

Safety Data Sheet

#31324224 · 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
2-(2-Aminoethylamino)ethanol	111-41-1	C4H12N2O	10	20 Aug 2026

SECTION 1

Identification

Product name	2-(2-Aminoethylamino)ethanol
CAS number	111-41-1
Chemical formula	C4H12N2O
Molecular weight	104.15
SMILES	C(CNCCO)N
EC / EINECS number	203-867-5
Recommended use & restrictions	For research use. Laboratory use. Manufacture of chemicals. Not for human or animal use.
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
H290	May be corrosive to metals
H314 (sub cat. 1B)	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H335	May cause respiratory irritation
H360Df	May damage the unborn child. Suspected of damaging fertility.
H362	May cause harm to breast-fed children
H412	Harmful to aquatic life with long lasting effects
CODE	PRECAUTIONARY STATEMENT
P260	Do not breathe dust/fume/gas/mist/vapours/spray
P263	Avoid contact during pregnancy/while nursing
P280	Wear protective gloves/protective clothing/eye protection/face protection
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)	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

SECTION 3

Composition / information on ingredients

Purity / concentration	c. 100% 2-(2-Aminoethylamino)ethanol (CAS: 111-41-1)- H290 H314B, H317, H335, H360Df, H362, H412
Impurities / stabilising additives	None

SECTION 4

First-aid measures

Inhalation	Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
Skin contact	IF ON SKIN: Wash with plenty of soap and water. Continue to rinse for at least 15 minutes. Get medical advice/attention if you feel unwell.
Eye contact	Remove contact lenses if present. Rinse eyes with water. Continue to rinse for at least 15 minutes and seek medical attention
Ingestion	After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.
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	No specific firefighting procedure given
Special hazards	Carbon oxides Nitrogen oxides (NOx) 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. Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6

Accidental release measures

Personal precautions & PPE	Avoid breathing dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. For personal protection, see section 8.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
Containment & clean-up methods	Absorb spillage with a suitable absorbent material.

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

Storage temperature	Ambient
Precautions for safe handling	Observe good chemical hygiene practices. Keep away from food, drink and animal feeding stuffs. Wash contaminated skin thoroughly after handling. Do not eat, drink or smoke when using this product. Remove contaminated clothing and launder thoroughly before re-use. Wear protective clothing, gloves, eye and face protection. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.
Conditions for safe storage (incompatibilities)	Hygroscopic. Store under inert gas.

SECTION 8

Exposure controls / personal protection

Occupational exposure limits (OEL / WEL)	UK - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020. STEL: 0.15 mg/m³ 15 min TWA: 0.05 mg/m³ 8 hr Resp. Sens.
DNEC/PNEC data	DNEC Chronic effects systemic (Dermal): 2 mg/kg bw/day Chronic effects systemic (Inhalation): 0.704 mg/m³ PNEC Fresh water: 0.022 mg/L Fresh water sediment: 0.172 mg/kg sediment dw Water Intermittent: 0.22 mg/L Microorganisms in sewage treatment: 82.2 mg/L Soil (Agriculture): 0.0189 mg/kg soil dw Marine water: 0.0022 mg/L Marine water sediment: 0.0172 mg/kg sediment dw Food chain: 0.000667 g/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	Gloves: Nitrile Rubber, 0.11mm (480 mins).
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)	1.029 g/mL DERIVED FROM: LITERATURE
Flash point	125 °C DERIVED FROM: LITERATURE
Acidity	Base DERIVED FROM: LITERATURE
Appearance / physical state	Viscous liquid DERIVED FROM: LITERATURE
Colour	Colourless to pale yellow DERIVED FROM: LITERATURE
Odour	Odourless DERIVED FROM: LITERATURE
Melting / freezing point	-28°C DERIVED FROM: LITERATURE
Boiling point	237-244°C DERIVED FROM: LITERATURE
Solubility (water)	<i>No data available</i>
pH	12 DERIVED FROM: LITERATURE
Vapour pressure	<1 mbar @ 20 °C DERIVED FROM: LITERATURE
Partition coefficient (log Pow)	-1.46 DERIVED FROM: LITERATURE
Auto-ignition / decomposition temp	345°C DERIVED FROM: LITERATURE

SECTION 10

Stability & reactivity

Chemical stability / reactivity	Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical. Stable under the prescribed storage conditions
Conditions to avoid	Avoid moisture. Excessive heat.
Incompatible materials	Metals.
Hazardous decomposition products	See section 5

SECTION 11

Toxicological information

Acute toxicity (LD50 / LC50)	Information on hazard classes as defined in Regulation (EC) No 1272/2008
Skin corrosion / irritation	Causes severe burns
Eye corrosion / irritation	Causes serious eye damage
Respiratory / skin sensitisation	May cause an allergic skin reaction
Carcinogenicity	Not classified
Mutagenicity	Not classified
Reproductive toxicity	May cause harm to breast-fed children. May damage fertility. Suspected of damaging the unborn child
STOT (single / repeated exposure)	Single exposure: May cause respiratory irritation
Aspiration hazard	Not classified
Endocrine disruptors	Not classified

SECTION 12

Ecological information

Aquatic toxicity	Information on hazard classes as defined in Regulation (EC) No 1272/2008 LC50 - Oncorhynchus mykiss (rainbow trout) - > 100 mg/l - 96 h EC50 - Daphnia magna (water flea) - 22 mg/l - 48h IC50 - Desmodesmus subspicatus (green algae) - 210 mg/l - 72 h EC50 - Pseudomonas putida - 135 mg/l - 17 h Ref: External SDS
Persistence & degradability	Result: 0 % - Not readily biodegradable
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	UN2735
Proper shipping name	POLYAMINES, LIQUID, CORROSIVE,N.O.S
Class	8
Packing group	II
Transport category	2
Tunnel code	(E)
Packing instruction (ADR)	P001
Packing instruction (IMDG)	P001
Environmental hazards	Yes.
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	Replaces previous SDS (ver. 1) published 14/02/2019 According to REACH etc. (Amendment etc.) (EU Exit) Regulations 202 No. 1577. Harmonised Entry. Index No ATP01corr 603-194-00-0 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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