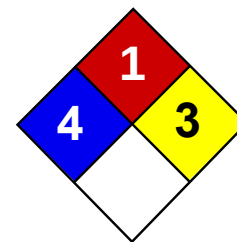




Safety Data Sheet

Sodium azide



Section 1: Chemical Product and Company Identification

Product Name: Sodium azide

Contact Information:

Catalog Codes: 572

CAS#: 26628-22-8

Email: info@drm-chem.com

RTECS: -

Address: #7, Afshar javan Alley,
Sohrevardi
St, Tehran, Iran

TSCA: -

Synonym: Hydrazoic azid sodium salt

post code: 1551818111

Chemical Name: Sodium azide

Tehran Sales: +98 21 88177760

Chemical Formula: NaN_3

Order Online: Drm-chem.com

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Sodium azide	26628-22-8	<= 100 %

Toxicological Data on Ingredients:

Section 3: Hazards Identification

3.1 Classification of the substance or mixture

Acute toxicity, (Category 2)	H300: Fatal if swallowed.
Acute toxicity, (Category 2)	H330: Fatal if inhaled
Acute toxicity, (Category 1)	H310: Fatal in contact with skin.
Specific target organ toxicity - repeated exposure, (Category 2), Brain	H373: May cause damage to organs through prolonged or repeated exposure if swallowed.
Short-term (acute) aquatic hazard, (Category 1)	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, (Category 1)	H410: Very toxic to aquatic life with long lasting effects.

3.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal Word

Danger

Hazard Statements

H300 + H310 + H330

Fatal if swallowed, in contact with skin or if inhaled.

H373

May cause damage to organs (Brain) through prolonged or repeated exposure if swallowed.
very toxic to aquatic life with long lasting effects.

H410

Precautionary Statements

P262

Do not get in eyes, on skin, or on clothing.

P264

Wash skin thoroughly after handling

P273

Avoid release to the environment.

P280

P302 + P352 + P310

Wear protective gloves/ protective clothing.

IF ON SKIN: Wash with plenty of water.

Immediately call a POISON CENTER/ doctor.

P304 + P340 + P310

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

Supplemental Hazard information (EU)

EUH032

Contact with acids liberates very toxic gas.

Reduced Labeling (<= 125 ml)

Pictogram



Signal Word

Danger

Hazard Statements

H300 + H310 + H330

Fatal if swallowed, in contact with skin or if inhaled.

Precautionary Statements

P262

Do not get in eyes, on skin, or on clothing.

P264

Wash skin thoroughly after handling.

P280

Wear protective gloves/ protective clothing.

P302 + P352 + P310

IF ON SKIN: Wash with plenty of water.

Immediately call a POISON CENTER/ doctor.

P304 + P340 + P310

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

Supplemental Hazard information (EU)

EUH032

Contact with acids liberates very toxic gas.

3.3 Other hazards

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

Ecological 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.

Toxicological 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 4: First Aid Measures

4.1 Description of first-aid measures

General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician immediately.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

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 in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 3.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

Section 5: Fire and Explosion Data

5.1 Extinguishing media

Suitable extinguishing media

Sand Special powder against metal fire Cement

Unsuitable extinguishing media

Foam Water.

5.2 Special hazards arising from the substance or mixture

Sodium oxides

Combustible.

Fire may cause evolution of:

nitrous gases, nitrogen oxides

Caution! in contact with water product releases:

Hydrazoic acid, sodium

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 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.

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

Section 7: Handling and Storage

7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture.

Hygiene measures Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 3.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons. Do not store near acids.

Recommended storage temperature see product label.

Storage class

Storage class (TRGS 510): 6.1A: Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

7.3 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**8.1 Control parameters**

Ingredients with workplace control parameters

8.2 Exposure controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min
Material tested:KCL 741 Dermatril® L

Body Protection

protective clothing

Respiratory protection

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P3

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains.

Section 9: Physical and Chemical Properties

Physical state	solid
Color	white
Odor	odorless
pH	10 at 65 g/l at 25 °C
Melting point/freezing point	Melting point/ range: 370 - 425 °C - ASTM E 537-76 - Decomposition
Initial boiling point and boiling range	No data available
Flash point	Not applicable
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or	No data available

explosive limits	
Vapor pressure	No data available
Density	No data available
Relative density	No data available
Water solubility	No data available
Partition coefficient: n-octanol/water	Not applicable for inorganic substances
Autoignition Temperature	309 °C at 1.013 hPa - Relative self-ignition temperature for solids
Decomposition Temperature	370 - 425 °C Decomposition energy (mass): 0,8 kJ/kg
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Relative vapor density	No data available
Explosive properties	Not classified as explosive.
Oxidizing properties	None
density	1,850 g/cm ³ at 20 °C
Other safety information	No data available
Particle size	285,1 µm - Mean particle size

Section 10: Stability and Reactivity Data

10.1 Reactivity

highly reactive

Risk of dust explosion.

