

Revision Date 24-Apr-2015

Version 1

SAFETY DATA SHEET

| 1. IDENTIFICATION | | |
|---------------------------------------|--|--|
| Product identifier | | |
| Product Name | 14D THREAD SEALANT WITH PTFE 16 FL.OZ. | |
| Other means of identification | | |
| Product Code | 80633 | |
| Synonyms | None | |
| Recommended use of the chemical | and restrictions on use | |
| Recommended Use | Sealant | |
| Uses advised against | No information available | |
| Details of the supplier of the safety | data sheet | |
| Manufacturer Address | Distributor | |
| ITW Permatex | ITW Permatex Canada | |
| 10 Columbus Blvd. | 35 Brownridge Road, Unit 1 | |
| Hartford, CT 06106 USA | Halton Hills, ON Canada L7G 0C6 | |
| | Telephone: (800) 924-6994 | |
| Company Phone Number | 1-87-Permatex | |
| | (877) 376-2839 | |
| 24 Hour Emergency Phone Number | | |
| | International Emergency: | |
| | 00+1+ 813-248-0585 | |
| | Contract Number: MIS0003453 | |
| E-mail address | mail@permatex.com | |
| | 2. HAZARDS IDENTIFICATION | |

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

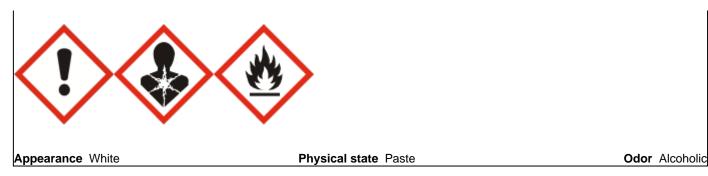
| Acute toxicity - Oral | Category 4 |
|--|------------|
| Carcinogenicity | Category 2 |
| Specific target organ toxicity (single exposure) | Category 1 |
| Flammable liquids | Category 3 |

Label elements

Danger

Emergency Overview

Harmful if swallowed May cause cancer Causes damage to organs Flammable Liquid



Precautionary Statements - Prevention

Obtain special instructions before use Do not handle until all safety precautions have been read and understood Use personal protective equipment as required Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Do not breathe dust/fume/gas/mist/vapors/spray Keep away from heat/sparks/open flames/hot surfaces. — No smoking Keep container tightly closed Take precautionary measures against static discharge

Precautionary Statements - Response

IF exposed: Call a POISON CENTER or doctor/physician Specific treatment (see supplemental first aid instructions on this label) IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth In case of fire: Use Water spray, fog or regular foam for extinction

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Harmful to aquatic life with long lasting effects.

Unknown acute toxicity

65.99515% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

substance(s)

| Chemical Name | CAS No | Weight-% | Trade Secret |
|-------------------------|------------|----------|--------------|
| TALC | 14807-96-6 | 15 - 40 | * |
| ETHANOL | 64-17-5 | 10 - 30 | * |
| CASTOR OIL | 8001-79-4 | 10 - 30 | * |
| POLYVINYL RESIN | 63148-65-2 | 5 - 10 | * |
| 2-PROPANOL | 67-63-0 | 1 - 5 | * |
| TITANIUM DIOXIDE | 13463-67-7 | 1 - 5 | * |
| METHANOL | 67-56-1 | 1 - 5 | * |
| POLYTETRAFLUOROETHYLENE | 9002-84-0 | 1 - 5 | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

