



Safety Data Sheet

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Version 2.0

Section 1 - Chemical Product and Company Identification

1.1 Product/Chemical Name:

Product Form: Mixture
 Product Name: SLIPS® Foul-Protect™ N1x Part A (White)
 Product Code: N/A
 Formula: Mixture
 Synonyms: Reservoir SLIPS
 Chemical Family: Unspecified

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of substance/mixture Use for creating anti-fouling lubricious surface. For professional use only.

1.3 Details of the supplier of the safety data sheet

Adaptive Surface Technologies
 85 Bolton St
 Cambridge MA, 02140
 USA
 Phone (617) 360-7080
 info@adaptivesurface.tech

1.4 Emergency telephone number

Emergency Number: INFOTRAC – 24/7 Emergency Response for Incidents During Transport
 1-800-535-5053 (Inside U.S.) 1-352-323-3500 (Outside U.S.)

Section 2 - Hazards Identification

2.1 Classification of the substance or mixture**Classification (GHS-US)**

Toxic to reproduction Category 2 (H361)

2.2 Label elements**GHS-US labeling**

Signal word (GHS-US) Warning
 Hazard statements (GHS-US) H361 Suspected of damaging fertility

Precautionary statements (GHS-US) : P201-Obtain special instructions before use
 P202- Do not handle until all safety precautions have been read and understood.

P280 – Wear protective gloves.
 P308+P313 If exposed and concerned: Get medical advice.
 P405 Store locked up.
 P501- Dispose of contents/container to an approved waste disposal plant

2.3 Other Hazards

None known

Section 3 - Composition / Information on Ingredients**3.1 Substance**

Not applicable

3.2 Mixture

Name	Product Identifier	%	Classification (GHS-US)
Silanol Terminated polydimethylsiloxane	(CAS) 70131-67-8	60-70%	Not Classified
Titanium(IV) oxide	13463-67-7	20-25%	Carcinogen 2, H351
Octamethylcyclotetrasiloxane	(CAS) 556-67-2	< 2-5%	Flam. Liq. 3, H226 Repro 2, H361
3-{2-[Acetoxy (polyethyleneoxy)propyl]} heptamethyltrisiloxane	(CAS) 125997-17-3	<3.4%	Flam. Liq. 4, H227 Eye Irrit. 2A, H319

Full text of H-phrases: see section 16

Note: The titanium dioxide in this product is inextricably bound in the paint matrix so the carcinogen classification does not apply.

Section 4 - First Aid Measures**4.1 Description of first aid measures**

First-aid measures general	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
First-aid measures after skin contact	Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.
First-aid measures after eye contact	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Obtain medical attention if irritation persists.
First-aid measures after ingestion	Do not induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor.

4.1 Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	May cause minor respiratory irritation.
Symptoms/injuries after skin contact	May cause mild skin irritation.
Symptoms/injuries after eye contact	May cause mild eye irritation.
Symptoms/injuries after ingestion	Ingestion may cause gastrointestinal irritation.

Chronic symptoms	Contains a chemical that is suspected to adversely affect fertility.
4.3. Indication of any immediate medical attention and special treatment needed	
Immediate medical attention is generally not required. If medical advice is needed, have product container or label at hand.	
Section 5 - Fire-Fighting Measures	
5.1 Extinguishing media	
Suitable extinguishing media	Water spray. Water fog, Foam, Carbon dioxide. Dry chemical.
Unsuitable extinguishing media	None known
5.2 Special hazards arising from the substance or mixture	
Fire hazard:	Not considered flammable but will burn at high temperatures. Irritating fumes and organic acid vapors may develop under high temperatures.
Explosion hazard:	Product is not explosive.
Reactivity:	Hazardous reactions will not occur under normal conditions
5.3 Advice for firefighters	
Precautionary measures fire	Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.
Firefighting instructions	Use water spray or fog for cooling exposed containers. Do not allow run-off from firefighting to enter drains or water courses.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	Refer to Section 9 for flammability properties
Section 6 - Accidental Release Measures	
6.1 Personal precautions, protective equipment and emergency procedures	
General measures	Avoid all contact with skin, eyes, or clothing. Do not breathe vapor, mist or spray.
6.1.1 For non-emergency personnel	
Protective equipment	Use appropriate personal protection equipment (PPE).
Emergency procedures	Evacuate unnecessary personnel.
6.1.2 For emergency responders	
Protective equipment	Equip cleanup crew with proper protection (see Section 8).
Emergency procedures	Stop leak if safe to do so. Ventilate area.
6.2 Environmental precautions	
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.	
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. Clear up spills immediately and dispose of waste safely.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

Section 7 - Handling and Storage

7.1. Precautions for safe handling

Additional hazards when processed

Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

Hygiene measures

Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

Comply with applicable regulations.

Storage conditions

Store in a dry, cool and well-ventilated place. Keep container tightly closed.

Incompatible products

Oxidizing agents

7.3. Specific end use(s)

Use for creating anti-fouling lubricious surface. For professional use only.

