

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Zap-OX
Product code : ZO-16-12, ZO-16-1, ZO-16-4

1.2. Recommended use and restrictions on use

Recommended use : Cleansers / rust remover
Restrictions on use : For professional use only, Industrial use

1.3. Supplier

Nanoplas Inc.
2950 Prairie Street South West
Suite 900
Grandville, MI, 49418
T (616)-452-3707
info@nanomoldcoating.com

1.4. Emergency telephone number

Emergency number : For Chemical Emergency Call INFOTRAC 24hr/day 7days/week
(collect calls accepted)
Within USA, Mexico and Canada: 800-535-5053 ID# 102222
Outside USA, Mexico and Canada: 1-352-323-3500 ID# 102222

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation Category 1C	H314	Causes severe skin burns and eye damage
Serious eye damage Category 1	H318	Causes serious eye damage
Full text of H statements : see section 16		

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger
Hazard statements (GHS US) : H314 - Causes severe skin burns and eye damage
Precautionary statements (GHS US) : P260 - Do not breathe mist, vapors.
P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.
P310 - Immediately call a POISON CENTER or doctor/physician
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P310 - Immediately call a POISON CENTER or doctor/physician.
P363 - Wash contaminated clothing before reuse.

Zap-OX

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P310 - Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician.
P405 - Store locked up.
P501 - Dispose of contents/container to a hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

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

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Silicon Dioxide, Quartz	CAS-No.: 14808-60-7	35 – 40
C9-11 PARETH-6	CAS-No.: 68439-46-3	5 – 10
Methyl salicylate	CAS-No.: 119-36-8	1 – 5
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	CAS-No.: 70693-62-8	1 – 5
Alkyl Dimethyl Ethylbenzyl Ammonium Chloride	CAS-No.: 85409-23-0	1 - <5

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Move the affected person to fresh air. Get immediate medical advice/attention.
First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get immediate medical advice/attention. Wash contaminated clothing before reuse.
First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
First-aid measures after ingestion : Do NOT induce vomiting. Get immediate medical advice/attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Causes serious eye damage. Causes eye and skin burns. Severe corrosion to the respiratory tract at high concentrations. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.
Inhalation : At high concentrations: Corrosive to the respiratory tract.
Skin : Causes skin irritation. May cause burns.
Eyes : Severe eye irritant. Risk of serious damage to eyes.
Ingestion : May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic symptoms : No chronic health hazards are likely for this material.

Zap-OX

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

4.3. Immediate medical attention and special treatment, if necessary

Get immediate medical attention.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media : None.

5.2. Specific hazards arising from the chemical

Fire hazard : This product is not classified as flammable or combustible.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Wear suitable protective clothing. Do not get in eyes, on skin, or on clothing. Keep unnecessary and unprotected personnel away from the spillage.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Do not breathe mist, spray. Do not get in eyes, on skin, or on clothing. Do not touch or walk on the spilled product. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Do not allow product to spread into the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up : Absorb and/or contain spill with inert material, then place in suitable container. Wash contaminated area with large amounts of water.
Other information : Dispose in a safe manner in accordance with local/national regulations. Report spill as required by local and federal regulations.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

Zap-OX

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure adequate ventilation. Do not breathe mist, spray. Avoid any direct contact with the product. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Handle in accordance with good industrial hygiene and safety procedures. Empty containers retain product residue and can be hazardous. Handle uncleaned empty containers as full ones.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in dry, cool, well-ventilated area. Store at ambient temperature. Store locked up.
- Incompatible materials : Strong oxidizers. Strong bases.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Silicon Dioxide, Quartz (14808-60-7)

USA - ACGIH - Occupational Exposure Limits

Local name	Silica crystalline - quartz
ACGIH OEL TWA	0.025 mg/m ³ (R - Respirable particulate matter)
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2024

USA - OSHA - Occupational Exposure Limits

Local name	Quartz (Respirable) (Silica: Crystalline)
OSHA PEL (TWA)	0.05 mg/m ³ respirable dust
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA): Use formulas: (250 / (%SiO ₂ +5)) for mppcf and (10 mg/m ³ / (%SiO ₂ +2)) for mg/m ³ . CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts

8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure adequate ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
- Environmental exposure controls : Do not allow product to spread into the environment.