| Description of first aid measures | | | | |
|--|--|--|--|--|
| General advice | Get medical advice/attention if you feel unwell. | | | |
| Eye contact | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. | | | |
| Skin contact | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with soap and water. If symptoms persist, call a physician. | | | |
| Inhalation | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician. | | | |
| Ingestion | IF SWALLOWED:. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician. | | | |
| Self-protection of the first aider | Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. | | | |
| Most important symptoms and effe | ects, both acute and delayed | | | |
| Symptoms | See section 2 for more information. | | | |
| Indication of any immediate medical attention and special treatment needed | | | | |
| Note to physicians | Treat symptomatically. | | | |
| | 5. FIRE-FIGHTING MEASURES | | | |
| <u>Suitable extinguishing media</u> Carbon dioxide (CO2), Dry chemical, | Foam | | | |
| Unsuitable extinguishing media None. | | | | |
| Specific hazards arising from the c Flammable. Keep product and empty | hemical container away from heat and sources of ignition. | | | |
| <u>Explosion data</u> Sensitivity to Mechanical Impact Sensitivity to Static Discharge | None. None. | | | |
| Protective equipment and precautions for firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. | | | | |
| | 6. ACCIDENTAL RELEASE MEASURES | | | |
| Personal precautions, protective en | quipment and emergency procedures | | | |

Personal precautionsRemove all sources of ignition. Use personal protective equipment as required. Ensure
adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing.
Wash thoroughly after handling.

Environmental precautions

Environmental precautions Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

| Methods for containment | Prevent further leakage or spillage if safe to do so. | | |
|--|---|--|--|
| Methods for cleaning up | Eliminate all ignition sources if safe to do so. Ensure adequate ventilation. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. | | |
| Prevention of secondary hazards | Clean contaminated objects and areas thoroughly observing environmental regulations. | | |
| | 7. HANDLING AND STORAGE | | |
| Precautions for safe handling | | | |
| Advice on safe handling | Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use personal protective equipment as required. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. | | |
| Conditions for safe storage, including any incompatibilities | | | |
| Storage Conditions | Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Store locked up. | | |
| Incompatible materials | Strong oxidizing agents | | |
| 8. EXPOSURE CONTROLS/PERSONAL PROTECTION | | | |

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--------------------------------|--|--|--|
| TALC 14807-96-6 | TWA: 2 mg/m ³ particulate matter containing no asbestos and <1% crystalline silica, respirable fraction | (vacated) TWA: 2 mg/m ³ respirable dust <1% Crystalline silica, containing no Asbestos TWA: 20 mppcf if 1% Quartz or more, use Quartz limit | IDLH: 1000 mg/m ³ TWA: 2 mg/m ³ containing no Asbestos and <1% Quartz respirable dust |
| ETHANOL 64-17-5 | STEL: 1000 ppm | TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³ | IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m³ |
| 2-PROPANOL 67-63-0 | STEL: 400 ppm TWA: 200 ppm | TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³ | IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³ |
| TITANIUM DIOXIDE 13463-67-7 | TWA: 10 mg/m ³ | TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust | IDLH: 5000 mg/m ³ |
| METHANOL 67-56-1 | STEL: 250 ppm TWA: 200 ppm S* | TWA: 200 ppm TWA: 260 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m ³ (vacated) S* | IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³ |

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls

Showers Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

| Eye/face protection | Wear safety glasses with side shields (or goggles). |
|--------------------------------|--|
| Skin and body protection | Wear protective gloves and protective clothing. |
| Respiratory protection | Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate. |
| General Hygiene Considerations | Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended. |

9. PHYSICAL AND CHEMICAL PROPERTIES

Remarks • Method

Tag Closed Cup Butyl acetate = 1

Air = 1

Information on basic physical and chemical properties

| Physical state | Paste |
|--|---|
| Appearance | White |
| Odor | Alcoholic |
| Odor threshold | No information available |
| Property pH Melting point / freezing point Boiling point / boiling range Flash point Evaporation rate Flammability (solid, gas) Flammability Limit in Air | <u>Values</u> No information available No information available 82 °C / 180 °F 23 °C / 74 °F < 1 No information available |
| Upper flammability limit: | 12.7% |
| Lower flammability limit: | 2.3% |
| Vapor pressure | 33 mm Hg @ 68°F |
| Vapor density | >1 |
| Relative density | 1.06-1.10 |
| Water solubility | Partially soluble |
| Solubility in other solvents | No information available |
| Partition coefficient | No information available |
| Autoignition temperature | No information available |
| Decomposition temperature | No information available |
| Kinematic viscosity | No information available |
| Dynamic viscosity | No information available |
| Explosive properties | No information available |
| Oxidizing properties | No information available |
| Other Information Softening point Molecular weight VOC Content (%) Density Bulk density | No information available No information available 36.7% No information available No information available |