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

Contact with acids liberates very toxic gas

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

Heavy metals

Bromine

Dimethylsulfate

Acid

Dichloromethane

carbon disulfide

sulfuric acid

Halogenated hydrocarbon

Copper

Lead

chromyl chloride

A risk of explosion and/or of toxic gas formation exists with the following substances:

Generates dangerous gases or fumes in contact with:

Acids

Water

with

Heat.

Violent reactions possible with:

nitrates

benzoyl chloride

Generates dangerous gases or fumes in contact with:

Acids

10.4 Conditions to avoid

An explosion occurred when a mixture of sodium azide, methylene chloride, dimethyl sulfoxide, and sulfuric acid were being concentrated on a rotary evaporator.

Strong heating (decomposition).

Exposure to moisture.

no information available

10.5 Incompatible materials

Aluminum, Heavy metals

10.6 Hazardous decomposition products

In the event of fire: see section 5

Section 11: Toxicological Information

11.1 Information on toxicological effects

Mixture

Acute toxicity

LD50 Oral - Rat - 27 mg/kg

Remarks: (RTECS)

LC50 Inhalation - Rat - male and female - 4 h - 0,054 - 0,52 mg/l - dust/mist

(US-EPA)

LD50 Dermal - Rabbit - 20 mg/kg

Remarks: (RTECS)

Skin corrosion/irritation

Skin - In vitro study

Result: No skin irritation

(OECD Test Guideline 439)

Serious eye damage/eye irritation

Eyes - Bovine cornea

Result: No eye irritation - 4 h

(OECD Test Guideline 437).

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse

Result: negative

(OECD Test Guideline 429)

Germ cell mutagenicity

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Test Type: unscheduled DNA synthesis assay

Test system: Chinese hamster lung cells

Metabolic activation: without metabolic activation

Method: OECD Test Guideline 482

Result: negative

Test Type: sister chromatid exchange assay

Test system: Chinese hamster ovary cells

Metabolic activation: without metabolic activation

Method: OECD Test Guideline 479

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

Oral - May cause damage to organs through prolonged or repeated exposure. –

Brain

Aspiration hazard

No data available

11.2 Additional Information

Endocrine disrupting properties

Product:

Assessment: 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.

Nausea, Headache, Vomiting, Laboratory experiments in animals have shown sodium azide to produce a profound hypotensive effect, demyelination of myelinated nerve fibers in the central nervous system, testicular damage, blindness, attacks of rigidity, and hepatic and cerebral effects., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: Ecological Information

12.1 Toxicity

Toxicity to fish

flow-through test LC50 - *Oncorhynchus mykiss* (rainbow trout) - 2,75 mg/l - 96 h (OECD Test Guideline 203)

Toxicity to algae

static test ErC50 - *Pseudokirchneriella subcapitata* - 0,35 mg/l - 96 h (OECD Test Guideline 201)

Toxicity to bacteria

12.2 Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

Product:

Assessment: 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.

12.7 Other adverse effects

Biological effects:

Forms toxic mixtures in water, dilution measures notwithstanding.

Herbicide Nematocidal effect.

Discharge into the environment must be avoided.

Section 13: Disposal Considerations

13.1 Waste treatment methods

No data available

Section 14: Transport Information

14.1 UN number

ADR/RID: 1687

IMDG: 1687

IATA: 1687

14.2 UN proper shipping name

ADR/RID: SODIUM AZIDE

IMDG: SODIUM AZIDE

IATA: Sodium azide

14.3 Transport hazard class(es)

ADR/RID: 6.1

IMDG: 6.1

IATA: 6.1

14.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II

14.5 Environmental hazards

ADR/RID: yes

IMDG Marine pollutant: yes

IATA: no

14.6 Special precautions for user

Tunnel restriction code: (E)

Further information: No data available

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

Section 15: Other Regulatory Information

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

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

National legislation

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

H1 ACUTE TOXIC

E1 ENVIRONMENTAL HAZARDS

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

Section 16: Other Information

References: Not available

Other Special Considerations: Not available

Created: /07/2025

The information above is believed to be accurate and represents the best information currently

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