

Safety Data Sheet

#17573857 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
3,5-Dimethylphenol (3,5-Xylenol)	108-68-9	C8H10O	10	17 Aug 2026

SECTION 1

Identification

Product name	3,5-Dimethylphenol (3,5-Xylenol)
CAS number	108-68-9
Chemical formula	C8H10O
Molecular weight	122.16
SMILES	<chem>CC1=CC(=CC(=C1)O)C</chem>
EC / EINECS number	203-606-5
Recommended use & restrictions	For analytical purposes, scientific research and development. Not for human consumption or veterinary purposes.
Emergency telephone	0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

**DANGER**

CODE HAZARD STATEMENT

H301 + H311 Toxic if swallowed or in contact with skin**H314 (sub cat. 1B)** Causes severe skin burns and eye damage**H401** Toxic to aquatic life

CODE PRECAUTIONARY STATEMENT

P260 Do not breathe dust/fume/gas/mist/vapours/spray**P280** Wear protective gloves/protective clothing/eye protection/face protection**P301+P330+P331** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting**P302+P352** IF ON SKIN: Wash with soap and water**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 continuously with water for several minutes. Remove contact lenses if present and easy to do, continue rinsing**Other hazards (e.g. PBT / vPvB, not classified)**

This substance/mixture does not meet the PBT or vPvB criteria of REACH regulation, annex XIII. Does not contain components considered to have endocrine-disrupting properties

SECTION 3

Composition / information on ingredients

Purity / concentration 100% 3,5-Dimethylphenol (3,5-Xylenol) (CAS: 108-68-9)- H301, H311, H314b**Impurities / stabilising additives** None

SECTION 4

First-aid measures

Inhalation	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing; give oxygen or artificial respiration if necessary.
Skin contact	Take off immediately all contaminated clothing and wash immediately with plenty of water; do not remove clothing if it sticks to the skin.
Eye contact	Rinse immediately with plenty of water, remove contact lenses if present and easy to do, and continue rinsing.
Ingestion	Rinse mouth out with water; do not induce vomiting; get medical advice/attention.
Symptoms / effects & medical attention	See Section 11

SECTION 5

Fire-fighting measures

Suitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.
Unsuitable extinguishing media	None known
Special hazards	Carbon oxides Combustible. Vapours are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire.
Advice for firefighters	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6

Accidental release measures

Personal precautions & PPE	Isolate from fire, avoid dust formation, eliminate ignition sources, wear recommended PPE, evacuate unnecessary personnel, keep upwind.
Environmental precautions	Prevent entry to sewers and public waters.
Containment & clean-up methods	Sweep or shovel into suitable closed containers for disposal.

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

Storage temperature	Ambient
Precautions for safe handling	Avoid creating or spreading dust, provide local exhaust or general room ventilation, wash hands before eating/drinking/smoking.
Conditions for safe storage (incompatibilities)	Keep in original container in a cool, well-ventilated place away from heat sources and direct sunlight; keep container closed when not in use. Storage class 6.1A

SECTION 8

Exposure controls / personal protection

Occupational exposure limits (OEL / WEL) *Not applicable*

DNEC/PNEC data	DNEC Acute effects systemic (Dermal): 1.75 mg/kg bw/day Chronic effects systemic(Dermal): 1 mg/kg bw/day Acute effects systemic (Inhalation): 12.34 mg/m3 Chronic effects systemic (Inhalation): 7.05 mg/m3 PNEC Fresh water: 100 µg/L Fresh water sediment: 0.532 mg/kg sediment dw Water Intermittent: 44 µg/L Microorganisms in sewage treatment: 1.14 mg/L Soil (Agriculture): 0.38 mg/kg soil dw Marine water: 30 µg/L Marine water sediment: 0.16 mg/kg sediment dw Food chain: 19.4 mg/kg food
Eye / face protection	Safety glasses Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.
Skin / hand protection	Nitrile gloves Thickness: 0.11mm. Breakthrough time: 480mins.
Respiratory protection	Full-face respirator Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.