10. STABILITY AND REACTIVITY

Reactivity No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents

Hazardous Decomposition Products

Carbon oxides Fluorides

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| Inhalation | Harmful by inhalation. |
|--------------|--|
| Eye contact | Contact with eyes may cause irritation. May cause redness and tearing of the eyes. |
| Skin contact | May cause skin irritation and/or dermatitis. |
| Ingestion | May be harmful if swallowed. |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------------------|---------------------|------------------------|--|
| ETHANOL 64-17-5 | = 7060 mg/kg (Rat) | - | = 124.7 mg/L (Rat)4 h |
| 2-PROPANOL 67-63-0 | = 1870 mg/kg (Rat) | = 4059 mg/kg (Rabbit) | = 72600 mg/m³(Rat)4 h |
| TITANIUM DIOXIDE 13463-67-7 | > 10000 mg/kg (Rat) | - | - |
| METHANOL 67-56-1 | = 6200 mg/kg (Rat) | = 15800 mg/kg (Rabbit) | = 22500 ppm (Rat) 8 h = 64000 ppm (Rat) 4 h |

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| Sensitization Germ cell mutagenicity Carcinogenicity | No information No information No information No information The table be | | agency has listed any ing | redient as a carcinogen |
|--|--|----------|---------------------------|-------------------------|
| Chemical Name | ACGIH | IARC | NTP | OSHA |
| TALC 14807-96-6 | - | Group 3 | - | - |
| ETHANOL 64-17-5 | A3 | Group 1 | Known | Х |
| 2-PROPANOL 67-63-0 | - | Group 1 | - | Х |
| TITANIUM DIOXIDE 13463-67-7 | - | Group 2B | - | Х |
| POLYTETRAFLUOROETHY LENE 9002-84-0 | - | Group 3 | - | - |

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans

Not classifiable as a human carcinogen

NTP (National Toxicology Program)

Known - Known Carcinogen

 OSHA (Occupational Safety and Health Administration of the US Department of Labor)

 X - Present

 Chronic toxicity
 May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. Contains a known or suspected reproductive toxin.

 Target Organ Effects
 Blood, Central nervous system, Central Vascular System (CVS), Eyes, Gastrointestinal tract (GI), Liver, Lungs, Reproductive System, Respiratory system, Skin.

The following values are calculated based on chapter 3.1 of the GHS document .

| ATEmix (oral) | 1811 | mg/kg |
|-------------------------------|------|-------|
| ATEmix (dermal) | 6521 | mg/kg |
| ATEmix (inhalation-dust/mist) | 11.7 | mg/l |

12. ECOLOGICAL INFORMATION

Ecotoxicity

35.44605% of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|-----------------------|--|---|--|
| TALC 14807-96-6 | - | 100: 96 h Brachydanio rerio g/L LC50 semi-static | - |
| ETHANOL 64-17-5 | - | 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through | 9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50 |
| 2-PROPANOL 67-63-0 | 1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50 | 11130: 96 h Pimephales promelas mg/L LC50 static 9640: 96 h Pimephales promelas mg/L LC50 flow-through 1400000: 96 h Lepomis macrochirus μg/L LC50 | 13299: 48 h Daphnia magna mg/L EC50 |
| METHANOL 67-56-1 | - | 28200: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static 19500 - 20700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 13500 - 17600: 96 h Lepomis macrochirus mg/L LC50 flow-through 18 - 20: 96 h Oncorhynchus mykiss mL/L LC50 static | - |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

| Chemical Name | Partition coefficient |
|---------------|-----------------------|
| ETHANOL | -0.32 |
| 64-17-5 | |
| 2-PROPANOL | 0.05 |
| 67-63-0 | |
| METHANOL | -0.77 |
| 67-56-1 | |

