

Permatex, Inc.  
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Hartford, CT 06106 USA  
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MATERIAL SAFETY DATA SHEET

# 1. Product Identification

Product Name: 14H THREAD SEALANT W/PTFE 4 FL.OZ.  
Item No: 80632  
Product Type: Sealant

# 2. Composition/Information on Ingredients

Component	Weight%	ACGIH; TLV-TWA	OSHA PEL
ETHANOL 64-17-5	20-40	1000 ppm	1000 ppm; 1900 mg/m
TALC 14807-96-6	20-40	2 mg/m	20 mppcf
CASTOR OIL 8001-79-4	20-40	Not listed	Not listed
POLYVINYL RESIN 63148-65-2	<10	Not listed	Not listed
2-PROPANOL 67-63-0	<5	200 ppm	400 ppm; 980 mg/m
TITANIUM DIOXIDE 13463-67-7	<3	10 mg/m	15 mg/m
METHANOL 67-56-1	<2	200 ppm	200 ppm; 260 mg/m
POLYTETRAFLUOROETHYLENE 9002-84-0	<2	Not listed	Not listed

# 3. Hazards Identification

Toxicity: May cause eye, skin and respiratory irritation. Methanol  
may cause blindness or death if swallowed.  
Primary Routes of Entry: Eye and skin contact, ingestion, inhalation  
Signs and Symptoms of Exposure: Excessive accidental exposure may cause headache,  
dizziness, nausea and mild respiratory irritation.  
Overexposure may cause eye and skin redness.

Component	Weight%	NTP	ACGIH Carcinogens	IARC
ETHANOL 64-17-5	20-40		A4-Not Classifiable as a human carcinogen	
TALC 14807-96-6	20-40	Male rat-some evidence, female rat-clear evidence, male mice-no evidence, female mice-no evidence	A4-Not classifiable as a human carcinogen	Group 3 Supplement 7, 1987 Monograph 42, 1987
2-PROPANOL 67-63-0	<5		A4-Not Classifiable as a human carcinogen	Group 3 Monograph 71, 1999; Supp.7, 1987; Monograph 15, 1977
TITANIUM DIOXIDE 13463-67-7	<3	male rat-negative , female rat-negative , male mice-negativ e, female mice-negativ e	A4	Group 2B; Vol 93, 2006; Vol 47, 1989
POLYTETRAFLUOROETHYLENE 9002-84-0	<2			Group 3 Supplement 7, 1987; Monograph 19,

1979

Medical Conditions Recognized as Being Aggravated by Exposure: Preexisting eye, skin and respiratory disorders may be aggravated by overexposure to this product.

#### 4. First Aid Measures

Ingestion: Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. Obtain medical attention.

Skin contact: Wash off with soap and water. If skin irritation persists, call a physician.

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

#### 5. Fire Fighting Measures

Flash Point ::F(C)::: 74::F TTC

Recommended Extinguishing Media: Carbon Dioxide, Dry Chemicals, Foam.

Special Fire-Fighting Procedures: Firefighters should wear self-containing breathing apparatus. Water spray may be ineffective on flames but should be used to keep fire-exposed containers cool.

Hazardous Products of Combustion: Oxides of carbon, Fluoride compounds

Unusual Fire/Explosion Hazards: Closed containers may rupture or explode when exposed to extreme heat.

Lower Explosive Limit: 2.3

Upper Explosive Limit: 12.7

#### 6. Accidental Release Measures

Spill Procedures: Eliminate all sources of ignition. Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal. Residues may be cleaned up with isopropyl alcohol.

#### 7. Handling and Storage

Storage: Store away from heat, sparks or open flame. Do not store at temperatures above 100::F (38::C).

Handling: Avoid contact with skin and eyes. Do not inhale vapors. Keep container closed when not in use.

#### 8. Exposure Controls/Personal Protection

Eyes: Safety glasses.

Skin: Neoprene or nitrile gloves recommended.

Ventilation: General; local exhaust ventilation as necessary to control any air contaminants to within their exposure limits (or to the lowest feasible levels when limits have not been established) during the use of this product.

Respiratory Protection: An approved organic vapor respirator should be worn when exposures are expected to exceed the applicable limits.

