

Safety Data Sheet
acc. to OSHA HCS

Printing date 02/06/2019

Reviewed on 02/06/2019

1 Identification

- Product identifier

- **Trade name:** ST-3® Thread Sealant
- **Synonyms:** ST-3-W - Applied
- **Part number:** ST3W-applied
- **Application of the substance / the mixture**
Sealing
Sealant

- 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



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2B H320 Causes eye irritation.

- Label elements

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

- Hazard pictograms



GHS07

- Signal word Warning

- Hazard statements

H315+H320 Causes skin and eye irritation.

- Precautionary statements

- P264 Wash face, hands and any exposed skin thoroughly after handling.
- P280 Wear protective gloves.
- P302+P352 If on skin: Wash with plenty of water.
- P321 Specific treatment (see on this label).
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P337+P313 If eye irritation persists: Get medical advice/attention.

- Classification system:

- NFPA ratings (scale 0 - 4)



Health = 1
Fire = 1
Reactivity = 0

- HMIS-ratings (scale 0 - 4)



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

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/06/2019

Reviewed on 02/06/2019

Trade name: ST-3® Thread Sealant

(Contd. of page 1)

- Other hazards**- Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

* 3 Composition/information on ingredients

- Chemical characterization: Mixtures

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

- Dangerous components:

	Acrylic polymer	Skin Irrit. 2, H315; STOT SE 3, H335-H336; Eye Irrit. 2B, H320	30 – 39%
1332-58-7	Kaolin		20 – 29%
12001-26-2	Mica		10 – 19%
13463-67-7	titanium dioxide	Carc. 2, H351	5 – 9%
9002-84-0	Polytetrafluoroethylene	Combustible Dust	5 – 9%
	Acrylic emulsion	Skin Irrit. 2, H315; STOT SE 3, H335-H336; Eye Irrit. 2B, H320	1 – 4%
112926-00-8	Precipitated silica (Silica-Amorphous)	Combustible Dust	1 – 4%
7558-79-4	Di-Sodium Phosphate	Skin Irrit. 2, H315	1 – 4%
64742-55-8	Mineral oil, light paraffinic	Carc. 1B, H350	≤ 1%
14808-60-7	Silicon Dioxide	Carc. 1A, H350; STOT RE 1, H372	≤ 1%

4 First-aid measures

- Description of first aid measures**- After inhalation:**

In case of unconsciousness place patient stably in side position for transportation.
Supply fresh air; consult doctor in case of complaints.

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- **After swallowing:** If symptoms persist consult 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:

Inform respective authorities in case of seepage into water course or sewage system.

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.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/06/2019

Reviewed on 02/06/2019

Trade name: ST-3® Thread Sealant

(Contd. of page 2)

See Section 13 for disposal information.

7 Handling and storage

- Handling:

- Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of dust.

- Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.

- 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:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.

- 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 other constituents have no known exposure limits.

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
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
13463-67-7 titanium dioxide	
PEL	Long-term value: 15* mg/m ³ *total dust
REL	See Pocket Guide App. A
TLV	Long-term value: 10 mg/m ³
112926-00-8 Precipitated silica (Silica-Amorphous)	
PEL	20mppcf or 80mg/m ³ /%SiO ₂
REL	Long-term value: 6 mg/m ³ See Pocket Guide App. C
TLV	TLV withdrawn
14808-60-7 Silicon Dioxide	
PEL	Long-term value: 0.05* mg/m ³ *resp. dust; 30mg/m ³ /%SiO ₂ +2
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

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

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/06/2019

Reviewed on 02/06/2019

Trade name: ST-3® Thread Sealant

(Contd. of page 3)

- Exposure controls**- Personal protective equipment:****- General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.

- Breathing equipment:

Not required.
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:

Tightly sealed goggles

- Body protection: Protective work clothing

* 9 Physical and chemical properties

- Information on basic physical and chemical properties**- General Information****- Appearance:**

- Form: Solidified mass

- Color: White

- Odor: Characteristic

- Odor threshold: Not determined.

- pH-value: Not applicable.

- Change in condition

- Melting point/Melting range: Undetermined.

- Boiling point/Boiling range: $\geq 100\text{ °C}$ ($\geq 212\text{ °F}$)

- Flash point: 150 °C (302 °F)

- Flammability (solid, gaseous): Not determined.

