

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification

1.1 Product identifiers

Product Name: 4 Fluorophenol

Cat No.: AC119560000; AC119560250; AC119561000

CAS No.: 371-41-5

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 Ltd.

B/503, Shayog, S. V. Road,

Kandivali (West), Mumbai – 400067. India.

Telephone: +91-22-6123 0222

Email: <u>exports@kscl.co.in</u>

1.4 Emergency telephone number

Emergency Phone : +91-8657457330 (10.00am - 7.00pm) [Office hours]

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 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 2)	
Specific target organ toxicity (Single exposure)	(Category 3)	
Target organs – Respiratory system		•
Combustible dust	yes	

2.2 Label elements

Pictogram: Signal word

Warning



Hazard statement (s)

May form combustible dust concentrations in air



Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation
Harmful if swallowed, in contact with skin or if inhaled

Precautionary statement (s)

Prevention

Wash face, hands and any exposed skin thoroughly after handling 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

Do not eat, drink or smoke when using this product

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



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

Media::

Method:

5.2

Flash Point:

Component	CAS-No	Weight %
Phenol, 4-fluoro-	371-41-	>95
	5	

SECTION 4: First aid measures

	SE	CTION 4: First aid measures			
4.1	Description of first aid measu	res			
	If inhalation :	Remove to fresh air. If breathing is difficult, give oxygen. 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 eyelic 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			
	S	ECTION 5: Firefigh 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	No information available			

68 °C / 154.4 °F

No information available



Autoignition Temperature:

No information available

Explosion Limits:

No data available Upper No data available Lower

Sensitivity to Mechanical

No information available

Impact

No information available **Sensitivity to Static**

Discharge

the Chemical:

Specific Hazards Arising from Combustible material. Containers may explode when heated.

Hazardous Combustion Carbon monoxide (CO). Carbon dioxide (CO2). Hydrocarbons.

Products: Gaseous hydrogen fluoride (HF). Fluorine.

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. Thermal decomposition can lead to

release of irritating gases and vapors

Health	Flammability	immability Instability	
2	3	0	N/A

NFPA:

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 **Environmental precautions**

Should not be released into the environment. See section 12 for additional Ecological Information

Methods and materials for containment and cleaning up 6.3

Remove all sources of ignition. Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

SECTION 7: Handling and storage

7.1 **Precautions for safe handling**

Use only under a chemical fume hood. Wear personal protective equipment/face protection. Keep away from open flames, hot surfaces and sources of ignition. Avoid dust formation. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Do not ingest. If swallowedthen seek immediate medical assistance.



7.2 Conditions for safe storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away fromheat, sparks and flame. Incompatible Materials. Strong oxidizing agents. Strong acids. Strong bases. Acid anhydrides. Acid chlorides.

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

Use only under a chemical fume hood. 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 StandardEN 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: Phy	rsical and	chemical	properties

9.1 Information on basic physical and chemical properties a) Appearance Form: solid, beige b) Odour Characteristic c) Odour Threshold No information available d) pH 5-6 5% aq. sol e) Melting point / freezing 44 - 49 °C / 111.2 - 120.2 °F point f) Initial boiling point and No information available



	hailing range					
	boiling range					
	g) Flash point	68 °C / 154.4 °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				
	l) 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 temperature	No information available				
	q) Decomposition temperature	No information available				
	r) Viscosity	Not applicable				
	s) Molecular formula	C6 H5 F O				
	t) Molecular Weight	112.1				
	SECTI	ON 10: Stability and Reactivity				
10.1	Reactive Hazard :	Yes				
10.2	Chemical stability:	Stable under normal conditions.				
10.3	Possibility of hazardous reactions :	None under normal processing.				
10.4	Conditions to avoid :	Avoid dust formation. Incompatible products. Heat, flames and sparks. Keep away from open flames, hot surfaces and sources of ignition.				
10.5	Incompatible materials:	Strong oxidizing agents, Strong bases, strong acids, Acid anhydrides, Acid chlorides				
10.6	Hazardous decomposition	Carbon monoxide (CO), Carbon dioxide (CO2), Hydrocarbons,				
	products :	Gaseous hydrogen fluoride (HF), Fluorine				
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

Component	mponent LD50 Oral		LC50 Inhalation	
Phenol, 4-fluoro-	340 mg/kg (rat)	Not listed	Not listed	

Toxicologically Synergistic Products No information available

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

Irritation: Irritating to eyes, respiratory system and skin

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	
Phenol, 4-	371-41-	Not listed	Not	Not listed	Not listed	Not listed	
fluoro-	5		listed				
Mutagenic Effe	ects:		No infor	mation availabl	e.		
Reproductive E	ffects:		No infor	mation availabl	e.		
Developmental Effects :				No information available.			
Teratogenicity:				No information available.			
STOT - single ex	xposure :		Respirat	Respiratory system			
STOT - repeated exposure:				None known			
Aspiration hazard :				No information available.			
Symptoms / effects,both acute and delayed:			No infor	mation availabl	e		

Endocrine Disruptor Information:

Other Adverse Effects:

invoctigated

No information available

The toxicological properties have not been fully

investigated.



	SECTION 12: Ecological information						
12.1 Ecoto	oxicity:	Do not empty into drains.					
12.2	Persistence and degradability:	Soluble in water Persistence is unlikely based on information Available.					
	Bioaccumulation/ Accumulation	No information available					
12.3	Mobility:	Will likely be mobile in the environment due to its water solubility.					

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	14.2 UN proper shipping name							
	DOT:	Toxic solid, organic, n. o. s.						
	IMDG:	Toxic solid, organic, n. o. s.						
	IATA:	Toxic solid, organic, n. o. s.						
	IMDG:	Toxic solid, organic, n. o. s.						
14.3	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
Phenol, 4- fluoro-	371-41- 5	X	ACTIVE	-

Legend:



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

X - Listed

'-' - Not Listed

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
Phenol, 4-fluoro-	371-41-5	-	Х	206-736-0	Х	Х	Х	Х	Х	KE- 17038

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

Authorization/Restrictions according to EU REACH

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

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Component	CAS No	OECD HPV	Persistent OrganicPollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Phenol, 4-fluoro-	371-41-5	Not applicable	Not applicable	Not applicable	Not applicable
Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantitiesfor Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantitiesfor Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Phenol, 4-fluoro-	371-41-5	Not applicable	Not applicable	Not applicable	Not applicable

SECTION 16: Other information

16.1 Prepared By: Regulatory affairs

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Creation Date:20-May-2010Revision Date:24-Dec-2021Print Date:24-Dec-2021

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

HazCom 2012 Standard replacing the current legislation

under 29 C FR 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.

