

SAFETY DATA SHEET

1. Identification

Product identifier: SODIUM AZIDE

Other means of identification

Product No.: 1953

Recommended use and restriction on use

Recommended use: Not available.

Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company Name: Avantor Performance Materials, Inc.
Address: 3477 Corporate Parkway, Suite 200
Center Valley, PA 18034

Telephone: Customer Service: 855-282-6867

Fax:
Contact Person: Environmental Health & Safety
e-mail: info@avantormaterials.com

Emergency telephone number:

24 Hour Emergency: 908-859-2151

Chemtrec: 800-424-9300

2. Hazard(s) identification

Hazard classification

Health hazards

Acute toxicity (Oral)	Category 2
Acute toxicity (Dermal)	Category 1

Environmental hazards

Acute hazards to the aquatic environment	Category 1
Chronic hazards to the aquatic environment	Category 1

Label elements

Hazard symbol:



Signal word: Danger

Hazard statement: Fatal if swallowed.
Fatal in contact with skin.
Very toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention:	Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.
Response:	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Specific treatment (see this label). IF ON SKIN: Wash with plenty of soap and water. Immediately call a POISON CENTER/doctor. Take off immediately all contaminated clothing and wash it before reuse. Collect spillage.
Storage:	Store locked up.
Disposal:	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in GHS classification: None.

3. Composition/information on ingredients

Substances

Chemical identity	Common name and synonyms	CAS number	Content in percent (%)*
SODIUM AZIDE		26628-22-8	90 - 100%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

General information:	Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.
Ingestion:	Rinse mouth. Call a physician or poison control center immediately. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Inhalation:	Move to fresh air. Call a physician or poison control center immediately. If breathing stops, provide artificial respiration.
Skin contact:	Wash the skin immediately with soap and water. Call a physician or poison control center immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.
Eye contact:	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

Symptoms: Fatal if swallowed. Fatal in contact with skin.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically. Symptoms may be delayed.

5. Fire-fighting measures

General fire hazards: In case of fire and/or explosion do not breathe fumes.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Foam, carbon dioxide or dry powder.

Unsuitable extinguishing media: Water.

Specific hazards arising from the chemical: Decomposes explosively upon heating, shock, concussion or friction. Reacts with both copper and lead to form explosive azides.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Fight fire from a protected location.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep unauthorized personnel away. Use personal protective equipment. See Section 8 of the MSDS for Personal Protective Equipment. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Methods and material for containment and cleaning up: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

Notification Procedures: Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Inform authorities if large amounts are involved.

Environmental precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.

7. Handling and storage

Precautions for safe handling: Avoid contact with eyes. Avoid contact with skin. Wash hands thoroughly after handling. Do not taste or swallow. Use only with adequate ventilation.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed. Store locked up. Store in cool, dry place. Store in a well-ventilated place. Avoid heat, sparks, open flames and other ignition sources. Store away from incompatible materials.

8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Chemical identity	Type	Exposure Limit values	Source
SODIUM AZIDE - as NaN ₃	Ceiling	0.29 mg/m ³	US. ACGIH Threshold Limit Values (2011)
SODIUM AZIDE - as hydrazoic acid vapor	Ceiling	0.11 ppm	US. ACGIH Threshold Limit Values (2011)
SODIUM AZIDE - as HN ₃	Ceil_Time	0.1 ppm	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
SODIUM AZIDE - as NaN ₃	Ceil_Time	0.3 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
SODIUM AZIDE - as HN ₃	Ceiling	0.1 ppm	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
SODIUM AZIDE - as NaN ₃	Ceiling	0.3 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
SODIUM AZIDE - as HN ₃	Ceiling	0.1 ppm	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)

Appropriate engineering controls

No data available.

Individual protection measures, such as personal protective equipment

General information:	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area.
Eye/face protection:	Wear safety glasses with side shields (or goggles) and a face shield.
Skin protection	
Hand protection:	Chemical resistant gloves
Other:	Wear suitable protective clothing.
Respiratory protection:	In case of inadequate ventilation use suitable respirator. Supplied-air respirator with full facepiece, helmet or hood.
Hygiene measures:	Avoid contact with skin. Avoid contact with eyes. Do not eat, drink or smoke when using the product. Wash contaminated clothing before reuse. Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Wash hands after handling.

9. Physical and chemical properties

Appearance

Physical state:	Solid
Form:	Crystals or powder.
Color:	Colorless
Odor:	Odorless
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	275 °C Decomposes
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 limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	1.85 (20 °C)
Solubility(ies)	
Solubility in water:	420 g/l (17 °C)
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.
Other information	
Molecular weight:	65.01 g/mol (N ₃ Na)

10. Stability and reactivity

Reactivity:	No dangerous reaction known under conditions of normal use.
Chemical stability:	Decomposes explosively upon heating, shock, concussion or friction.
Possibility of hazardous reactions:	Hazardous polymerization does not occur.
Conditions to avoid:	Heat, sparks, flames. Contact with incompatible materials.
Incompatible materials:	Halogenated hydrocarbons. Metals. Acids. Acid chlorides.
Hazardous decomposition products:	Explodes upon decomposition liberating nitrogen gas and sodium.

