



Printing date 07/17/2015 Reviewed on 07/17/2015

1 Identification

- Product identifier

- Trade name: ST-3® Thread Sealant

Synonyms: ST-3-WPart number: ST3W

- Relevant identified uses of the substance or mixture Thread 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.

STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

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-determining components of labeling:

Acrylic polymer Acrylic polymer Acrylic emulsion

- Hazard statements

H315+H320 Causes skin and eye irritation.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P280 Wear protective gloves.
P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a poison center/doctor if you feel unwell.
P332+P313 If skin irritation occurs: Get medical advice/att

P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

(Contd. of page 1)

Safety Data Sheet acc. to OSHA HCS

Printing date 07/17/2015 Reviewed on 07/17/2015

Trade name: ST-3® Thread Sealant

- Classification system:

NFPA ratings (scale 0 - 4)



- HMIS-ratings (scale 0 - 4)



Fire = 1 REACTIVITY Reactivity = 0

- 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.

- Dange	rous components:	
	Acrylic polymer	30-40%
	Polymer	10-20%
	Kaolin Clay	10-20%
12001-26-2	Mica	5-10%
	Titanium dioxide	5-10%
	Acrylic polymer	1-5%
	Acrylic emulsion	1-5%
	2-butoxyethanol	1-5%
64742-55-8	Mineral oil, light paraffinic	≤ 1.00%

4 First-aid measures

- Description of first aid measures
 - 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. 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. 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.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures

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:

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

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Dispose of the collected material according to regulations.

Printing date 07/17/2015 Reviewed on 07/17/2015

Trade name: ST-3® Thread Sealant

(Contd. of page 2)

- 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 item 7.
- Control parameters

- (- Components with limit values that require monitoring at the workplace:		
Kaol	Kaolin Clay		
PEL	Long-term value: 15* 5** mg/m³ *total dust **respirable fraction		
REL	Long-term value: 10* 5** mg/m³ *total dust **respirable fraction		
1200	1-26-2 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: 3* mg/m³ *as respirable fraction		
Titar	ium dioxide		
PEL	Long-term value: 15 mg/m³		
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: 97 mg/m³, 20 ppm BEI		
	- Ingredients with biological limit values:		
111-	76-2 2-butoxyethanol		
	200 mg/g creatinine Medium: urine		
	Time: end of shift Parameter: Butoxyacetic acid 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.

Avoid contact with the eyes and skin.

Printing date 07/17/2015 Reviewed on 07/17/2015

Trade name: ST-3® Thread Sealant

(Contd. of page 3)

- 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.

- 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 cher	mical properties
- General Information	
- Appearance:	
- Form:	Liquid
- Color:	White
- Odor: - Odour threshold:	Characteristic
- Odour 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:	150 °C (302 °F)
- Flammability (solid, gaseous):	Not applicable.
- Ignition temperature:	
- 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):	23.4 hPa (18 mm Hg)
- Density at 20 °C (68 °F):	1 g/cm³ (8.345 lbs/gal)
- Relative density	Not determined.
Vapour density	Not determined.
 Evaporation rate 	Not determined.
- Solubility in / Miscibility with	
- Water:	Not miscible or difficult to mix.
- Partition coefficient (n-octanol/wate	er): Not determined.
- Viscosity:	•
- Dynamic at 20 °C (68 °F):	900 mPas
- Kinematic:	Not determined.
Mileiliauc.	Not determined.

Printing date 07/17/2015 Reviewed on 07/17/2015

Trade name: ST-3® Thread Sealant

(Contd. of page 4)

18.8 g/l / 0.16 lb/gl

- Solids content: 60.0 %

- **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:

- L	D/LC50 v	alues that are relevant for classification:	
Acrylic po	Acrylic polymer		
Oral	LD50	>5000 mg/kg (rat)	
Dermal	LD50	>5000 mg/kg (rabbit)	
Polymer			
Oral	LD50	5000 mg/kg (rat)	
Dermal	LD50	5000 mg/kg (rabbit)	
Titanium	dioxide		
Oral	LD50	24000 mg/kg (rat)	
Dermal	LD50	10000 mg/kg (rabbit)	
Acrylic po	olymer		
Oral	LD50	>5000 mg/kg (rat)	
Dermal	LD50	>5000 mg/kg (rabbit)	
111-76-2	111-76-2 2-butoxyethanol		
Oral	LD50	1480 mg/kg (rat)	
Dermal	LD50	400 mg/kg (rab)	
Inhalative	LC50/4 h	11 mg/l (ATE)	

- Primary irritant effect:
 - on the skin: No irritant effect.
 - 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

- 12	ARC (International Agency for Research on Cancer)	
9002-84-0	Polytetrafluoroethylene	3
111-76-2	2-butoxyethanol	3
112926-00-8	Precipitated silica (Silica-Amorphous)	3
- ^	ITP (National Toxicology Program)	
None of the in	ngredients is listed.	
- (DSHA-Ca (Occupational Safety & Health Administration)	
None of the in	ngredients is listed.	

(Contd. on page 6)

Printing date 07/17/2015 Reviewed on 07/17/2015

Trade name: ST-3® Thread Sealant

(Contd. of page 5)

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 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.

- 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 M. and the IBC Code	ARPOL73/78 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
Modified polysiloxane
- TSCA (Toxic Substances Control Act):
Kaolin Clay
Polytetrafluoroethylene
2-butoxyethanol
Mineral oil, light paraffinic
Di-Sodium Phosphate
Modified polysiloxane

Printing date 07/17/2015 Reviewed on 07/17/2015

Trade name: ST-3® Thread Sealant

(Contd. of page 6) Surfactant Deionized water - Proposition 65 Chemicals known to cause cancer: Acrylic polymer Acrylic polymer Surfactant 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:

- Carcinogenic categories

NL
A
A3

- 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

Surfactant

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 07/17/2015 / 5
 - 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 percel LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

- * 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.