

Safety Data Sheet

#90028478 · 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
Trimethylamine hydrochloride 65-75% aqueous solution	593-81-7	(CH ₃) ₃ N·HCl	10	31 Jul 2026

SECTION 1

Identification

Product name	Trimethylamine hydrochloride 65-75% aqueous solution
CAS number	593-81-7
Chemical formula	(CH ₃) ₃ N·HCl
Molecular weight	95.57
SMILES	Cl.N(C)(C)C
EC / EINECS number	209-810-0
Recommended use & restrictions	For research and development purposes. Not suitable 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



WARNING

CODE	HAZARD STATEMENT
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

CODE	PRECAUTIONARY STATEMENT
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash thoroughly after handling
P280	Wear protective gloves/protective clothing/eye protection/face protection
P302+P352	IF ON SKIN: Wash with soap and water
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do, continue rinsing
P362	Take off contaminated clothing and wash before reuse

Other hazards (e.g. PBT / vPvB, not classified)	Does not contain components considered to be persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB). Does not contain components considered to have endocrine-disrupting properties. Does not meet PBT or vPvB criteria under REACH Annex XIII.
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SECTION 3

Composition / information on ingredients

Purity / concentration	65-75% Trimethylamine hydrochloride (CAS 593-81-7)- H315, H319 25-75% Distilled Water (CAS 7732-18-5)
Impurities / stabilising additives	None

SECTION 4

First-aid measures

Inhalation

Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention. Place unconscious person on their side in the recovery position and ensure breathing can take place.

Skin contact

Rinse with water.

Eye contact

Rinse with water. Do not rub eye. Remove any contact lenses and open eyelids wide apart. Get medical attention if any discomfort continues.

Ingestion

Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Never give anything by mouth to an unconscious person. Place unconscious person on their side in the recovery position and ensure breathing can take place. Keep affected person under observation. Get medical attention if symptoms are severe or persist.

Symptoms / effects & medical attention

See Section 11.

SECTION 5

Fire-fighting measures

Suitable extinguishing media

The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media

None known

Special hazards

Containers can burst violently or explode when heated, due to excessive pressure build-up. Thermal decomposition or combustion products may include harmful gases or vapours, carbon monoxide (CO), carbon dioxide (CO₂), nitrous gases (NO_x).

Advice for firefighters

Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6

Accidental release measures

Personal precautions & PPE	Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material. Avoid inhalation of vapours and spray/mists. Use suitable respiratory protection if ventilation is inadequate.
Environmental precautions	Avoid discharge into drains or watercourses or onto the ground.
Containment & clean-up methods	Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Small Spillages: Collect spillage. Large Spillages: Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

Storage temperature	Ambient
Precautions for safe handling	Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse.
Conditions for safe storage (incompatibilities)	Store away from incompatible materials (see Section 10). Store locked up. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.

SECTION 8

Exposure controls / personal protection

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

DNEC/PNEC data *Not applicable*

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 Not required
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 g/mL
DERIVED FROM: LITERATURE

Flash point *Not applicable*

Acidity Neutral
DERIVED FROM: LITERATURE

Appearance / physical state Liquid
DERIVED FROM: LITERATURE

Colour *No data available*

Odour Not known
DERIVED FROM: LITERATURE

Melting / freezing point -
DERIVED FROM: LITERATURE

Boiling point -
DERIVED FROM: LITERATURE

Solubility (water) *No data available*

pH -
DERIVED FROM: LITERATURE

Vapour pressure -
DERIVED FROM: LITERATURE

Partition coefficient (log Pow) -
DERIVED FROM: LITERATURE

Auto-ignition / decomposition temp -
DERIVED FROM: LITERATURE

SECTION 10

Stability & reactivity

Chemical stability / reactivity	Stable under the prescribed storage conditions
Conditions to avoid	<i>No data available</i>
Incompatible materials	Strong oxidising agents. Strong acids
Hazardous decomposition products	See section 5

SECTION 11

Toxicological information

Acute toxicity (LD50 / LC50)	Trimethylamine hydrochloride LD50 = 3090 mg/kg (Rat)
Skin corrosion / irritation	Causes skin irritation
Eye corrosion / irritation	Causes serious eye irritation
Respiratory / skin sensitisation	Not classified
Carcinogenicity	Not classified
Mutagenicity	<i>Not applicable</i>
Reproductive toxicity	<i>Not applicable</i>
STOT (single / repeated exposure)	Not classified
Aspiration hazard	Not classified
Endocrine disruptors	Not classified

SECTION 12

Ecological information

Aquatic toxicity	<i>Not applicable</i>
Persistence & degradability	<i>Not applicable</i>
Bioaccumulative potential	<i>Not applicable</i>
Mobility in soil	<i>Not applicable</i>
PBT / vPvB assessment	<i>Not applicable</i>

SECTION 13

Disposal considerations

Waste treatment / disposal methods	Dispose of in accordance with local/national regulations
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SECTION 14

Transport information

UN number	Not applicable
Proper shipping name	Not applicable
Class	Not applicable
Packing group	Not applicable
Transport category	Not applicable
Tunnel code	Not applicable
Packing instruction (ADR)	Not applicable
Packing instruction (IMDG)	Not applicable
Environmental hazards	Not applicable
Special precautions for user	Handle in accordance with good industrial hygiene and safety practice

SECTION 15

Regulatory information

REACH code	Y113
UFI code	Not applicable
ECHA notification	Not applicable
Chemical safety assessment carried out?	Not applicable

SECTION 16

Other information

Revision notes / other information	Not applicable
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