# SAFETY DATA SHEET

Revision Date 11/30/2016 Print Date 03/27/2017

#### 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Sodium Azide

Product Number : SA1001, SA1009 Index-No. : 011-004-00-7

CAS-No. : 26628-22-8

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

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Gojira Fine Chemicals, LLC

5386 Majestic Parkway, Suite 7 Bedford Heights, OH 44146 USA

Telephone : 440-252-5397

Email : docsupport@gojirafc.com

Fax : 888-211-5523

1.1 Emergency telephone number

Emergency Phone # : 800-255-3924 (Chem-Tel, Contract# MIS7318160)

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

## GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 2), H300 Acute toxicity, Dermal (Category 1), H310

Specific target organ toxicity - repeated exposure, Oral (Category 2), Brain, H373

Acute aquatic toxicity (Category 1), H400 Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)

H300 + H310 Fatal if swallowed or in contact with skin

H373 May cause damage to organs (Brain) through prolonged or repeated

exposure if swallowed.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P262 Do not get in eyes, on skin, or on clothing. P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face

protection.

P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse

mouth.

P302 + P350 + P310 IF ON SKIN: Gently wash with plenty of soap and water. Immediately call

a POISON CENTER or doctor/physician.

P314 Get medical advice/ attention if you feel unwell.

P362 Take off contaminated clothing and wash before reuse.

P391 Collect spillage. P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Contact with acids liberates very toxic gas.

Sodium Azide may react with lead and copper plumbing to form highly explosive metal azides., Rapidly absorbed through skin.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Formula : N<sub>3</sub>Na

Molecular weight : 65.01 g/mol

CAS-No. : 26628-22-8

EC-No. : 247-852-1

Index-No. : 011-004-00-7

**Hazardous components** 

Component	Classification	Concentration
Sodium azide		
	Acute Tox. 2; Acute Tox. 1; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H300 + H310, H373, H410	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

# 4.1 Description of first aid measures

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

## In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

#### In case of eve contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 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 2.2) and/or in section 11

## 4.3 Indication of any immediate medical attention and special treatment needed

No data available

### 5. FIREFIGHTING MEASURES

## 5.1 Extinguishing media

## Suitable extinguishing media

Dry powder

## 5.2 Special hazards arising from the substance or mixture

No data available

## 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

## 5.4 Further information

No data available

### 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

### 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Never allow product to get in contact with water during storage. Do not store near acids.

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

# Components with workplace control parameters

Components with workplace control parameters						
Component	CAS-No.	Value	Control	Basis		
			parameters			
Sodium azide	26628-22-8	С	0.100000 ppm	USA. NIOSH Recommended		
				Exposure Limits		
	Remarks	Potential for dermal absorption				
		С	0.300000	USA. NIOSH Recommended		
			mg/m3	Exposure Limits		
		Potential for dermal absorption				
		С	0.110000 ppm	USA. ACGIH Threshold Limit Values		
				(TLV)		
		Lung damage				

	Cardiac impairment				
	Not classifiable as a human carcinogen				
	С	0.290000 mg/m3	USA. ACGIH Threshold Limit Values		
<u> </u>	1 1		(TLV)		
	Lung damage				
	Cardiac impairment				
	Not classifiable as a human carcinogen				
	С	0.110000 ppm	USA. ACGIH Threshold Limit Values (TLV)		
	Lung damage				
	Cardiac impairment				
	Not classifiable as a human carcinogen				
	С	0.290000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)		
	Lung damage				
	Cardiac impairment				
	Not classifiable as a human carcinogen				
	С	0.1 ppm	USA. NIOSH Recommended Exposure Limits		
	Potential for dermal absorption				
	С	0.1 ppm	USA. OSHA - TABLE Z-1 Limits for		
			Air Contaminants - 1910.1000		
	Skin notation				
	С	0.3 mg/m3	USA. OSHA - TABLE Z-1 Limits for		
			Air Contaminants - 1910.1000		
	Skin notation				
	С	0.29 mg/m3	USA. ACGIH Threshold Limit Values (TLV)		
	Lung damage				
	Cardiac impa	airment			
	Not classifial	ble as a human ca	rcinogen		
	С	0.11 ppm	USA. ACGIH Threshold Limit Values (TLV)		
	Lung damage				
	Cardiac impairment				
		ble as a human ca	rcinogen		
	С	0.3 mg/m3	USA. NIOSH Recommended		
			Exposure Limits		
	Potential for dermal absorption				
	С	0.1 ppm	California permissible exposure		
		0.3 mg/m3	limits for chemical contaminants		
			(Title 8, Article 107)		
	Skin				

## 8.2 Exposure controls

## Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

## 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.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method:

EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

# **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

# Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

a) Appearance Form: crystalline

Colour: white

b) Odourc) Odour Thresholddata availableNo data available

d) pH 10 at 65 g/l at 25 °C (77 °F)

e) Melting point/freezing

point

275 °C (527 °F)

f) Initial boiling point and

boiling range

. ... .

No data available

g) Flash pointh) Evaporation rateNo data availableNo data available

i) Flammability (solid, gas) The product is not flammable. - Flammability (solids)

j) Upper/lower No data available

flammability or explosive limits

(c) Vapour pressure 0.01 hPa (0.01 mmHg) at 20 °C (68 °F)

I) Vapour density No data availablem) Relative density 1.850 g/cm3

n) Water solubility 65 g/l at 20 °C (68 °F) - completely soluble

o) Partition coefficient: n-

octanol/water

No data available

p) Auto-ignition 309 °C (588 °F) at 1,013 hPa (760 mmHg)

temperature

q) Decomposition 300 °C (572 °F) -

temperature

r) Viscosity No data available

s) Explosive properties Not explosive

t) Oxidizing properties No data available

## 9.2 Other safety information

Bulk density 0.8 kg/m3

### 10. STABILITY AND REACTIVITY

## 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

#### 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.

## 10.5 Incompatible materials

Halogenated hydrocarbon, Metals, Acids, Acid chlorides, Hydrazine, Dimethyl sulfate, Inorganic acid chlorides

# 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Sodium oxides

Other decomposition products - No data available

In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

# 11.1 Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - Rat - 27 mg/kg

Inhalation: No data available

Dermal: No data available

No data available

#### Skin corrosion/irritation

Skin - reconstructed human epidermis (RhE)

Result: No skin irritation - 15 min

## Serious eye damage/eye irritation

Eyes - Bovine cornea

Result: No eye irritation - 4 h (OECD Test Guideline 437)

### Respiratory or skin sensitisation

in vivo assay - Mouse

Result: Does not cause skin sensitisation.

(OECD Test Guideline 429)

## Germ cell mutagenicity

No data available

### Carcinogenicity

Carcinogenicity - Rat - male and female - Oral No significant adverse effects were reported

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by OSHA.

## Reproductive toxicity

No data available

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

### **Additional Information**

Repeated dose Rat - male and female - Oral - LOAEL : 5 mg/kg

toxicity

RTECS: VY8050000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity to fish mortality LC50 - Pimephales promelas (fathead minnow) - 5.46 mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to algae static test EC50 - Pseudokirchneriella subcapitata - 0.35 mg/l - 96 h

(OECD Test Guideline 201)

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

## 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

## 12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

### 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

### Contaminated packaging

Dispose of as unused product.

### 14. TRANSPORT INFORMATION

DOT (US)

UN number: 1687 Class: 6.1 Packing group: II

Proper shipping name: Sodium azide Reportable Quantity (RQ): 1000 lbs

Poison Inhalation Hazard: No

**IMDG** 

UN number: 1687 Class: 6.1 Packing group: II EMS-No: F-A, S-A

Proper shipping name: SODIUM AZIDE

Marine pollutant:yes

**IATA** 

UN number: 1687 Class: 6.1 Packing group: II

Proper shipping name: Sodium azide

#### 15. REGULATORY INFORMATION

#### **SARA 302 Components**

The following components are subject to reporting levels established by SARA Title III, Section 302:

CAS-No. Revision Date 26628-22-8 2007-07-01

Sodium azide 26628-22-8 2007-07-01

**SARA 313 Components** 

The following components are subject to reporting levels established by SARA Title III, Section 313:

CAS-No. Revision Date

Sodium azide 26628-22-8 2007-07-01

SARA 311/312 Hazards

Acute Health Hazard

**Massachusetts Right To Know Components** 

Sodium azide CAS-No. Revision Date 26628-22-8 2007-07-01

Pennsylvania Right To Know Components

CAS-No. Revision Date

Sodium azide 26628-22-8 2007-07-01

**New Jersey Right To Know Components** 

CAS-No. Revision Date

Sodium azide 26628-22-8 2007-07-01

## California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### 16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity

Aquatic Acute Acute aquatic toxicity
Aquatic Chronic Chronic aquatic toxicity
H300 Fatal if swallowed.

H300 + H310 Fatal if swallowed or in contact with skin

H310 Fatal in contact with skin.

H373 May cause damage to organs through prolonged or repeated exposure if swallowed.

H400 Very toxic to aquatic life.

**HMIS Rating** 

Health hazard: 4
Chronic Health Hazard:
Flammability: 0
Physical Hazard 0

**NFPA** Rating

Health hazard: 4
Fire Hazard: 0
Reactivity Hazard: 3

## **Further information**

The above information is believed to be accurate and represents the best information currently available to Gojira Fine Chemicals. However, we make no warranty or merchantability or any other warranty, express or Implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Gojira Fine Chemicals be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Gojira Fine Chemicals has been advised of the possibility of such damages.