8.3. Individual protection measures/Personal protective equipment

Materials for protective clothing:

Use chemically protective clothing.

Hand protection:

Chemically resistant protective gloves. Consult supplier for specific recommendations.

Eye protection:

Chemical goggles

Zap-OX

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. In operations where exposure limits are exceeded or exposure levels are excessive, an approved respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

Thermal hazard protection:

Not applicable.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: White. Viscous. slurry.
Color	: White
Odor	: mint
Odor threshold	: No data available
pH	: $\geq 1 - \leq 2$
Melting point	: 0 °C
Freezing point	: 0 °C
Boiling point	: 100 °C
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 1.2 – 1.3
Solubility	: Soluble in water. completely soluble.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: Product is not explosive.
Oxidizing properties	: No data available

9.2. Other information

VOC content : 1 – 20

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts with (strong) oxidizers. Strong bases.

Zap-OX

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

10.4. Conditions to avoid

Incompatible materials.

10.5. Incompatible materials

Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Silicon Dioxide, Quartz (14808-60-7)

LD50 oral rat	> 22500 mg/kg
---------------	---------------

C9-11 PARETH-6 (68439-46-3)

LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
-----------------	---

LC50 Inhalation - Rat	> 1.6 mg/l/4h Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
-----------------------	--

Methyl salicylate (119-36-8)

LD50 oral rat	887 mg/kg
---------------	-----------

LD50 dermal rat	> 2000 mg/kg
-----------------	--------------

Pentapotassium bis(peroxymonosulphate) bis(sulphate) (70693-62-8)

LD50 oral rat	500 mg/kg body weight (OECD 423 method)
---------------	---

LD50 dermal rat	> 2000 mg/kg body weight (OECD 402 method)
-----------------	--

Alkyl Dimethyl Ethylbenzyl Ammonium Chloride (85409-23-0)

LD50 oral rat	344 mg/kg
---------------	-----------

LD50 dermal rabbit	2300 mg/kg
--------------------	------------

Skin corrosion/irritation : Causes severe skin burns.
pH: $\geq 1 - \leq 2$

Serious eye damage/irritation : Causes serious eye damage.
pH: $\geq 1 - \leq 2$

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified. The Crystalline Silica is inextricably bound in the chemical matrix of this product and no exposure can occur.

Silicon Dioxide, Quartz (14808-60-7)

IARC group	1 - Carcinogenic to humans
------------	----------------------------

National Toxicity Program (NTP) Status	Known Human Carcinogens
--	-------------------------

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified.

Zap-OX

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

Silicon Dioxide, Quartz (14808-60-7)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
C9-11 PARETH-6 (68439-46-3)	
NOAEL (oral,rat,90 days)	≥ 500 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Pentapotassium bis(peroxymonosulphate) bis(sulphate) (70693-62-8)	
LOAEL (oral,rat,90 days)	600 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (oral,rat,90 days)	200 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects	: Causes serious eye damage. Causes eye and skin burns. Severe corrosion to the respiratory tract at high concentrations. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.
Inhalation	: At high concentrations: Corrosive to the respiratory tract.
Skin	: Causes skin irritation. May cause burns.
Eyes	: Severe eye irritant. Risk of serious damage to eyes.
Ingestion	: May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic symptoms	: No chronic health hazards are likely for this material.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life.

