

Safety Data Sheet acc. to OSHA HCS

Printing date 03/01/2018

Reviewed on 01/22/2018

1 Identification

- Product identifier

- **Trade name:** ND Anti-Seize
- **Synonyms:** 957 Anti-Seize - High Temperature
- **Part number:** 957
- **Application of the substance / the mixture** Lubricant

- Details of the supplier of the safety data sheet

- **Manufacturer/Supplier:**
 ND Industries, Inc
 1000 North Crooks Road
 Clawson, MI 48017
 USA
 Telephone: +1-248-288-0000
 Email: info@ndindustries.com
 Website: www.ndindustries.com
- **Information department:** Product safety department
- **Emergency telephone number:**
 United States: 1-800-424-9300
 International: +1-703-527-3887

* 2 Hazard(s) identification

- Classification of the substance or mixture



GHS08 Health hazard

Carc. 1A H350 May cause cancer.

- Label elements

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**
Silicon Dioxide
- **Hazard statements**
H350 May cause cancer.
- **Precautionary statements**

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system:

- NFPA ratings (scale 0 - 4)



Health = 0
Fire = 1
Reactivity = 0

- HMIS-ratings (scale 0 - 4)



HEALTH 0 Health = *0
FIRE 1 Fire = 1
REACTIVITY 0 Reactivity = 0

- Other hazards

- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.

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- **vPvB:** Not applicable.

* 3 Composition/information on ingredients

- Chemical characterization: Mixtures

- **Description:** Mixture of the substances listed below with nonhazardous additions.

- Dangerous components:

12001-26-2	Mica		10 - 19%
14808-60-7	Silicon Dioxide	Carc. 1A, H350; Acute Tox. 4, H332	≤ 1%
1332-58-7	Kaolin		≤ 1%
13463-67-7	titanium dioxide	Carc. 2, H351	≤ 1%

* 4 First-aid measures

- Description of first aid measures

- General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

- **After skin contact:** Generally the product does not irritate the skin.

- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:** Immediately call a doctor.

- Information for doctor:

- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

- **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

5 Fire-fighting measures

- Extinguishing media

- Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

CO₂, sand, extinguishing powder. Do not use water.

Use fire fighting measures that suit the environment.

- **For safety reasons unsuitable extinguishing agents:** Water

- **Special hazards arising from the substance or mixture** No further relevant information available.

- Advice for firefighters

- Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

* 6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Wear protective clothing.

- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

- Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

Dispose of the collected material according to regulations.

- Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- Handling:

- Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

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- Conditions for safe storage, including any incompatibilities

- Storage:

- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

- **Specific end use(s)** No further relevant information available.

* 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- Control parameters

- Components with limit values that require monitoring at the workplace:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the remaining constituent has no known exposure limits.

12001-26-2 Mica	
PEL	Long-term value: 20 mppcf ppm <1% crystalline silica
REL	Long-term value: 3* mg/m ³ *respirable dust; containing < 1% quartz
TLV	Long-term value: 3* mg/m ³ *as respirable fraction
14808-60-7 Silicon Dioxide	
PEL	see Quartz listing
REL	Long-term value: 0.05* mg/m ³ *respirable dust; See Pocket Guide App. A
TLV	Long-term value: 0.025* mg/m ³ *as respirable fraction
1332-58-7 Kaolin	
PEL	Long-term value: 15* 5** mg/m ³ *total dust **respirable fraction
REL	Long-term value: 10* 5** mg/m ³ *total dust **respirable fraction
TLV	Long-term value: 2* mg/m ³ E; as respirable fraction

- **Additional information:** The lists that were valid during the creation were used as basis.

- Exposure controls

- Personal protective equipment:

- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

- Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Nitrile rubber, NBR

- Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Goggles recommended during refilling.

- **Body protection:** Protective work clothing

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* 9 Physical and chemical properties

- Information on basic physical and chemical properties	
- General Information	
- Appearance:	
- Form:	Viscous
- Color:	White
- Odor:	Characteristic
- Odor threshold:	Not determined.
- pH-value:	Not determined.
- Change in condition	
- Melting point/Melting range:	Undetermined.
- Boiling point/Boiling range:	≥ 100 °C (≥ 212 °F)
- Flash point:	100 °C (212 °F)
- Flammability (solid, gaseous):	Not applicable.
- Decomposition temperature:	Not determined.
- Auto igniting:	Product is not selfigniting.
- Danger of explosion:	Product does not present an explosion hazard.
- Explosion limits:	
- Lower:	Not determined.
- Upper:	Not determined.
- Vapor pressure at 20 °C (68 °F):	≤ 30 hPa (≤ 22.5 mm Hg)
- Density:	
- Relative density	Not determined.
- Vapor density	Not determined.
- Evaporation rate	Not determined.
- Solubility in / Miscibility with	
- Water:	Not miscible or difficult to mix.
- Partition coefficient (n-octanol/water): Not determined.	
- Viscosity:	
- Dynamic:	Not determined.
- Kinematic:	Not determined.
- Solvent content:	
- Organic solvents:	0.0 %
- Water:	13.3 %
- VOC content:	0.00 % 0.0 g/l / 0.00 lb/gl
- Solids content:	23.6 %
- Other information No further relevant information available.	

