



PRODUCT: TYTAN™ HT3

Material Safety Data Sheet

1. Company and Product Identification

Product type: TYTAN™ HIGH TEMPERATURE RED SILICONE SEALANT

Product description: Silicone Elastomer

National Fire Protection Association (NFPA) Profile
Health: 2
Flammability: 1
Instability/Reactivity: 0

Manufacturer: SELENA USA, Inc.
21715 Beck Drive,
Elkhart, IN 46516
USA

Phone number: (574)-523-0400; (877)-735-3627(toll free)

Emergency phone number: CHEMTREC +1 (800) 424-9300

Website: www.SelenaUSA.com

2. Hazards Identification

Potential health effects

Acute Effects:

Eye: Direct contact may cause moderate irritation.

Skin: May cause moderate irritation.

Inhalation: Material is not likely to present an inhalation hazard at ambient conditions. However, if material is heated or high vapor/aerosol concentrations are attained, central nervous system depression may occur, which is characterized by drowsiness, dizziness, confusion or loss of coordination.

Oral: Low ingestion hazard in normal use.

Prolonged/Repeated Exposure Effects:

Skin: No known applicable information.

Inhalation: No known applicable information.

Oral: No known applicable information.

Signs and Symptoms of Overexposure: Not known applicable information.

Medical Conditions Aggravated by Exposure: Not known applicable information.



PRODUCT: TYTAN™ HT3

3. OSHA Hazard Components

<u>CAS Number</u>	<u>Wt [%]</u>	<u>Component name</u>
17689-77-9	1.0÷5.0	Ethyltriacetoxysilane
4253-34-3	1.0÷5.0	Methyltriacetoxysilane

The above components are hazardous as defined in 29 CFR 1910.1200

4. First Aid Measures

- Eye:** Immediately flush with water for 15 minutes. Get medical attention.
- Skin:** Remove from skin and wash thoroughly with soap and water or waterless cleanser. Get medical attention if irritation or other ill effects develop or persist.
- Inhalation:** Material is not likely to present an inhalation hazard at ambient conditions. If material is heated or vapor/mist/dust/fumes are generated, care should be taken to prevent inhalation. In case of exposure to vapor/mist/dust/fumes, move to fresh air.
- Oral:** No first should be needed.
- Comments:** Treat according to person's condition and specifics of exposure.

5. Fire-Fighting Measures

- Flash Point:** >212°F />100°C (Closed Cup)
- Autoignition Temperature:** Not determined.
- Flammability Limits in Air:** Not determined.
- Extinguishing Media:** On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO₂), dry chemical or water spray. Water can be used to cool fire exposed containers.
- Fire Fighting Measure:** Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to our local emergency plan. Use water spray to keep fire exposed containers cool.
- Usual fire hazards:** None



PRODUCT: TYTAN™ HT3

6. Accidental Release Measures

Containment/ Clean up: Observe all personal protection equipment recommendations described in Sections 5 and 8. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements

Note: See section 8 for Personal Protective Equipment for Spills. For additional information call the numbers provided in section 1.

7. Handling and Storage

Handling: Use with adequate ventilation. Product evolves acetic acid (HOAc) when exposed to water or humid air. Provide ventilation during use to control HOAc within exposure guidelines or use respiratory protection. Avoid eye contact. Avoid skin contact. Do not take internally. Avoid breathing vapor. Keep container closed.

Storage: Use reasonable care and store away from oxidizing materials. Keep container closed and store away from water or moisture.

8. Exposure Control / Personal Protection

Component exposure limits:

<u>CAS Number</u>	<u>Component Name</u>	<u>Exposure Limits</u>
17689-77-9	Ethyltriacetoxysilane	See acetic acid comments
4253-34-3	Methyltriacetoxysilane	See acetic acid comments

Acetic acid is formed upon contact with water or humid air. Provide adequate ventilation to control exposure within guidelines of OSHA PEL: TWA: 10ppm; ACGIH TLV: TWA 10ppm; STEL: 15ppm.

Engineering measures:

Local ventilation: recommended.
General ventilation: recommended.

Personal protective equipment for usual handling:

Eyes: Use proper protection – safety glasses as a minimum.
Skin: Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.



PRODUCT: TYTAN™ HT3

Suitable
Gloves: Butyl Rubber, Nitrile Rubber.
Inhalation: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. IH personnel can assist in judging the adequacy of existing engineering controls.

Suitable respirator: Respiratory protection is not needed under ambient conditions. If vapor/mist/dust/fumes are generated when material is heated or handled, the following is advised. General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.

Personal protective equipment for spills

Eyes: Use full face respirator.
Skin: Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.

