

1: Identification of substance / mixture

1. Product Identifier

Substance

Product Name **Sodium azide**
Product Code 094448
CAS Number 26628-22-8
Other Names
IUPAC
MFCD Number MFCD00003536
EC/EINECS
REACH Number

Index-No

2. Relevant identified uses of the substance or mixture and uses advised against

Research and Development

3. Details of the supplier of the safety data sheet

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Hadfield
Derbyshire
SK13 1QH
UK

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Email: sds@fluorochem.co.uk



4. Emergency telephone number

+44(0)7855 268577 -

2. Hazards Identification

1. Classification of the substance or mixture

EUH032		
H300	Acute Tox. 2	
H310	Acute Tox. 1	
H315	Skin Irrit. 2	
H319	Eye Irrit. 2	
H330	Acute Tox. 2	
H370	STOT SE 1	
H373	STOT RE 2	
H410	Aquatic Chronic 1	

2. Label elements

Signal Word **Danger**



Hazard Statements

EUH032	Contact with acids liberates very toxic gas.
H300	Fatal if swallowed.
H310	Fatal in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H370	Causes damage to organs cardiovascular system, central nervous system, gastrointestinal tract.
H373	May cause damage to organs central nervous system.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Phrases

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands and face thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P284	Wear respiratory protection.
P391	Collect spillage.
P501	Dispose of contents/container to hazardous or special waste collection point.

3. Other Hazards

Additional precautionary phrases are located throughout the safety data sheet

3. Composition / Information on Ingredients

1. Substances

Product Name	Hazards	Concentration
Sodium azide		
CAS Number: 26628-22-8	EUH032, H300, H310, H315, H319, H330, H370, H373, H410 Acute Tox. 1, Acute Tox. 2, Aquatic Chronic 1, Eye Irrit. 2, Skin Irrit. 2, STOT RE 2, STOT SE 1	<=100%

4. First Aid Measures

1. Description of first aid measures

<i>Skin Contact</i>	P302 + P350: IF ON SKIN: Gently wash with plenty of soap and water. P332 + P313: If skin irritation occurs: Get medical advice/attention. Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.
<i>Eye Contact</i>	P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313: If eye irritation persists: Get medical advice/attention. Rinse opened eye for several minutes under running water.
<i>Ingestion</i>	P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330: Rinse mouth.
<i>Inhalation</i>	P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Remove casualty from exposure ensuring one's own safety whilst doing so.

2. Most important symptoms and effects

Cough, Shortness of breath, Headache, Nasal congestion, Blurred Vision, Slow pulse, Lowered blood pressure, Unconsciousness, Abdominal pain, Nausea, Sweating, Redness, Blistering, Pain

3. Indication of any immediate medical attention

P314: Get medical advice/attention if you feel unwell.
 P321: Specific treatment (see ' First aid on this label).
 Obtain medical attention in the event of any acute or delayed symptoms

5. Firefighting measures

1. Extinguishing Media

<i>Suitable</i>	Carbon dioxide. Alcohol resistant foam. Dry chemical powder.
<i>Unsuitable</i>	no data

2. Special Hazards arising from the substance or mixture

Explosion risk in case of fire. Fight fire remotely due to the risk of explosion.
 Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.
 Nitrogen oxides (NOx), Hydrazoic acid

3. Advice for Fire Fighters

Wear self-contained breathing apparatus.
Wear protective clothing to prevent contact with skin and eyes.

6. Accidental Release Measures

1. Personal Precautions

Evacuate the area immediately.
Do not attempt to take action without suitable protective clothing – see section 8 of SDS.

2. Environmental Precautions

Do not discharge into drains or rivers.
Contain the spillage using bunding.
Alert the neighbourhood to the presence of fumes or gas.

3. Methods & Materials

P391: Collect spillage.
Mix with sand or vermiculite.
Transfer to a closable, labelled salvage container for disposal by an appropriate method.

4. Preventing the occurrence of secondary hazards.

No Special Measures Required

7. Handling and Storage

1. Personal Precautions

Safe Handling Ensure there is sufficient ventilation of the area
Do not use metal spatulas and avoid contact with metals and water
Avoid shock and friction. P264: Wash hands and face thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P273: Avoid release to the environment.

*Protection against
explosions and fires* P361: Remove/Take off immediately all contaminated clothing.
P362: Take off contaminated clothing and wash before reuse.
P363: Wash contaminated clothing before reuse.
Do not use metal spatulas and avoid contact with metals and water
Avoid shock and friction.

2. Conditions for safe storage, including any incompatibilities

Managing Storage Risks Store in cool, well ventilated area.
Keep container tightly closed.

Storage Controls No special requirements

Maintaining Integrity Store away from oxidising agents
Keep in tightly closed container in cool area away from direct sunlight or heat sources.

Other advice P405: Store locked up.

3. Specific End Uses

The end use(s) have not been fully determined. The substance is supplied for Research and Development purposes by professionals only.