SECTION 9

Physical & chemical properties

Density (g/mL)	1.115 g/mL DERIVED FROM: LITERATURE
Flash point	82 °C DERIVED FROM: LITERATURE
Acidity	Neutral DERIVED FROM: LITERATURE
Appearance / physical state	Solid DERIVED FROM: LITERATURE
Colour	White to beige DERIVED FROM: LITERATURE
Odour	Not known DERIVED FROM: LITERATURE
Melting / freezing point	61 - 66°C DERIVED FROM: LITERATURE
Boiling point	219-222°C DERIVED FROM: LITERATURE
Solubility (water)	5.3 g/L (25°C) DERIVED FROM: LITERATURE
pH	<i>Not applicable</i>
Vapour pressure	0.05 hPa DERIVED FROM: LITERATURE
Partition coefficient (log Pow)	2.35 DERIVED FROM: LITERATURE
Auto-ignition / decomposition temp	<i>Not applicable</i>

SECTION 10

Stability & reactivity

Chemical stability / reactivity	Stable under recommended handling and storage conditions.
Conditions to avoid	Protect from sunlight. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Incompatible materials	Strong oxidizers. Bases. Acid anhydrides. Acid chlorides. Brass. copper.
Hazardous decomposition products	Thermal decomposition generates : Carbon oxides (CO, CO2).

SECTION 11

Toxicological information

Acute toxicity (LD50 / LC50)	Information on hazard classes as defined in Regulation (EC) No 1272/2008 LD50 (Oral) = 608 mg/kg (Rat) Ref: Gigiena Truda i Professional'naya Patologiya v Estonskoi SSR. Labor Hygiene and Occupational Pathology in the Estonian SSR., 8(145), 1972 Acute toxicity estimate Dermal = 300.1 mg/kg Ref: External SDS LD50 (Intraperitoneal) = 156 mg/kg (Mouse) Ref: Journal of Medicinal Chemistry., 18(868), 1975.
Skin corrosion / irritation	Causes severe skin burns
Eye corrosion / irritation	Causes serious eye damage
Respiratory / skin sensitisation	Not classified
Carcinogenicity	Not classified
Mutagenicity	Not classified
Reproductive toxicity	Not classified
STOT (single / repeated exposure)	Not classified
Aspiration hazard	Not classified
Endocrine disruptors	Not classified

SECTION 12

Ecological information

Aquatic toxicity	LC50 - Carassius auratus (goldfish) - 22 mg/l - 96 h Remarks: (ECOTOX Database) LC50 - Oncorhynchus mykiss (rainbow trout) - 13 mg/l - 96 h Remarks: (IUCLID) static test EC50 - Daphnia magna (Water flea) - 7.7 mg/l - 48 h Remarks: External SDS static test ErC50 - Pseudokirchneriella subcapitata - > 22 mg/l - 72 h Remarks: External SDS
Persistence & degradability	aerobic Chemical oxygen demand - Exposure time 2 d Result: ca.89.3 % - Readily biodegradable. Remarks: (ECHA)
Bioaccumulative potential	<i>No data available</i>
Mobility in soil	<i>No data available</i>
PBT / vPvB assessment	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII. This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

SECTION 13

Disposal considerations**Waste treatment / disposal methods**

Dispose in a safe manner in accordance with local/national regulations.

SECTION 14

Transport information

UN number	UN2261
Proper shipping name	XYLENOLS, SOLID
Class	6.1
Packing group	II
Transport category	2
Tunnel code	(D/E)
Packing instruction (ADR)	P002
Packing instruction (IMDG)	P002
Environmental hazards	No
Special precautions for user	Handle in accordance with good industrial hygiene and safety practice



SECTION 15

Regulatory information

REACH code	Y110
UFI code	<i>Not applicable</i>
ECHA notification	<i>Not applicable</i>
Chemical safety assessment carried out?	<i>Not applicable</i>

SECTION 16

Other information

Revision notes / other information

Previous SDS version 1.0 published 02/08/2019

Harmonised Entry. Index No. 604-037-00-9

Hazard classification and labelling according to Regulation (EC) 1272/2008

All eye/face protection should comply with EN ISO 16321-1:2022

Respiratory equipment: Reusable air-purifying respirator (APR)

Filter Type: ABEK

Standard: EN 14387

National Regulations:

-Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances

Other regulations, limitations and legal regulations:

-Directive 94/33/EC- The protection of young people at work

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