

SAFETY DATA SHEET

according to 1907/2006/EC, Article 3

Version no. : 2.0
Prepared on : 04.02.2026
Revised on : -

SECTION 1: Identification of the substance/mixture and of the company/undertaking.

1.1 Product identifiers

Product name Sodium bicarbonate, Anhydrous
Product Number PSR42726
Brand PureSynth research chemicals
CAS No. 144-55-8

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory Chemicals.

1.3 Details of the supplier of the safety data sheet

Company PureSynth Research Chemicals GmbH.
64683 Einhausen Marie-Curie-Straße. 3, Germany

1.4 Emergency telephone number

Worldwide Helpline No.: 1800-8908-260

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2), H225
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 3), H331
Acute toxicity, Dermal (Category 3), H311
Specific target organ toxicity - single exposure (Category 1), Eyes, Central nervous system, H370

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word Warning

Hazard statement(s)

H319 Causes serious eye irritation.

Precautionary statement(s)

P264 Keep away from heat, hot surfaces, sparks, open flames and Other ignition sources. No smoking.
P280 Wear protective gloves/ protective clothing/ eye protection/ face Protection/ hearing protection.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

P337 + P313

contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.

2.3 Other hazards:

This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher

SECTION 3: Composition / information on ingredients

3.1 Substances

Common names & Synonyms	Mol. formula	CAS number
Sodium Hydrogen Carbonate	NaHCO ₃	144-55-8
Component	Classification	Concentration
Sodium Hydrogen Carbonate	-	>= 90 - <= 100

SECTION 4: First aid measures

Description of first aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	Remove person to fresh air and keep comfortable for breathing. Get medical advice/ attention if you feel unwell.
In case of skin contact	Take off all contaminated clothing immediately. If on skin, rinse well with water. If skin irritation occurs: Get medical advice/ attention.
In case of eye contact	Rinse with plenty of water. If easy to do, remove contact lens, if worn. If eye irritation persists: Get medical advice/ attention.
If swallowed	Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
Most important symptoms and effects, both acute and delayed	None known.
Indication of any immediate medical attention and special treatment needed	No data available

SECTION 5: Fire fighting measures

Extinguishing media	Dry powder, Foam, Water spray, Carbon dioxide (CO ₂)
Suitable extinguishing media	
Special hazards arising from the substance or mixture	No data available
Advice for fire-fighters	Wear self-contained breathing apparatus for fire fighting if necessary.
Further information	Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8
Environmental precautions	Prevent product from entering drains.
Methods and materials for containment and cleaning up	Pick up and arrange disposal without creating dust.
Reference to other sections	For disposal see section 13.

SECTION 7: Handling and storage

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. For precautions see section 2.2.
Conditions for safe storage, including any incompatibilities	Keep container tightly closed. Store in a cool and shaded area. Protect from moisture. Keep under inert gas. Storage class (TRGS 510): 11: Combustible Solids
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls / Personal protection

Control parameters	No data available
Exposure controls	
Appropriate engineering controls	No data available.
Personal protective equipment:	
Eye / face protection	Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Body Protection	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	Duat mask.
Control of environmental exposure	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

Appearance	Form: Solid
	Colour: White
Odour	NO data available
pH - Value	No data available
Density	NO data available
Boiling Point	NO data available
Melting Point	NO data available
Solubility in water	NO data available
Flash point	NO data available
Vapour pressure	NO data available
Auto -ignition temperature	NO data available
Vapour density	NO data available
Flammability (solid, gas)	NO data available
Evaporation rate	NO data available
Partition coefficient: n- octanol / water	NO data available
Viscosity	NO data available
Explosive properties	NO data available
Upper / lower flammability or explosive limits	NO data available
Oxidizing properties	No data available

Other safety information: No data available

Minimum ignition energy 0,14 mJ

Conductivity < 1 µS/cm

Relative vapour density 1,11

SECTION 10: Stability and reactivity

Reactivity	No data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	None under normal processing.
Condition to avoid	Exposure to moisture,
Incompatible materials	Oxidizing agents, Acids.
Hazardous decomposition products	In the event of fire: see section 5

SECTION 11: Toxicological information

Acute toxicity	LD50 (Rat): 4.220 mg/kg Assessment: The component/mixture is minimally toxic after single ingestion.
Skin corrosion/irritation	Mild skin irritation
Serious eye damage/eye irritation	Mild eye irritation
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	No data available
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Additional Information	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

Toxicity	No data available
Persistence and degradability	
Biodegradability	No data available
Bio accumulative potential	No data available
Mobility in soil	Will not adsorb on soil.
Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at Levels of 0.1% or higher.
Other adverse effects	
Additional ecological information	Avoid release to the environment.
Stability in water	at 19 °C83 - 91 % - 72 h Remarks: Hydrolyses on contact with water.Hydrolyzes readily.

SECTION 13: Disposal considerations

Waste treatment methods	Disposal in accordance with local and national regulations. Entrust disposal to a licensed waste disposal company.
Products	
Contaminated packaging	Disposal in accordance with local and national regulations. Before disposal of used container, remove contents completely.

SECTION 14: Transport information

	UN no.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
ADR / RID	-	Not dangerous goods	-	-	No
IMDG	-	Not dangerous goods	-	-	No
IATA	-	Not dangerous goods	-	-	No

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

Conditions of restriction for the following entries should be considered: Number on list 75: If you intend to use this product as tattoo ink, please contact your vendor.

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

Not applicable

Regulation (EC) on substances that deplete the ozone layer

Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants

Not applicable

Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals

Not applicable

REACH - List of substances subject to authorisation (Annex XIV)

Not applicable

Water hazard class (Germany)

WGK 1 slightly hazardous to water Code Number: 374 Classification according to AwSV, Annex 1 (4)

Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

The information in this SDS is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The user must be determined suitability of this information for his application.