8. Exposure Controls/Personal Protection

1. Control Parameters

No Data Available

2. Exposure Controls

<i>General protective and hygiene measures</i>	P262: Do not get in eyes, on skin, or on clothing. Wash hands during breaks and at the end of handling the material Immediately remove any contaminated clothing
<i>Engineering measures</i>	Ensure there is sufficient ventilation of the area.
<i>Eye / Face Protection</i>	Safety Glasses with side-shields.
<i>Hand protection</i>	Protective gloves.
<i>Respiratory protection</i>	P260: Do not breathe dust/fume/gas/mist/vapours/spray. P284: Wear respiratory protection. Self-contained breathing apparatus must be available in case of emergency.
<i>Skin protection</i>	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practice. Wash and dry hands. Protective clothing.
<i>Other personal protection advice</i>	no data

9. Physical and Chemical Properties

1. Physical and Chemical Properties

Appearance	Solid
Odour	odorless
Odour threshold	No Data Available
PH	No Data Available
Melting point / Freezing point	275°C
Initial boiling point and boiling range	No Data Available
Flash point	No Data Available
Evaporation rate	No Data Available
Flammability(solid,gas)	No Data Available
Upper/lower flammability or explosive limits	No Data Available
Vapour pressure	1Pa 20C
Vapour density	No Data Available
Relative density	No Data Available
Solubility(ies):	water (41.7g/100ml 17C), Ammonia, Ethanol, Ether
Partition coefficient: n-octanol/water	<0.3
Auto-ignition temperature	No Data Available
Decomposition temperature	No Data Available
Viscosity	No Data Available
Explosive properties	No Data Available
Oxidising properties	No Data Available

2. Other Information

No additional information available

10. Stability and Reactivity

1. Reactivity

no unusual reactivity

2. Stability

Stable under normal conditions.

3. Possibility of Hazardous Reactions

may explosively decompose on heating, shock, friction etc

4. Conditions to Avoid

heat, shock, friction

5. Incompatible Materials

Oxidising agents, acids, metals

6. Hazardous Decomposition Products

In combustion emits toxic fumes.

In combustion emits toxic fumes of nitrogen oxides., hydrazoic acid

11. Toxicology information

1. Information

<i>Acute Toxicity</i>	ihl-rat LC50:37 mg/m3 orl-hmn TDLo:710 ug/kg orl-man LDLo:29 mg/kg orl-rat LD50:27 mg/kg orl-wmn LDLo:14 mg/kg skn-rbt LD50:20 mg/kg
<i>Skin corrosion/irritation</i>	irritant for skin and mucous membranes
<i>Serious eye Damage/irritation</i>	irritant effect
<i>Respiratory or skin sensitisation</i>	No sensitizing effect known
<i>Germ Cell mutagenicity</i>	dnd-hmn-leu 3 mmol/L dni-hmn-fbr 50 mg/L dni-hmn-hla 30 mmol/L mmo-sat 1.5ug/plate/24H(+/-S9)
<i>Carcinogenicity</i>	orl-rat TDLo:2730 mg/kg/78W-C
<i>Reproductive toxicity</i>	not known
<i>STOT-single exposure</i>	not known
<i>STOT-repeated exposure</i>	not known
<i>Aspiration hazard</i>	not known

2. Additional

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC,NTP,OSHA or ACGIH

12. Ecological Information

1. Toxicity

not known

2. Persistence and degradability

not known

3. Bio-Accumulative Potential

not known

4. Mobility and Soil

not known

5. Results of PBT & vPvB assessment

not known

6. Other adverse effects

Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.

13. Disposal Considerations

1. Waste Treatment Methods

Disposal Operations Recycle to process, if possible. Consult your local regional authorities and an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur. Observe all federal, state and local regulations when disposing of the substance.

Disposal of Packaging Disposal must be made according to official regulations.

14. Transport Information

Air (ICAO)

1. **UN Number:** 1687
2. **Shipping Name:** Sodium azide
3. **Transport hazard class(es):** : 6.1 Sub Class :



4. **Packing group:** II
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk:**

Road (ADR)

1. **UN Number:** 1687
2. **Shipping Name:** SODIUM AZIDE
3. **Transport hazard class(es):** : 6 Sub Class :



4. **Packing group:** II
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk:**

Sea (IMDG)

1. **UN Number:** 1687
2. **Shipping Name:** Sodium azide
3. **Transport hazard class(es):** : 6.1 Sub Class :



4. **Packing group:** II
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk:** IBCINS: IBC08
IBCPPROV: B4, B21
UNTANKINS: -
TANKPROV: -

15. Safety, health, environmental and national regulations

1. Safety, health, environmental and national regulations:

product is not subject to any additional regulations or provisions

2. Safety Assessment

No Chemical Safety Assessment

16. Other Information

1. Other Information:

ADR: Accord Europeen sur le transport des marchandises Dangereuses par Route(European Agreement concerning the International Carriage of Dangerous Goods by road)

RID:Reglement International concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the International Air Transport Association

ICAO:International Civil Aviation Organization

ICAO-TI: Technical Instructions by the ICAO

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CAS:Chemical Abstracts Service

2. Associated risk phrases according to European directive 67/548/EEC

3. Disclaimer

The product listed is for research and development purposes only and not for human or animal use. As such, in most cases, the toxicological, ecological and physicochemical properties have not been fully determined and the product should be treated with respect and always handled under suitable conditions by appropriately qualified personnel. The responsible party shall use this datasheet only in conjunction with other sources of information gathered by them, and should make an independent judgement of suitability, to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance with this material safety data sheet, or in combination with any other product or process, is the responsibility of the user.