11. Toxicological information

Information on likely routes of exposure

Ingestion:	Fatal if swallowed.
Inhalation:	Harmful if inhaled.
Skin contact:	Fatal in contact with skin.
Eye contact:	Causes eye irritation.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral	
Product:	LD 50 (Rat): 27 mg/kg
Dermal	
Product:	LD 50 (Rabbit): 20 mg/kg

Inhalation

Product: LC 50 (Rat,): 37 mg/l

Repeated dose toxicity

Product: No data available.

Skin corrosion/irritation

Product: Fatal in contact with skin.

Serious eye damage/eye irritation

Product: Irritating to eyes.

Respiratory or skin sensitization

Product: Not a skin sensitizer.

Carcinogenicity

Product: This substance has no evidence of carcinogenic properties.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ cell mutagenicity

In vitro

Product: No mutagenic components identified

In vivo

Product: No mutagenic components identified

Reproductive toxicity

Product: No components toxic to reproduction

Specific target organ toxicity - single exposure

Product: None known.

Specific target organ toxicity - repeated exposure

Product: None known.

Aspiration hazard

Product: Not classified

Other effects: None known.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 96 h): 0.8 mg/l
LC 50 (Bluegill (Lepomis macrochirus), 96 h): 0.7 mg/l
LC 50 (Fathead minnow (Pimephales promelas), 96 h): 5.46 mg/l

Aquatic invertebrates

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and degradability

Biodegradation

Product: There are no data on the degradability of this product.

BOD/COD ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration factor (BCF)

Product: No data available on bioaccumulation.

Partition coefficient n-octanol / water (log K_{ow})

Product: No data available.

Mobility in soil: No data available.

Other adverse effects: Very toxic to aquatic life with long lasting effects.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local laws. Do not allow to enter drains, sewers or watercourses.

Contaminated packaging: Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number:	UN 1687
UN proper shipping name:	Sodium azide
Transport hazard class(es)	
Class(es):	6.1
Label(s):	6.1
Packing group:	II
Marine Pollutant:	No

IMDG

UN number:	UN 1687
UN proper shipping name:	SODIUM AZIDE
Transport hazard class(es)	
Class(es):	6.1
Label(s):	6.1
EmS No.:	F-A, S-A
Packing group:	II
Marine Pollutant:	No

IATA

UN number:	UN 1687
Proper Shipping Name:	Sodium azide
Transport hazard class(es):	
Class(es):	6.1
Label(s):	6.1
Marine Pollutant:	No
Packing group:	II

15. Regulatory information
US federal regulations
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

SODIUM AZIDE Reportable quantity: 1000 lbs.

Superfund amendments and reauthorization act of 1986 (SARA)
Hazard categories

<input checked="" type="checkbox"/> Acute (Immediate)	<input type="checkbox"/> Chronic (Delayed)	<input checked="" type="checkbox"/> Fire	<input checked="" type="checkbox"/> Reactive	<input type="checkbox"/> Pressure Generating
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SARA 302 Extremely hazardous substance

Chemical identity	RQ	Threshold Planning Quantity
SODIUM AZIDE	1000 lbs.	500 lbs.

SARA 304 Emergency release notification

Chemical identity	RQ
SODIUM AZIDE	1000 lbs.

SARA 311/312 Hazardous chemical

Chemical identity	Threshold Planning Quantity
SODIUM AZIDE	500lbs

SARA 313 (TRI reporting)

Chemical identity	Reporting threshold for other users	Reporting threshold for manufacturing and processing
SODIUM AZIDE	10000 lbs	25000 lbs.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US state regulations
US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

SODIUM AZIDE Listed

US. Massachusetts RTK - Substance List

SODIUM AZIDE Listed

US. Pennsylvania RTK - Hazardous Substances

SODIUM AZIDE Listed

US. Rhode Island RTK

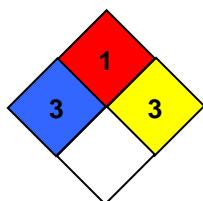
SODIUM AZIDE Listed

Inventory Status:

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
EINECS, ELINCS or NLP:	On or in compliance with the inventory
Japan (ENCS) List:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	On or in compliance with the inventory
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.

16. Other information, including date of preparation or last revision

NFPA Hazard ID



Red	Flammability
Blue	Health
Yellow	Reactivity
White	Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue date:	06-22-2014
Revision date:	No data available.
Version #:	1.0
Further information:	No data available.

Disclaimer:

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