E

#### Legend:



**TSCA** - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

5E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

PMN - Indicates a commenced PMN substance

TSCA 12(b) - Notices of Export Not applicable

#### **International Inventories:**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
3,5-Difluoro aniline	372- 39-4	-	-	206-752-8	-	-		-	-	-

## **U.S. Federal Regulations**

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

**OSHA** - Occupational Safety and Not applicable

**Health Administration** 

**CERCLA** Not applicable

California Proposition 65 This product does not contain any Proposition 65

chemicals.

### 15.2 U.S. State Right-to-Know Regulations:

Not applicable

### **U.S. Department of Transportation**

Reportable Quantity (RQ): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N



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

#### **Other International Regulations**

Mexico – Grade No information available

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

Safety,	health and envi	ronmental regulation	ns/legislation sp	ecific for the sul	ostance or mixture
Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
3,5-Difluoro aniline	372-39-4	Not applicable	Not applicable	Not applicable	Not applicable
Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
3,5-Difluoro aniline	372-39-4	Not applicable	Not applicable	Not applicable	Not applicable

# **SECTION 16: Other information**

**16.1 Prepared By:** Regulatory affairs

Krishna Solvechem

Limited

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**Revision Summary:** This document has been updated to comply with the US OSHA

HazCom 2012 Standard replacing the current legislation under29 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.