Section 8 - Exposure Controls / Personal Protection

8.1 Control parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

Components with workplace control parameters

Component	CAS-No.	Value	Control Parameters	Basis
Titanium(IV) oxide	13463-67-7	TWA	10 mg/m ³	USA ACGIH TLV
		TWA	15 mg/m ³ (total duct)	USA OSHA PEL

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment

Hand protection	Wear protective gloves made of neoprene or nitrile rubber.
Eye protection	Chemical goggles or safety glasses.
Skin and body protection	Wear suitable protective clothing as needed to avoid skin contact . Wash contaminated clothing before reuse.
Respiratory protection	Use a NIOSH-approved respirator with dust/mist/organic vapor cartridges or self-contained breathing apparatus whenever exposures are excessive.
Section 9 - Physical and Chemical Properties	
9.1. Information on basic physical and chemical properties	
Physical state	Liquid
Appearance	White liquid
Odor	Mild
Odor threshold	No data available
pH	No data available
Evaporation Rate	No data available
Melting point	<-60°C (-76°F)
Freezing point	No data available
Boiling point	>205°C (401°F)
Flash point	205°C (401°F)
Auto-ignition Temperature	490°C (914°F)
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapor pressure	No data available
Relative vapor density at 20 °C	No data available
Relative density	No data available
Specific Gravity	0.9 – 1.1
Solubility	No data available
Partition coefficient: n-octanol/water	No data available
Viscosity	100-200 cP
9.2 Other information	
VOC content	< 3 %
Section 10 - Stability and Reactivity	
10.1 Reactivity	
Hazardous reactions will not occur under normal conditions.	
10.2 Chemical stability	
Stable at standard temperature and pressure.	
10.3 Possibility of hazardous reactions	
Hazardous polymerization will not occur.	
10.4 Conditions to avoid	
Direct sunlight. Extremely high or low temperatures. Incompatible materials.	

10.5 Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

10.6 Hazardous decomposition products

Silicon oxides. Carbon oxides (CO, CO₂). Organic acids. Will decompose above 150 °C (>300° F) releasing formaldehyde vapors. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

Section 11- Toxicological Information**11.1 Information on toxicological effects**

Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified. Titanium dioxide is classified by IARC as a 2B carcinogen. Titanium dioxide only causes cancer through inhalation of respirable particles. Since the titanium dioxide is inextricably bound in the paint matrix and no inhalation exposure can occur under normal conditions of use or a foreseeable emergency, no classification is required.
Reproductive toxicity	Contains Octamethylcyclotetrasiloxane which is suspected of damaging fertility based on animal data.
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration hazard	Not classified
May cause minor respiratory irritation.	
Symptoms/injuries after skin contact	May cause mild skin irritation.
Symptoms/injuries after eye contact	May cause mild eye irritation.
Symptoms/injuries after ingestion	Ingestion may cause gastrointestinal irritation.
Chronic symptoms	Contains a chemical that is suspected to adversely affect fertility.

Section 12 – Ecological Information**12.1 Toxicity**

No additional information available

12.2 Persistence and degradability

No additional information available

12.3 Bioaccumulative potential

No additional information available

12.4 Mobility in soil	
No additional information available	
12.5 Other adverse effects	
Other information	Avoid release to the environment.
Section 13 – Disposal considerations	
13.1 Waste treatment methods	
Waste disposal recommendations	Dispose of waste material in accordance with all local, regional, national, and international regulations.
Section 14 – Transport information	
In accordance with DOT / IMDG / IATA	
14.1 UN number	
Not applicable	
14.2 UN proper shipping name	
Not applicable	
14.3 Additional information	
Other information	No supplementary information available.
Transport by sea	
No additional information available	
Air transport	
No additional information available	
Section 15 – Regulatory information	
US Federal regulations	
TSCA: This product contains a substance that is not on the TSAC inventory. This material is supplied for research and development purposes subject to the R&D exemption under TSCA, 40 CFR 720.36, and must meet the requirements of the exemption, including supervision by a “technically qualified individual” as defined by 40 CFR 720.3(ee). The use of this material for “commercial purposes” as defined by 40 CFR 720.3 [®] is not permitted in the United States. This product is subject to export notification.	
EPA SARA 302: This product does not contain chemicals regulated under SARA Section 302.	
EPA SARA 311 HAZARD CLASSIFICATION: Refer to Section 2 for the OSHA Hazard Classification.	
EPA SARA 313: This product contains the following chemicals that are regulated under SARA Title III, section 313: None	
US State regulations	
This product is not known to contain chemicals regulated under California Proposition 65.	

EU Regulations: This product is classified and labeled in accordance with EC CLP. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006 (REACH)

Section 16 – Other information

Revision date 02/20/2019
 Other information This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Full text of H-phrases

Flam. Liq	Flammable Liquid
Repro	Reproductive Toxicity
H227	Combustible Liquid
H226	Flammable liquid and vapor
H319	Causes serious eye irritation.
H315	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.

NFPA health hazard 1
 NFPA fire hazard 1
 NFPA reactivity 0

We believe that the information contained herein is current as of the date of this Safety Data Sheet and is offered in good faith. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of Adaptive Surface Technologies, it is the user's obligation to determine the conditions of safe use of the product.