Silicon Dioxide, Quartz (14808-60-7)	
LC50 - Fish [1]	> 10000 mg/l
C9-11 PARETH-6 (68439-46-3)	
LC50 - Fish [1]	5 – 7 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	2.5 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	1.4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
Methyl salicylate (119-36-8)	
LC50 - Fish [1]	19.8 mg/l Pimephales promelas (Fathead minnow)
EC50 - Crustacea [1]	28 mg/l Daphnia magna (Water flea)
LC50 - Fish [2]	1370 mg/l Pimephales promelas (Fathead minnow)
EC50 72h - Algae [1]	1.6 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	1.1 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
ErC50 algae	27 mg/l Desmodesmus subspicatus
Pentapotassium bis(peroxymonosulphate) bis(sulphate) (70693-62-8)	
LC50 - Fish [1]	53 mg/l Oncorhynchus mykiss (Rainbow trout)

Zap-OX

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

Pentapotassium bis(peroxymonosulphate) bis(sulphate) (70693-62-8)	
EC50 - Crustacea [1]	3.5 mg/l Daphnia magna (Water flea)
Alkyl Dimethyl Ethylbenzyl Ammonium Chloride (85409-23-0)	
LC50 - Fish [1]	1.06 mg/l Oncorhynchus mykiss (Rainbow trout)
EC50 - Crustacea [1]	0.015 mg/l Daphnia magna (Water flea)
ErC50 algae	0.026 mg/l Pseudokirchneriella subcapitata
NOEC (chronic)	0.004 mg/l Daphnia magna (Water flea)
NOEC chronic fish	0.032 mg/l Pimephales promelas (Fathead minnow)

12.2. Persistence and degradability

Zap-OX	
Persistence and degradability	No data available.
Silicon Dioxide, Quartz (14808-60-7)	
Persistence and degradability	Biodegradation is not applicable to inorganic compounds.
C9-11 PARETH-6 (68439-46-3)	
Persistence and degradability	Readily biodegradable.
Methyl salicylate (119-36-8)	
Persistence and degradability	Readily biodegradable.
Pentapotassium bis(peroxymonosulphate) bis(sulphate) (70693-62-8)	
Persistence and degradability	Readily biodegradable.
Alkyl Dimethyl Ethylbenzyl Ammonium Chloride (85409-23-0)	
Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential

Silicon Dioxide, Quartz (14808-60-7)	
Bioaccumulative potential	Not potentially bioaccumulable.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation : Dispose of in accordance with applicable federal, state, and local regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.



Zap-OX

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

DOT	IMDG	IATA
14.1. UN number		
Not regulated	3082	3082
14.2. Proper Shipping Name		
Not regulated	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkyl Dimethyl Ethlbenzyl Ammonium Chloride)	Environmentally hazardous substance, liquid, n.o.s. (Alkyl Dimethyl Ethlbenzyl Ammonium Chloride)
14.3. Transport hazard class(es)		
Not regulated	9	9
		
14.4. Packing group		
Not regulated	III	III
14.5. Environmental hazards		
Not regulated	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available		

14.6. Special precautions for user

DOT

Not regulated

IMDG

Special provision (IMDG) : 274, 335, 969
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : LP01, P001
Packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1, TP29
EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage) : S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
Stowage category (IMDG) : A

IATA

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L
Special provision (IATA) : A97, A158, A197, A215
ERG code (IATA) : 9L

Zap-OX

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Zap-OX

SARA Section 311/312 Hazard Classes	Refer to Section 2 for OSHA Hazard Classification.
-------------------------------------	--

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Alkyl Dimethyl Ethylbenzyl Ammonium Chloride	CAS-No. 85409-23-0	1 - <5%
--	--------------------	---------

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

No additional information available

15.3. US State regulations

Zap-OX

U.S. - California - Proposition 65 - Other information	Crystalline Silica is inextricably bound in the chemical matrix of this product and no exposure can occur.
--	--



WARNING:

This product can expose you to Crystalline Silica-Quartz, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
Silicon Dioxide, Quartz(14808-60-7)	U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

Revision date : 7/3/2024

Full text of hazard classes and H-statements

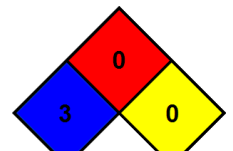
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

NFPA health hazard

: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

NFPA fire hazard

: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.



Zap-OX

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.

Hazard Rating

Health : 3 Serious Hazard

Flammability : 0 Minimal Hazard

Physical : 0 Minimal Hazard

Indication of changes:

Composition/Information on ingredients. Physical and chemical properties. revised edition.
--

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.