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

| Disposal of wastes | This material 261). | This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). | | |
|------------------------|---------------------|---|-------------------------------|------------------------|
| Contaminated packaging | Do not reuse | container. | | |
| US EPA Waste Number | D001 | | | |
| Chemical Name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
| METHANOL | - | Included in waste stream: | - | U154 |
| 67-56-1 | | F039 | | |

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name | California Hazardous Waste Status |
|---------------|-----------------------------------|
| ETHANOL | Toxic |
| 64-17-5 | Ignitable |
| 2-PROPANOL | Toxic |
| 67-63-0 | Ignitable |
| METHANOL | Toxic |
| 67-56-1 | Ignitable |

14. TRANSPORT INFORMATION

DOT

| UN/ID no Proper shipping name: Hazard Class Packing Group Emergency Response Guide Number | 1133 Adhesives, Limited Quantity (LQ) 3 III 128 |
|--|--|
| IATA UN/ID no Proper shipping name: Hazard Class ERG Code | ID 8000 Consumer commodity 9 9L |
| IMDG UN/ID no Proper shipping name: Hazard Class Packing Group EmS-No | 1133 Adhesives, Limited Quantity (LQ) 3 III F-E, S-D |

15. REGULATORY INFORMATION

| International Inventories | |
|---------------------------|-------------|
| TSCA | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Not Listed. |
| ENCS | Not Listed. |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |
| | |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

- IECSC China Inventory of Existing Chemical Substances
- **KECL** Korean Existing and Evaluated Chemical Substances
- PICCS Philippines Inventory of Chemicals and Chemical Substances
- AICS Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name | SARA 313 - Threshold Values % |
|-----------------------------------|-------------------------------|
| 2-PROPANOL - 67-63-0 | 1.0 |
| METHANOL - 67-56-1 | 1.0 |
| SARA 311/312 Hazard Categories | |
| Acute health hazard | Yes |
| Chronic Health Hazard | No |
| Fire hazard | Yes |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|---------------|--------------------------|----------------|--------------------------|
| METHANOL | 5000 lb | - | RQ 5000 lb final RQ |
| 67-56-1 | | | RQ 2270 kg final RQ |

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

| Chemical Name | California Proposition 65 |
|-----------------------------------|---------------------------|
| ETHANOL - 64-17-5 | Carcinogen |
| | Developmental |
| TITANIUM DIOXIDE - 13463-67-7 | Carcinogen |
| METHANOL - 67-56-1 | Developmental |
| METHYL ISOBUTYL KETONE - 108-10-1 | Carcinogen |
| | Developmental |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|--------------------------------------|------------|---------------|--------------|
| TALC 14807-96-6 | Х | X | X |
| ETHANOL 64-17-5 | Х | X | Х |
| 2-PROPANOL 67-63-0 | Х | X | Х |
| TITANIUM DIOXIDE 13463-67-7 | Х | X | X |
| WATER 7732-18-5 | - | - | X |
| METHANOL 67-56-1 | Х | X | X |
| POLYTETRAFLUOROETHYLENE 9002-84-0 | - | - | X |

| METHYL ISOBUTYL KETONE | Х | Х | Х |
|------------------------|---|---|---|
| 108-10-1 | | | |
| | | | |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

| NFPA | Health hazards 2 | Flammability 3 | Instability 0 | - |
|------|------------------|----------------|--------------------|-----------------------|
| HMIS | Health hazards 2 | Flammability 3 | Physical hazards 0 | Personal protection B |

NFPA (National Fire Protection Association) HMIS (Hazardous Material Information System)

Revision Date 24-Apr-2015

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet