

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/09/2024

Reviewed on 03/21/2024

Trade name: ST-3® Thread Sealant

(Contd. of page 1)

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P280	Wear protective gloves.
P280	Wear eye protection / face protection.
P302+P352	If on skin: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a poison center/doctor if you feel unwell.
P321	Specific treatment (see on this label).
P362+P364	Take off contaminated clothing and wash it before reuse.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

- 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 Irritation 2, H315; Specific Target Organ Toxicity - Single Exposure 3, H335-H336; Eye Irritation 2B, H320	30 – 39%
CAS: 1332-58-7	Kaolin	10 – 19%
CAS: 12001-26-2	Mica	5 – 9%
	Acrylic polymer Eye Irritation 2B, H320	4.31%
CAS: 111-76-2	2-butoxyethanol Acute Toxicity - Dermal 3, H311; Acute Toxicity - Inhalation 3, H331; Acute Toxicity - Oral 4, H302; Skin Irritation 2, H315; Eye Irritation 2A, H319; Flammable Liquids 4, H227	1 – 4%
CAS: 7558-79-4	Di-Sodium Phosphate Skin Irritation 2, H315	1 – 4%
CAS: 64742-55-8	Mineral oil, light paraffinic Carcinogenicity 1B, H350	≤ 1%
CAS: 14808-60-7	Crystalline Silica Carcinogenicity 1A, H350; Specific Target Organ Toxicity - Repeated Exposure 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:** Use fire fighting measures that suit the environment.

- 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.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/09/2024

Reviewed on 03/21/2024

Trade name: ST-3® Thread Sealant

(Contd. of page 2)

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures

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:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

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.

Open and handle receptacle with care.

Prevent formation of aerosols.

- Information about protection against explosions and fires: 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 section 7.

- Control parameters

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

At this time, the other constituents have no known exposure limits.

CAS: 1332-58-7 Kaolin

PEL Long-term value: 15* 5** mg/m³
*total dust **respirable fraction

REL Long-term value: 10* 5** mg/m³
*total dust **respirable fraction

TLV Long-term value: 2* mg/m³
E; as respirable fraction, A4

CAS: 12001-26-2 Mica

PEL Long-term value: 20 mppcf ppm
<1% crystalline silica

REL Long-term value: 3* mg/m³
*respirable dust; containing < 1% quartz

TLV Long-term value: 0.1 mg/m³
*resp.fraction

CAS: 111-76-2 2-butoxyethanol

PEL Long-term value: 240 mg/m³, 50 ppm
Skin

REL Long-term value: 24 mg/m³, 5 ppm
Skin

TLV Long-term value: 20 ppm
BEI, A3

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/09/2024

Reviewed on 03/21/2024

Trade name: ST-3® Thread Sealant

(Contd. of page 3)

CAS: 14808-60-7 Crystalline Silica	
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 *respirable particulate matter, A2
- Ingredients with biological limit values:	
CAS: 111-76-2 2-butoxyethanol	
BEI	200 mg/g creatinine Medium: urine Time: end of shift Parameter: Butoxyacetic acid (BAA) (with hydrolysis)

- **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.
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:** Required use of safety glasses

- **Body protection:** Protective work clothing

9 Physical and chemical properties

- Information on basic physical and chemical properties	
- General Information	
- Appearance:	
- Form:	Liquid
- Color:	White
- Odor:	Characteristic
- Odor threshold:	Not determined.
- pH-value at 20 °C (68 °F):	7.49
- Change in condition	
- Melting point/Melting range:	Undetermined.
- Boiling point/Boiling range:	≥ 100 °C (≥ 212 °F)
- Flash point:	150 °C (302 °F)
- Flammability (solid, gaseous):	Not applicable.
- Decomposition temperature:	Not determined.
- Ignition temperature:	Product is not selfigniting.
- Danger of explosion:	Product does not present an explosion hazard.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/09/2024

Reviewed on 03/21/2024

Trade name: ST-3® Thread Sealant

(Contd. of page 4)

- Explosion limits:	
- Lower:	Not determined.
- Upper:	Not determined.
- Vapor pressure at 20 °C (68 °F):	≤ 23.4 hPa (≤ 17.6 mm Hg)
- Density at 20 °C (68 °F):	~ 1.56691 g/cm ³ (~ 13.07586 lbs/gal)
- 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 at 20 °C (68 °F):	900 mPas
- Kinematic:	Not determined.
- Solvent content:	
- Organic solvents:	1.9 %
- Water:	11.5 %
- VOC content:	1.91 %
	~ 29.9 g/l / ~ 0.25 lb/gal
- Solids content:	29.7 %
- 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:**

ATE (Acute Toxicity Estimate)

Oral	LD50	62,827 mg/kg
Dermal	LD50	20,942 mg/kg
Inhalative	LC50/4 h	157 mg/l

Acrylic polymer

Oral	LD50	> 5,000 mg/kg (rat)
Dermal	LD50	> 5,000 mg/kg (rabbit)

Acrylic polymer

Oral	LD50	> 5,000 mg/kg (rat)
Dermal	LD50	> 5,000 mg/kg (rabbit)

CAS: 111-76-2 2-butoxyethanol

Oral	LD50	1,200 mg/kg (ATE)
		1,480 mg/kg (rat)
Dermal	LD50	400 mg/kg (rab)
Inhalative	LC50/4 h	3 mg/l (ATE)

CAS: 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.

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/09/2024

Reviewed on 03/21/2024

Trade name: ST-3® Thread Sealant

(Contd. of page 5)

- 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)**

CAS: 13463-67-7	titanium dioxide	2B
CAS: 9002-84-0	Polytetrafluoroethylene	3
CAS: 111-76-2	2-butoxyethanol	3
CAS: 7631-86-9	Silicon dioxide, Untreated fumed	3
CAS: 14808-60-7	Crystalline Silica	1

- NTP (National Toxicology Program)

CAS: 14808-60-7	Crystalline Silica	K
-----------------	--------------------	---

- 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.**- 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.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/09/2024

Reviewed on 03/21/2024

Trade name: ST-3® Thread Sealant

(Contd. of page 7)

- NFPA ratings (scale 0 - 4)

Health = 2
 Fire = 1
 Reactivity = 0

- Date of preparation / last revision 04/09/2024**- Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 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)
 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
 BEI: Biological Exposure Limit
 Flammable Liquids 4: Flammable liquids – Category 4
 Acute Toxicity - Oral 4: Acute toxicity – Category 4
 Acute Toxicity - Dermal 3: Acute toxicity – Category 3
 Skin Irritation 2: Skin corrosion/irritation – Category 2
 Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A
 Eye Irritation 2B: Serious eye damage/eye irritation – Category 2B
 Carcinogenicity 1A: Carcinogenicity – Category 1A
 Carcinogenicity 1B: Carcinogenicity – Category 1B
 Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3
 Specific Target Organ Toxicity - Repeated Exposure 1: Specific target organ toxicity (repeated exposure) – Category 1

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