

SAFETY DATA SHEET

POLY TAK

1 – IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY UNDERTAKING

PRODUCT NAME: POLY TAK
PRODUCT NUMBER: 2-PT
RECOMMENDED USE: Aircraft coatings and adhesives
RESTRICTIONS ON USE: Not applicable
SUPPLIER: Poly-Fiber, Inc.
P.O. Box 3129, Riverside, CA 92519, USA
4343 Fort Drive, Riverside, CA 92509, USA
(951) 684-4280
(951) 809-7144
(760) 782-1947
EMERGENCY TELEPHONE: +1(800) 424-9300 (Chemtrec- US 24/7) +1(703) 527-3887 (International – Call Collect 24/7)
+61 2 9037 2994 (Australia 24/7)

2 - HAZARDS IDENTIFICATION

GHS Hazard Category

Flammable liquids	Category 2
Eye irritation	Category 2A
Specific target organ toxicity - single exposure (STOT – SE)	Category 3, Central nervous system
Acute toxicity, Oral	Category 4
Acute toxicity, Inhalation	Category 3
Acute toxicity, Dermal	Category 4
Skin irritation	Category 2
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Acute aquatic toxicity	Category 3

Label Elements


Pictograms



Signal Word

DANGER

Hazard Statements

 **WARNING:** This product can expose you to chemicals including Propylene Oxide, which is known to the State of California to cause cancer. For more information go to [www. P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poison Schedule:	5
Australian Inventory of Chemical Substances (AICS)	Listed
New Zealand Inventory of Chemicals (NZIoC)	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76)	14

H224:	Extremely flammable liquid and vapour.
H225:	Highly flammable liquid and vapour
H302:	Harmful if swallowed
H311:	Toxic in contact with skin
H315:	Causes skin irritation.
H318:	Causes serious eye damage
H319:	Causes serious eye irritation
H331:	Toxic if inhaled.
H335:	May cause respiratory irritation.
H336:	May cause drowsiness or dizziness
H340:	May cause genetic defects.
H350:	May cause cancer.
H402:	Harmful to aquatic life.
H412:	Harmful to aquatic life with long lasting effects

Precautionary Statements

General:

P101:	If medical advice is needed, have product container or label at hand
P102:	Keep out of reach of children
P103:	Read label before use
P201:	Obtain special instructions before use.
P202:	Do not handle until all safety precautions have been read and understood.

Preventative:

P210:	Keep away from heat/sparks/open flames/hot surfaces. – No smoking
P233:	Keep container tightly closed
P240:	Ground/bond container and receiving equipment
P241:	Use explosion-proof electrical/ventilation/lighting equipment
P242:	Use only non-sparking tools
P243:	Take precautionary measures against static discharge
P261:	Avoid breathing mist/vapours/spray
P264:	Wash thoroughly after handling
P270:	Do not eat, drink or smoke when using this product
P271:	Use only outdoors or in a well-ventilated area
P273:	Avoid release to the environment
P280:	Wear eye protection/face protection

Response:

P301 + P312 + P330: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
Rinse mouth

P303 + P361 + P353: IF ON SKIN (or hair): Take off contaminated clothing and wash before reuse.
Rinse skin with water/shower

P304 + P340 + P311: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor.

P305 + P351 + P338 + P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor

P312: Call a POISON CENTER or doctor/physician if you feel unwell

P308 + P313: IF exposed or concerned: Get medical advice/ attention.

P332 + P313: If skin irritation occurs: Get medical advice/ attention.

P362: Take off contaminated clothing and wash before reuse

P337 + P313: If eye irritation persists: Get medical advice/attention

P370 + P378: In case of fire: Use foam/water spray/fog for extinction

Storage:

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

P403 + P235: Store in a well-ventilated place. Keep cool

P405: Store locked up

Disposal:

P501: Dispose of contents/container to an authorized RCRA facility

****This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.**

3 – COMPOSITION /INFORMATION ON INGREDIENTS

Name	EC No.	CAS No.	Content %	GHS Classification
Methyl Ethyl Ketone	201-159-0	78-93-3	40-50%	Flammable liquids (Category 2), H225 Eye irritation (Category 2A), H319 Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336
Acetone	200-662-2	67-64-1	40-50%	Flammable liquids (Category 2), H225 Eye irritation (Category 2A), H319 Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336
Propylene Oxide **	200-879-2	75-56-9	0-10%	Flammable liquids (Category 1), H224 Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 3), H331 Acute toxicity, Dermal (Category 3), H311 Skin irritation (Category 2), H315 Serious eye damage (Category 1), H318 Germ cell mutagenicity (Category 1B), H340 Carcinogenicity (Category 1B), H350 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335 Acute aquatic toxicity (Category 3), H402 Chronic aquatic toxicity (Category 3), H412

The Full Text for all H-Statements and P-Statements is displayed in Section 15

COMPOSITION COMMENTS

The data shown are in accordance with the latest GHS Directives.

4- FIRST AID MEASURES

INHALATION:

Move the victim to a fresh air place immediately. Get medical attention if discomforts persist.

INGESTION:

Rinse mouth with clean water immediately. DO NOT induce vomiting. Get medical attention immediately. If vomiting occurs, keep the victim's head low so that vomits from the stomach will not enter the lungs.

SKIN CONTACT:

Remove contaminated clothing and flush the affected skin areas with clean water for at least 15 minutes. Get medical attention if discomfort persists.

EYES CONTACT:

Make sure all contact lenses are removed before flushing the eyes with eye lids open with clean water for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

5- FIRE FIGHTING PROCEDURES

EXTINGUISHING MEDIA:

Fire can be extinguished by using Foam, carbon dioxide, or dry powder Dry Chemicals, and, dolomite, etc...

SPECIAL FIREFIGHTING PROCEDURES:

Do not use a direct stream of water. Product may float and can be reignited on the surface of the water. Do not enter a confined area without full bunker gear including a positive-pressure NIOSH-approved self-contained breathing apparatus. Decomposition products may form toxic materials.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Never use welding or cutting torch on or near drum (even empty) because residue or product can ignite explosively. Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by pilot lights, flames and other ignition sources at locations distant from the material handling point. Flammable material.

6-ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Wear protective clothing as described in Section 8.

ENVIRONMENTAL PRECAUTIONS:

Spillages or uncontrolled discharges into watercourses must immediately be alerted to Environmental Agency or other appropriate regulatory authority.

SPILL CLEANUP METHODS:

Keep combustibles away from spilled material. Extinguish all ignition sources. Avoid sparks, open flames, and smoking. Ventilate. Absorb in vermiculite, dry sand, or earth and place into containers for disposal.

7-HANDLING AND STORAGE

USAGE PRECAUTIONS:

Keep away from heat, sparks and open flames. Avoid spilling, skin and eyes contact. Use with adequate ventilation and avoid excessive exposure to solvent vapors. Use approved respirator if air contamination exceeds the accepted level

PRECAUTIONS:

FLAMMABLE/Combustible. Keep away from oxidizers, open flames and other ignition sources. Keep unused contents in original container and tightly closed lids. Store in a cool, dry and well-ventilated place and at an ambient Temperature not to exceeding above 120° F.

STORAGE CLASS:

FLAMMABLE liquid storage.

8-EXPOSURE CONTROL/PERSONAL PROTECTION

Name	Workplace Exposure Limits	Remarks
Methyl Ethyl Ketone	ACGIH: 200ppm TWA; 300ppm STEL NIOSH: 200ppm TWA;590 mg/m ³ TWA; 3000ppm IDLH OSHA –Final PELs: 200ppm TWA; 590 mg/m ³ TWA	Consult local authorities for acceptable exposure limits.
Acetone	NIOSH: 250 ppm TWA; 590 mg/m ³ TWA 2500 ppm IDLH (10% LEL) ACGIH: 500 ppm TWA; 750 ppm STEL	Same As Above

	OSHA-Final PELs: 1000 ppm TWA; 2400 mg/m3 TWA	
Propylene Oxide	ACGIH: 2ppm TWA NIOSH: 400 ppm TWA OSHA-Final PELs: 100ppm TWA,240 mg/m3 TWA 240 mg/m3 TWA	Same As Above

**PROTECTIVE EQUIPMENTS:**

PROCESS CONDITIONS:

ENGINEERING MEASURES:

RESPIRATORY EQUIPMENT:

HANDPROTECTION:

EYE PROTECTION:

OTHER PROTECTION:

HYGIENE MEASURES:

Provide eyewash station.

Provide adequate ventilation. Fully equipped spray booth is recommended to ensure the workers legal exposure limits are not exceeded.

Wear respirator with appropriate cartridge for organic solvents and chemicals.

Wear approved gloves such as Neoprene, Nitrile or Rubber types.

Wear splash-proof goggles.

Wear appropriate clothing to prevent any possible skin contact.

DO NOT SMOKE IN THE WORK AREA. Wash at the end of each work shift and before eating, drinking or smoking. Promptly remove contaminated clothing.

9- PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Clear Viscous Liquid
COLOR:	Clear
ODOR:	Ketone characteristics
BOILING POINT:	135-175°F
RELATIVE DENSITY:	0.899 g/mL
VAPOR DENSITY:	Heavier than air
FLASH POINT:	-4 degrees F / -20 degrees C(Closed Cup)
FLAMMABILITY LIMITS:	0.8 (Lower%)
SOLUBILITY VALUE (g/100g H ₂ O @ 20°C):	Insoluble
VOLATILE ORGANIC COMPOUND (VOC):	333.16g/L

10- STABILITY AND REACTIVITY

STABILITY:

Stable

CONDITIONS TO AVOID:

Heat and fires. Ignition sources.

INCOMPATIBILITY (MATERIALS TO AVOID):

Strong alkalines or strong oxidizers. This material may dissolve some plastics, rubber compounds or coatings. May react strongly with acids while in liquid form.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

Hydrogen chloride and very small amounts of phosgene and chlorine.