- 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): $\leq 23.4\text{ hPa}$ ($\leq 17.6\text{ mm Hg}$)

- Density at 20 °C (68 °F): $\sim 1.89859\text{ g/cm}^3$ ($\sim 15.84373\text{ lbs/gal}$)

- Relative density Not determined.

- Vapor density Not applicable.

- Evaporation rate Not applicable.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/06/2019

Reviewed on 02/06/2019

Trade name: ST-3® Thread Sealant

(Contd. of page 4)

- Solubility in / Miscibility with	
- Water:	Insoluble.
- Partition coefficient (n-octanol/water):	Not determined.
- Viscosity:	
- Dynamic at 20 °C (68 °F):	900 mPas
- Kinematic:	Not applicable.
- Solvent content:	
- VOC content:	0.00 % 0.0 g/l / 0.00 lb/gal
- Solids content:	51.0 %
- 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 polymer		
Oral	LD50	> 5,000 mg/kg (rat)
Dermal	LD50	> 5,000 mg/kg (rabbit)
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)
7558-79-4 Di-Sodium Phosphate		
Oral	LD50	17,000 mg/kg (rat)

- **Primary irritant effect:**
 - **on the skin:** Irritant to skin and mucous membranes.
 - **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant
Carcinogenic.

- **Carcinogenic categories**

- IARC (International Agency for Research on Cancer)		
13463-67-7	titanium dioxide	2B
9002-84-0	Polytetrafluoroethylene	3
112926-00-8	Precipitated silica (Silica-Amorphous)	3
14808-60-7	Silicon Dioxide	1

- **NTP (National Toxicology Program)**

14808-60-7	Silicon Dioxide	K
------------	-----------------	---

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

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

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/06/2019

Reviewed on 02/06/2019

Trade name: ST-3® Thread Sealant

(Contd. of page 5)

- **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.
- **Ecotoxicological effects:**
 - **Remark:** Harmful to fish
- **Additional ecological information:**
 - **General notes:**
 - Water hazard class 3 (Self-assessment): extremely hazardous for water
 - Do not allow product to reach ground water, water course or sewage system, even in small quantities.
 - Danger to drinking water if even extremely small quantities leak into the ground.
 - Harmful to aquatic organisms
- **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
- 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):

None of the ingredients is listed.

- TSCA (Toxic Substances Control Act):

Kaolin

titanium dioxide

Polytetrafluoroethylene

Di-Sodium Phosphate

Sodium Aluminium silicate

Mineral oil, light paraffinic

Silicon Dioxide

Alumina Trihydrate

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/06/2019

Reviewed on 02/06/2019

Trade name: ST-3® Thread Sealant

(Contd. of page 6)

- TSCA new (21st Century Act): (Substances not listed)		
	Acrylic polymer	
12001-26-2	Mica	
	Acrylic emulsion	
112926-00-8	Precipitated silica (Silica-Amorphous)	
- Proposition 65		
- Chemicals known to cause cancer:		
	Acrylic polymer	
	Acrylic polymer	
14808-60-7	Silicon 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)		
None of the ingredients is listed.		
- TLV (Threshold Limit Value established by ACGIH)		
1332-58-7	Kaolin	A4
13463-67-7	titanium dioxide	A4
14808-60-7	Silicon Dioxide	A2
- NIOSH-Ca (National Institute for Occupational Safety and Health)		
13463-67-7	titanium dioxide	
14808-60-7	Silicon Dioxide	

- National regulations:**- Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

- 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 Affairs

- Contact: Safety, Health and Environmental Affairs

- Date of preparation / last revision 02/06/2019 / 34

- Abbreviations and acronyms:

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
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B
 Carc. 1A: Carcinogenicity – Category 1A
 Carc. 1B: Carcinogenicity – Category 1B
 Carc. 2: Carcinogenicity – Category 2
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

- * Data compared to the previous version altered.

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

Printing date 02/06/2019

Reviewed on 02/06/2019

Trade name: ST-3® Thread Sealant

(Contd. of page 7)

- Disclaimer

The information set forth is based on information that ND Industries, Incorporated believes to be accurate. No warranty, expressed or implied, is intended. The information is provided solely for your information and consideration and ND Industries Inc. assumes no legal responsibility for use or reliance thereon. In the event of a discrepancy between the information on the non-English document and its English counterpart, the English version shall supersede.

®ND and ND Industries, Inc. are registered trademarks of ND Industries Incorporated,
®Vibra-TITE is a registered trademark of ND Industries, Inc.