Inhalation/Suitable Respirator: Respiratory protection recommended. Follow OSHA Respirator Regulations (29 CFR 1910.134) and use NIOSH/MHSA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Precautionary measures: Avoid eye contact. Avoid skin contact. Avoid breathing vapor. Keep container closed. Do not take internally. Use reasonable care.
Comments: Product evolves acetic acid (HOAc) when exposed to water or humid air. Provide ventilation during use to control HOAc within exposure guidelines or use respiratory protection. When heated to temperature above 150°C (300°F) in the presence of air, product may form formaldehyde vapor. Physical and health hazard information is readily available from Selena USA, Inc. and the Material Safety Data Sheet.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions

9. Physical and Chemical Properties

Physical form: Paste
Color: RED
Odor: Acetic acid odor
Specific gravity@25°C: 1.007 g/cm³
Viscosity: Not determined



PRODUCT: TYTAN™ HT3

Freezing/Melting Point:	Not determined
Boiling Point:	Not determined
Vapor Pressure@25°C:	Not determined
Vapor density:	Not determined
Solubility in Water:	Not determined
pH:	Not determined
Volatile Content:	Not determined
Flash Point:	>212°F/>100°C (Closed Cup)

Note: The above information is not intended for use in preparing product specification.

10. Stability and Reactivity

Chemical stability:	Stable.
Hazardous polymerization:	Hazardous polymerization will not occur.
Conditions to avoid:	None.
Materials to avoid:	Oxidizing material can cause a reaction. Water, moisture, or humid air can cause hazardous vapors to form as described in Section 8.

11. Toxicological Information

Special hazard information on components:

No known applicable information.



PRODUCT: TYTAN™ HT3

12. Ecological Information

Environmental Fate and Distribution

Complete information is not yet available.

Environmental Effects

Complete information is not yet available.

Fate and Effects in Waste Water Treatment Plants

Complete information is not yet available.

Ecotoxicity Classification Criteria

Hazard Parameters (LC50 or EC50)	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	<=1	>1 and <=100	>100
Acute Terrestrial Toxicity	<=100	>100 and <= 2000	>2000

This table is adapted from "Environmental Toxicology and Risk Assessment", ASTM STP 1179, p.34, 1993. This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

13. Disposal Consideration

RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a hazardous waste?

No.

State or local laws may impose additional regulatory requirements regarding disposal.

14. Transport Information

DOT Road Shipment Information (49 CFR 172.101)

not required

Ocean Shipment (IMDG)

not required

Air Shipment (IATA)

not required



PRODUCT: TYTAN™ HT3

15. Regulatory Information

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings:

Section 302 Extremely Hazardous Substances (40 CFR 355):

None.

Section 304 CERCLA Hazardous Substances (40 CFR 302):

None.

Section 311/312 Hazard Class (40 CFR 370):

Acute: Yes

Chronic: No

Fire: No

Pressure: No

Reactive: No

Section 313 Toxic Chemicals (40 CFR 372):

None present or none present in regulated quantities.

Regulatory VOC: 30 g/l

Supplemental State Compliance Information

California

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None known.

Massachusetts

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
7631-86-9	7.0 ÷ 13.0	Silica, amorphous
1333-86-4	<= 2.0	Carbon black
13463-67-7	<= 1.8	Titanium dioxide
1309-37-1	<= 1.0	Iron oxide

New Jersey

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
70131-67-8	> 60.0	Dimethyl siloxane, hydroxyl-terminated
7631-86-9	7.0 ÷ 13.0	Silica, amorphous
64742-46-7	<= 6.9	Hydrotreated middle petroleum distillates
17689-77-9	1.0 ÷ 5.0	Ethyltriacetoxysilane
63148-2-9	1.0 ÷ 5.0	Polydimethylsiloxane
1333-86-4	<= 2.0	Carbon black
1309-37-1	<= 1.0	Iron oxide



PRODUCT: TYTAN™ HT3

147-14-8	<= 2.0	Tetrabenz-5,10,15,20-diazaporphyrinephthalocyanine (Pigment blue 15)
4253-34-3	1.0 ÷ 5.0	Methyltriacetoxysilane
13463-67-7	<= 1.8	Titanium dioxide
1309-37-1	<= 1.0	Iron oxide
Pennsylvania		
<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
70131-67-8	> 60.0	Dimethyl siloxane, hydroxyl-terminated
7631-86-9	7.0 ÷ 13.0	Silica, amorphous
64742-46-7	<= 6.9	Hydrotreated middle petroleum distillates
1333-86-4	<= 2.0	Carbon black
13463-67-7	<= 1.8	Titanium dioxide
1309-37-1	<= 1.0	Iron oxide

16. Other information

All information, recommendation or advice contained in this document or given by Selena Co. SA or any of its subsidiaries, affiliates or authorized representatives, whether written or oral, is given in good faith, to the best of its knowledge and based on current procedure in effect. Each user of the product shall convince himself, through all available sources (including finished product testing in its appropriate environment) of the suitability of the product supplied for its own particular purpose. Selena Co. SA, its subsidiaries and affiliates cannot be held responsible for any loss incurred through incorrect or faulty use of the product. The Material Safety Data Sheet related excessively to the described product. In case of applying it as a component of the other product, the MSDS is no more valid.