

Safety Data Sheet

#90022976 · 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
Sodium carbonate anhydrous, 99.9%	497-19-8	Na ₂ CO ₃	—	03 Sep 2024

SECTION 1

Identification

Product name	Sodium carbonate anhydrous
CAS number	497-19-8
Chemical formula	Na ₂ CO ₃
Molecular weight	105.99
SMILES	<chem>C(=O)([O-])[O-].[Na+].[Na+]</chem>
EC / EINECS number	207-838-8
Recommended use & restrictions	For research and development. Laboratory chemicals. Manufacture of substances. Not suitable for human 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
H319	Causes serious eye irritation
CODE	PRECAUTIONARY STATEMENT
P232	Protect from moisture
P280	Wear protective gloves/protective clothing/eye protection/face protection
P305+351+338	IF IN EYES: Rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
P337+313	If eye irritation persists get medical advice/attention
Other hazards (e.g. PBT / vPvB, not classified)	Does not contain components considered to have endocrine-disrupting properties. Does not contain components considered to be persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).

SECTION 3

Composition / information on ingredients

Purity / concentration	~100.0%
Impurities / stabilising additives	Not applicable

SECTION 4

First-aid measures

Inhalation	Remove person to fresh air and keep comfortable for breathing. In case of persistent throat irritation or coughing: seek medical attention.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Contact a physician if discomfort continues.
Eye contact	After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.
Ingestion	IF SWALLOWED: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only if the persons are fully conscious and awake). Administer activated charcoal (20 - 40g in a 10% slurry) and consult a doctor as quickly as possible. Do not attempt to neutralise.
Symptoms / effects & medical attention	Section 2 and/or 11

SECTION 5

Fire-fighting measures

Suitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given. Use measures appropriate to local circumstances
Unsuitable extinguishing media	No specific firefighting procedure given
Special hazards	Not combustible Carbon monoxide (CO) Carbon dioxide (CO ₂) Sodium oxides (SO _x) Ambient fire may liberate hazardous vapours
Advice for firefighters	In the event of fire, wear self-contained breathing apparatus. 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	Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. See section 8.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
Containment & clean-up methods	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

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.
Conditions for safe storage (incompatibilities)	Store in a dry place. Store in a closed container. Hygroscopic. Store under inert gas.

SECTION 8

Exposure controls / personal protection

Occupational exposure limits (OEL / WEL)	<i>Not applicable</i>
DNEC/PNEC data	Worker DNEL (long term)- Inhalation- Local effects- 10mg/m ³ .
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)	2.532 g/mL DERIVED FROM: LITERATURE
Flash point	<i>Not applicable</i>
Acidity	Base DERIVED FROM: LITERATURE
Appearance / physical state	Powder DERIVED FROM: LITERATURE
Colour	White DERIVED FROM: LITERATURE
Odour	Odourless DERIVED FROM: LITERATURE
Melting / freezing point	851 °C - Decomposition DERIVED FROM: LITERATURE
Boiling point	1,600 °C - (decomposition) DERIVED FROM: LITERATURE
Solubility (water)	212.5 g/l at 20 °C DERIVED FROM: LITERATURE
pH	12 DERIVED FROM: LITERATURE
Vapour pressure	No data a DERIVED FROM: LITERATURE
Partition coefficient (log Pow)	Not applicable for inorganic substances DERIVED FROM: LITERATURE
Auto-ignition / decomposition temp	No data available DERIVED FROM: LITERATURE

SECTION 10

Stability & reactivity

Chemical stability / reactivity	Reactivity: No data available. Stable under the prescribed storage conditions
Conditions to avoid	Violent reactions possible: Aluminium Alkaline earth metals organic nitro compounds Fluorine Alkali metals non- metallic oxides conc. sulfuric acid
Incompatible materials	Strong acids, strong oxidising agents, Fluorine, Metals.
Hazardous decomposition products	See section 5

SECTION 11

Toxicological information

Acute toxicity (LD50 / LC50)	LD50 Oral - Rat - male and female - 2,800 mg/kg LD50 Dermal - Rabbit - > 2,000 mg/kg
Skin corrosion / irritation	Skin - Rabbit Result: No skin irritation - 4 h
Eye corrosion / irritation	Eyes - Rabbit Result: Eye irritation
Respiratory / skin sensitisation	<i>No data available</i>
Carcinogenicity	<i>No data available</i>
Mutagenicity	<i>No data available</i>
Reproductive toxicity	<i>No data available</i>
STOT (single / repeated exposure)	<i>No data available</i>
Aspiration hazard	<i>No data available</i>
Endocrine disruptors	Substance not considered an endocrine disruptor

SECTION 12

Ecological information

Aquatic toxicity	Fish- static test LC50 - Lepomis macrochirus (Bluegill sunfish) - 300 mg/l - 96 h Daphnia and other aquatic invertebrates - semi-static test EC50 - Ceriodaphnia (water flea) - 220 - 227 mg/l - 48 h
Persistence & degradability	The methods for determining the biological degradability are not applicable to inorganic substances.
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 Annex XIII. This substance/mixture does not meet the vPvB criteria of REACH Annex XIII

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	Not applicable

SECTION 15

Regulatory information

REACH code	Y113
UFI code	Not applicable
ECHA notification	Not applicable
Chemical safety assessment carried out?	No

SECTION 16

Other information

Revision notes / other information	MSDS Version 1 - 05.11.2021 MSDS Version 2- 02.09.2024
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