#### 9. Physical and Chemical Properties

Appearance: White paste

Odor: Alcohol

Boiling Point: 180::F

pH: Does not apply

Solubility in Water: Partial

Specific Gravity: 1.06-1.10

VOC(Wt.%): 36.5%; 395 g/L

Vapor Pressure: 33 mm Hg @ 68::F

Vapor Density (Air=1): 2.07

Evaporation Rate: 7.7 (ether = 1)

#### 10. Stability and Reactivity

Chemical Stability: Stable in normal conditions

Hazardous Polymerization: Will not occur

Incompatibilities: Strong oxidizers

Conditions to Avoid: Keep away from heat, sparks and open flame. -No smoking.

Hazardous Products: Oxides of carbon, Fluoride compounds

of Combustion:

11. Toxicological Information  
See Section 3

12. Ecological Information  
No data available

13. Disposal Considerations  
Recommended Method Disposal should be made in accordance with federal, state  
of Disposal: and local regulations.  
US EPA Waste Number: D001 as per 40CFR 261.21

14. Transportation Information  
DOT (49CFR 172)

Ground Transport  
(DOT)

DOT Shipping Name: Consumer Commodity (not more than one liter)

Hazard Class: ORM-D

UN/ID Number: None

IATA

Proper Shipping Name: Consumer Commodity (Not more than 1 liter)

Class or Division: Class 9

UN/ID Number ID8000

IMDG

Proper Shipping: Adhesives containing flammable liquid, Limited Quantity

Hazard Class: Class 3 PGIII

UN Number: UN 1133

Marine Pollutant: None

15. Regulatory Information

SARA 313 Chemicals: The following component(s) is listed as a SARA Section 313  
Toxic Chemical.

Methanol

California Proposition 65: No California Prop 65 chemicals are known to be present.

TSCA Inventory Status: All components of this product are listed (or exempt) on  
the EPA TSCA inventory.

16. Other Information

Estimated NFPA Rating: HEALTH 2, FLAMMABILITY 3, REACTIVITY 0.

Estimated HMIS

Classification: HEALTH 2, FLAMMABILITY 3, PHYSICAL HAZARD 0

NFPA is a registered trademark of the National Fire Protection Assn.

HMIS is a registered trademark of the National Paint and Coatings Assn.

Prepared By: Denise Boyd, Manager-Environmental, Health & Safety  
Revision August 11, 2010  
Date:

Company: Permatex, Inc. 10 Columbus Blvd. Revision 7  
Hartford, CT USA 06106  
Number:

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## Material Safety Data Sheet

### 1. PRODUCT IDENTIFICATION

Product Name: 133K ANTI-SEIZE LUBRICANT 8OZ  
Item No: 80078  
Product Type: Lubricant

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

Component	Weight%	ACGIH; TLV-TWA	OSHA PEL
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC 64741-52-5	40-60	Not listed	Not listed
CALCIUM OXIDE 1305-78-8	15-25	2 mg/m3	5 mg/m3
GRAPHITE 7782-42-5	<10	2 mg/m3	15 mg/m3
ALUMINUM POWDER 7429-90-5	<10	1 mg/m3	15 mg/m3
MINERAL OIL 8012-95-1	<5	Not listed	Not listed

### 3. HAZARDS IDENTIFICATION

Toxicity: May cause eye and skin irritation. May cause nose, throat and respiratory irritation. May cause gastrointestinal irritation. High concentrations may cause central nervous system (CNS) depression.

Primary Routes of Entry: Eye and skin contact, ingestion, inhalation

Signs and Symptoms of Exposure: Overexposure may cause eye and skin redness, difficulty breathing and vomiting. Excessive accidental exposure may cause headache, dizziness, nausea and mild respiratory irritation.

Component	Weight%	NTP	ACGIH Carcinogens	IARC Carcinogen
MINERAL OIL 8012-95-1	<5		A2 Suspected human carcinogen (poorly refined); A4 not classifiable as a human carcinogen (highly and severely refined)	Group 3 Supplement 7, 1987; Monograph 33, 1984

Aggravated Medical Condition: Persons with respiratory problems such as emphysema and asthma should avoid inhalation. Since this product contain copper compounds, individuals with Wilson's Disease should avoid exposure to this product.

