

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification

1.1 Product identifiers

Product Name: 2,4,6 - Tribromophenol

Cat No.: AC160100000; AC160100050; AC160101000; AC160105000

CAS No.: 118-79-6

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)

Skin Sensitization	(Category 1)
Serious Eye Damage/Eye Irritation	(Category 2)

2.2 Label elements

Pictogram:



Signal word Warning

Hazard statement (s) Cause an allergic skin reaction



Causes serious eye irritation

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 Contaminated work clothing should not be allowed out of the workplace

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

Disposal:

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Very toxic to aquatic life



SECTION 3: Composition / information on ingredients

3.1

Component	CAS-No	Weight %
Phenol, 2,4,6-tribromo-	118-79-6	<=100

	SECTION 4: First aid measures						
4.1	Description of first aid measures						
	General Advice: Show this safety data sheet to the doctor in attendance. Immediate medical attention is required						
	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 apocket 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 :	None reasonably foreseeable. May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing					

SECTION 5: Firefighting effects

Treat symptomatically

5.1 Extinguishing media

Notes to Physician:

4.3

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

resistant foam.

Unsuitable Extinguishing

Media::

No information available

5.2 Flash Point : No information available **Method :** No information available



Autoignition Temperature: No

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:

Do not allow run-off from fire-fighting to enter drains or water

courses.

Hazardous Combustion

Products:

Carbon monoxide (CO). Carbon dioxide (CO2). Hydrogen halides

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
3	1	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. Avoid dust formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Avoid dust formation. Use only under a chemical fume hood. Do not breathe(dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance.



7.2 Conditions for safe storage

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible Materials. Strong oxidizing agents. 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

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: Physical and chemical properties				
9.1	.1 Information on basic physical and chemical properties				
	a) Appearance Beige solid powder				
b) Odour Pungent					
	c) Odour Threshold	No information available			
	d) pH	Not applicable			
	e) Melting point / freezing point	89 - 93 °C / 192.2 - 199.4 °F			
	f) Initial boiling point and	244 - 290 °C / 471.2 - 554 °F			



boiling range	
g) Flash point	No information available
h) Evaporation rate	No information available
i) Flammability (solid, gas)	Not applicable
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	2.55
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	No information available
s) Molecular formula	C6 H3 Br3 O
t) Molecular Weight	330.79
	-

	SECTION 10: Stability and Reactivity					
10.1	0.1 Reactive Hazard : None known, based on information available					
10.2	Chemical stability:	Stable under normal conditions.				
10.3	Possibility of hazardous reactions :	None under normal processing.				
10.4	Conditions to avoid:	Incompatible products.				
10.5	Incompatible materials:	Strong oxidizing agents, Acid anhydrides, Acid chlorides				
10.6	Hazardous decomposition products :	Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen halides				
10.7	Hazardous Polymerization	No information available				



SECTION 11: Toxicological information

11.1

Information on toxicological effects

Acute toxicity:

Product Information:

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Phenol, 2,4,6-	3704 mg/kg (Rat)	LD50 > 2000 mg/kg	>1630
tribromo-		(Rat)	mg/m³/4h

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: May cause sensitization by skin contact

Carcinogenicity: The table below indicates whether each agency ha

Any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Phenol,2,4,6-	118-79-	Not listed	Not	Not listed	Not listed	Not listed
tribromo-	6		listed			

Mutagenic Effects:	No information available.
Reproductive Effects:	No information available.
Developmental Effects:	No information available.
Teratogenicity:	No information available.
STOT - single exposure :	None known
STOT - repeated exposure:	None known
Aspiration hazard :	No information available.
Symptoms / effects,both acute and delayed:	Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain muscle pain or flushing
Endocrine Disruptor Information :	No information available
Other Adverse Effects :	The toxicological properties have not been fully

investigated.



SECTION 12: Ecological information

12.1

Ecotoxicity:

The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Phenol, 2,4,6- tribromo-	EC50: 0.4 - 72 mg/L, 72h(Pseudokirchneri ella subcapitata)	LC50: 1.0 - 96 mg/L, 96h static (Cyprinus carpio) LC50: 4.7 - 9.8 g/L, 96h flow- through (Pimephales promelas)	EC50 = 6.5 mg/L 30 min	EC50: 0.26 - 48 mg/L, 48h (Daphnia magna)

12.2 Persistence and degradability:

Bioaccumulation/

No information available

Accumulation

12.3 Mobility:

Will likely be mobile in the environment due to its water

solubility. Log Pow: 4.02

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: UN3077 TDG: UN3077 IATA: UN3077 IMDG: UN3077

14.2 UN proper shipping name

DOT: Environmentally hazardous substances, solid, n. o. s.

TDG: Environmentally hazardous substances, solid, n. o. s.

IMDG: Environmentally hazardous substances, solid, n. o. s.

IATA: Environmentally hazardous substances, solid, n. o. s.

14.3 Transport hazard class(es) DOT: 9 TDG: 9 IMDG: 9 IATA: 9

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,2,4,6- tribromo-	118-79-6	X	ACTIVE	-

Legend:



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

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Section 4

International Inventories:

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

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Phenol, 2,4,6- tribromo-	118- 79-6	Х	-	204-278-6	Х	Х	Х	X	Х	KE-34019

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:

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Phenol,2,4,6- tribromo-	-	Х	-	-	-

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, h	ealth and envi	ronmental regulatio	ons/legislation sp	pecific for the sul	ostance or mixtur
Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Phenol, 2,4,6- tribromo-	118-79-6	Listed	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, 2,4,6- tribromo-	118-79-6	Not applicable	Not applicable	Not applicable	Not applicable

SECTION 16: Other information

16.1 Prepared By: Regulatory affairs

Krishna Solvechem

Limited

Email: exports@kscl.co.in

Revision Date: 19-Jan-2023 **Print Date:** 19-Jan-2023

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.