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
 - **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

* 11 Toxicological information

- **Information on toxicological effects**
 - **Acute toxicity:**

- LD/LC50 values that are relevant for classification:

Acrylic copolymer

Oral	LD50	5,000 mg/kg (rat)
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Dermal	LD50	5,000 mg/kg (rabbit)
14808-60-7 Silicon Dioxide		
Inhalative	LC50/4 h	11 mg/l (ATE)
13463-67-7 titanium dioxide		
Oral	LD50	> 20,000 mg/kg (rat)
Dermal	LD50	> 10,000 mg/kg (rabbit)
Inhalative	LC50/4 h	> 6.82 mg/l (rat)

- Primary irritant effect:

- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.

- Sensitization: No sensitizing effects known.

- Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful

- Carcinogenic categories

- IARC (International Agency for Research on Cancer)

14808-60-7	Silicon Dioxide	1
13463-67-7	titanium dioxide	2B
111-76-2	2-butoxyethanol	3

- NTP (National Toxicology Program)

14808-60-7	Silicon Dioxide	K
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- OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- Toxicity

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability:** No further relevant information available.

- Behavior in environmental systems:

- **Bioaccumulative potential:** No further relevant information available.

- **Mobility in soil:** No further relevant information available.

- Additional ecological information:

- General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- Results of PBT and vPvB assessment

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects:** No further relevant information available.

*13 Disposal considerations

- Waste treatment methods

- **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packagings:

- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- UN-Number	
- DOT, ADN, IMDG, IATA	not regulated
- UN proper shipping name	
- DOT, ADN, IMDG, IATA	not regulated
- Transport hazard class(es)	
- DOT, ADN, IMDG, IATA	
- Class	not regulated
- Packing group	
- DOT, IMDG, IATA	not regulated

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- Environmental hazards:	
- Marine pollutant:	No
- Special precautions for user	Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
- UN "Model Regulation":	not regulated

*15 Regulatory information

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

- Sara

- Section 355 (extremely hazardous substances):

None of the ingredients is listed.

- Section 313 (Specific toxic chemical listings):

111-76-2 2-butoxyethanol

- TSCA (Toxic Substances Control Act):

Boron nitride

Sodium Aluminium silicate

Silicon Dioxide

Kaolin

titanium dioxide

Gum xanthan

Alumina Trihydrate

2,4,7,9-tetramethyldec-5-yne-4,7-diol

2-butoxyethanol

magnesium nitrate

5-chloro-2-methyl-2H-isothiazol-3-one

Magnesium Chloride

2-methyl-2H-isothiazol-3-one

glyoxal

Deionized water

- TSCA new (21st Century Act) (Substances not listed)

12001-26-2 Mica

- Proposition 65

- Chemicals known to cause cancer:

14808-60-7 Silicon Dioxide

13463-67-7 titanium dioxide

- Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

- Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

- Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- Carcinogenic categories

- EPA (Environmental Protection Agency)

Boron nitride

I (oral)

111-76-2 2-butoxyethanol

NL

- TLV (Threshold Limit Value established by ACGIH)

14808-60-7 Silicon Dioxide

A2

1332-58-7 Kaolin

A4

13463-67-7 titanium dioxide

A4

111-76-2 2-butoxyethanol

A3

107-22-2 glyoxal

A4

- NIOSH-Ca (National Institute for Occupational Safety and Health)

14808-60-7 Silicon Dioxide

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13463-67-7 titanium dioxide

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- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** ND Industries, Inc. - Safety, Health and Environmental Affaires

- **Contact:** Safety, Health and Environmental Affaires

- **Date of preparation / last revision** 03/01/2018 / 8

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Tox. 4: Acute toxicity – Category 4

Carc. 1A: Carcinogenicity – Category 1A

Carc. 2: Carcinogenicity – Category 2

- * **Data compared to the previous version altered.**

- **Disclaimer**

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