### 4. FIRST AID MEASURES

Ingestion: Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. If symptoms persist, call a physician.

Skin Contact: Wash off immediately with soap and water. If skin irritation persists, call a physician.

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

### 5. FIRE FIGHTING MEASURES

Flash Point of (Co): >200oF TCC

Recommended Extinguishing Media: Carbon Dioxide, Dry Chemicals, Foam.

Special Fire-Fighting Procedures: Firefighters should wear self-contained breathing apparatus. Water spray may be ineffective on flames but should be used to keep fire-exposed containers cool.

Hazardous Products of Oxidation: Oxides of carbon, Metal oxide fumes

Combustion:  
Unusual May ignite when sufficient heat is applied.  
Fire/Explosion  
Hazards:

Lower Explosive Limit: Not determined  
Upper Explosive Limit: Not determined

#### 6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Eliminate all sources of ignition. Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal.

#### 7. HANDLING AND STORAGE

Storage: Store away from heat, sparks or open flame. Do not store at temperatures above 100oF (38OC).  
Handling: Avoid prolonged skin contact. Keep away from eyes. Do not inhale vapors. Do not use near heat, sparks or open flame. Wash hands before eating and smoking.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Safety glasses  
Skin: Neoprene or nitrile gloves recommended.  
Ventilation: General; local exhaust ventilation as necessary to control any air contaminants to within their exposure limits (or to the lowest feasible levels when limits have not been established) during the use of this product.  
Respiratory Protection: Not required under normal use. An approved organic vapor respirator should be worn when exposures are expected to exceed the applicable limits.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Silver paste  
Odor: Petroleum distillates  
Boiling Point: Not determined  
pH: Does not apply  
Solubility in Water: Nil  
Specific Gravity: 1.17  
VOC(Wt.%): 0  
Vapor Pressure: <5 mm Hg  
Vapor Density (Air=1): <1  
Evaporation Rate: <1 (butyl acetate = 1)

#### 10. STABILITY AND REACTIVITY

Chemical Stability: Stable at normal conditions  
Hazardous: Will not occur  
Polymerization:  
Incompatibilities: Strong oxidizers, alkalies, mineral acids, selected amines.  
Conditions to Avoid: Heat.  
Hazardous Products of Combustion: Oxides of carbon, Metal oxide fumes

#### 11. TOXICOLOGICAL INFORMATION

See Section 3

#### 12. ECOLOGICAL INFORMATION

No data available

#### 13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal should be made in accordance with federal, state and local regulations.  
US EPA Waste Number: NH - Not a RCRA Hazardous Waste Material

#### 14. TRANSPORTATION INFORMATION

DOT (49CFR 172)  
U.S. Department of Transportation 0 DOT - 49 CFR (Ground)  
DOT Shipping Name: Not regulated  
Hazard Class: None  
UN/ID Number: None  
IATA (Air)  
Proper Shipping Name: Not regulated  
Class or Division: None  
UN/ID Number: None  
IMDG (Vessel)

OP220  
Requester: ORDER 0476W7

IMPERIAL SUPPLIES LLC  
MSDS SHEET FOR 0091790

PAGE: 3  
Rev Dt: 03/28/12

Proper Shipping Name: Not regulated  
Hazard Class: None  
UN Number: None

Marine Pollutant: None

15. REGULATORY INFORMATION

SARA 313 Chemicals: The following component(s) is listed as a SARA Section 313 Toxic Chemical.

NONE

California Proposition 65: No California Prop 65 chemicals are known to be present at or above the No Significant Risk Level  
TSCA Inventory Status: All components of this product are listed (or exempt) on the EPA TSCA inventory.

16. OTHER INFORMATION

Estimated NFPA Rating: HEALTH 1, FLAMMABILITY 1, REACTIVITY 0.  
Estimated HMIS HEALTH 1, FLAMMABILITY 1, PHYSICAL HAZARD 0

Classification:

(NFPA is a registered trademark of the National Fire Protection Association)  
HMIS is a registered trademark of the National Paint and Coatings Association

Prepared By: Denise Boyd, Manager-  
Environmental, Health & Safety

Revision Date: February 09, 2012

Company: ITW Permatex  
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Revision Number: 1

Telephone No.: 1-87-Permatex (877) 346-2839

K.S. TERMINALS INC.  
MATERIAL SAFETY DATA SHEET

No. MSDS-025

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: HEAT SHRINKABLE TERMINALS  
Company name: K.S. TERMINALS INC>  
Company address: 8, E. 3rd ROAD, CHANG PIN IND.  
PARK, HSIEN SHI CHANG HWA, TAIWAN  
Company Phone: TEL: 886-47580001  
FAX: 886-47580003  
Revised: 2009/3/31

2. COMPOSITION/INFORMATION ON INGREDIENTS

2.1 COPPER (Cu)

CAS NO: 7440-50-8  
Chemical components: Cu: 99.9% (CAS No. 7440-50-8)  
P: 0.015%-0.04% (CAS No. 7723-14-0)

2.2 Tin Plated

CAS No: 7440-31-5  
Chemical components: TIN SN: 99.9%  
LEAD (PB): 0.01%

2.3 Polyolefin (PE)

CAS No: 32131-17-2  
Chemical components: 95-100%

3. HAZARDS IDENTIFICATION

3.1 Endanger the effect the most importantly

(1) POTENTIAL HELATH EFFECTS: There is not any danger on the solid.  
(2) Environmental impact: No  
(3) Physics and chemistry danger: No  
(4) Endanger specially: No  
3.1.2 Main symptom: No  
3.1.3 Articles are endangered and classified: No

4. FIRST AID MEASURES

1. Expose the way first aid method differently:

(1) Eyes contact: Do not need.  
(2) Skin contact: Do not need.  
(3) Ingestion: Do not need.

2. The most important symptom and danger effect: No

3. Shelter to the first-aid personnel: Do not need

4. Suggestion to the doctor: Do not need

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: For localized power fires, smother with dry sand, dry dolomite, Sodium chloride of soda ash. Use fire-extinguishing media appropriate to fight surrounding fire.

6. ACCIDENTAL RELEASE MEASURES

Individual is in conformity with the precautions: Solid material is not suitable

Environmental precautions: Solid material is not suitable  
Clear up the method: Will let out the end son and pack the container into, in order to prevent personnel from slipping.

7. HANDLING AND STORAGE

Handle: This product does not belong to the dangerous wastes, can trust the retrieving trader to give reclaiming to deal with when must abandon.

Store:

1. Putting will ventilate the good indoor place to the dryness.  
2. Forbid expose on outdoors or warm humidity high airtight space, avoid with sour, soda, saline material store together.  
3. Keep away from heat source, spark, flame.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- 1, Project is controlled: No
- 2, Biological index: No
- 3, Personal safeguard: No

9. PHYSICAL AND CHEMICAL PROPERTIES

	Sn	PE	Copper
Appearance	Solid	Solid	Solid
Melting point	231 C	140 C	1083 C
Boiling point	2875 C	-	2595 C
Specific gravity	7.3	>1.0	8.94

10. STABILITY AND REACTIVITY

- 10.1 Is stable: Quite stable under the general environment, the activation is little possible danger reacts under.
- 10.2 Special states: No
- 10.3 States that should be avoided: Contact sour, soda and salt
- 10.4 Endangers and resolves things: No

11. TOXICOLOGICAL INFORMATION

- 11.1 Urgent toxicity: No
- 11.2 Some effects: No
- 11.3 Causes the sensitiveness: No
- 11.4 Slow toxicity or long-term toxicity: No
- 11.5 Special effects: No

12. ECOLOGICAL INFORMATION

- 12.1 possible environmental impact/the environment  
This product is unable to be resolved by the living beings, but can pass proper way and retrieve.

13. DISPOSAL CONSIDERATIONS

This product is not a harmfulness offal, can trust the retrieving trader to give reclaiming to deal with when must abandon.

14. TRANSPORT INFORMATION

While transporting a product, should pay attention to not exposing under the sunshine directly, avoid touching with water directly.

15. REGULATORY INFORMATION

Suitable regulation: Usually have no regulation of a specific decree.

16. OTHER INFORMATION

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.