HAZARDOUS POLYMERIZATION:

N/A

11-TOXICOLOGICAL INFORMATION**Methyl Ethyl Ketone (CAS# 78-93-3):**LD50/rabbit/skin/draize test = 500mg/24H moderate; LC50/mouse/inhalation = 32mg/m3/4H;

Carcinogenicity: Not listed by ACGIH, IARC, NIOSH, NTP or OSHA.

Acetone (CAS#67-64-1) : LD50/LC50: Dermal, guinea pig: LD50 = >9400 uL/kg; Draize test, rabbit, eye: 20 mg Severe; Draize test, rabbit, eye: 20 mg/24H Moderate; Draize test, rabbit, eye: 10 uL Mild; Draize test, rabbit, skin: 500 mg/24H Mild; inhalation, mouse: LC50 = 44 gm/m3/4H;

Inhalation, rat: LC50 = 50100 mg/m3/8H; Oral, mouse: LD50 = 3 gm/kg; Oral, rabbit: LD50 = 5340 mg/kg; Oral, rat: LD50 = 5800 mg/kg;

Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Epidemiology: In a series of studies, no statistically significant differences in causes of death or clinical laboratory results were observed in 948 employees exposed to up to 1070 ppm acetone over 23 years.

Teratogenicity: Animal studies have only shown harmful effects in the offspring of animals exposed to doses which also produced significant maternal toxicity. Reproductive Effects: During the Stewart et al. study, four adult female volunteers were exposed 7.5 hours to acetone vapor at a nominal concentration of 1000 ppm. Three of the four women experienced premature menstrual periods which were attributed to the acetone exposure. Mutagenicity: Sex chromosome loss and non-disjunction(Yeast - Saccharomyces cerevisiae) = 47600 ppm; Cytogenetic analysis(Rodent - hamster Fibroblast)= 40 gm/L. Neurotoxicity: No information found.

Propylene Oxide (CAS#75-56-9): Dermal contact. Eye contact. Inhalation. Ingestion. Toxicity to Animals: WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 380 mg/kg [Rat]. Acute dermal toxicity (LD50): 1500 mg/kg [Rabbit]. Acute toxicity of the vapor (LC50): 4000 ppm 4 hour(s) [Rat]. LC50/mouse = 1740ppm,4 hrs; Carcinogenicity: listed in NTP and classified by IARC Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified 2 (Reasonably anticipated.) by NTP. The substance is toxic to lungs, mucous membranes. Other Toxic Effects on Humans: Very hazardous in case of ingestion, of inhalation. Hazardous in case of skin contact (irritant, permeator). Special Remarks on Toxicity to Animals: Not available. Special Remarks on Chronic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available

12- ECOLOGICAL INFORMATION

Methyl Ethyl Ketone (CAS#78-93-3): Ecotoxicity : Fish/Fathead Minnow/LC50 = 3220mg/l; Environmental : Substance evaporates in water with T1/2=3D (rivers) to 12D (lakes); Physical : Substance photo degrades in air with T1/2=2.3 days.

Acetone (CAS#67-64-1): Ecotoxicity: Fish: Rainbow trout: 5540 mg/l; 96-hr; LC50Fish: Bluegill/Sunfish: 8300 mg/l; 96-hr; LC50 No data available. Environmental: Volatilizes, leeches, and biodegrades when released to soil. TERRESTRIAL FATE: If released on soil, acetone will both volatilize and leach into the ground. Acetone readily biodegrades and there is evidence suggesting that it biodegrades fairly rapidly in soils. AQUATIC FATE: If released into water, acetone will probably biodegrade. It is readily biodegradable in screening tests, although data from natural water are lacking. It will also be lost due to volatilization (estimated half-life 20 hr from a model river). Adsorption to sediment should not be significant. Physical: ATMOSPHERIC FATE: In the atmosphere, acetone will be lost by photolysis and reaction with photo-chemically produced hydroxyl radicals. Half-life estimates from these combined processes are 79 and 13 days in January and June, respectively, for an overall annual average of 22 days. Therefore considerable dispersion should occur. Being miscible in water, wash out by rain should be an important removal process. This process has been confirmed around Lake Shinsei-ko in Japan. There acetone was found in the air and rain as well as the lake.

Propylene Oxide (CAS#75-56-9) : Ecotoxicity: No adverse ecological effects expected. Environmental: This substance does not contain Class I and II ozone-depleting chemical. BOD5 and COD: Not available. Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. Toxicity of the Products of Biodegradation: The products of degradation are as toxic as the original product. Special Remarks on the Products of Biodegradation: Not available.

13 – DISPOSAL CONSIDERATIONS

Hazardous wastes should be sent to a RCRA approved incinerator or disposed of in a RCRA approved waste facility. Dispose of container and unused contents in accordance with federal, state and local requirements.

I certify that all chemicals in this shipment comply with all applicable rules or orders under TSCA and that I am not offering a chemical substance for entry in violation of TSCA or any applicable rule or order under TSCA.

14 – TRANSPORT INFORMATION

DOT / ADR / RID Classification:

DOT / ADR / RID PROPER SHIPPING NAME: ADHESIVE
PRIMARY HAZARD CLASS/DIVISION: 3
UN/UA NUMBER: UN1133
PACKING GROUP: II

AMDG and AND Classification:

IMDG PROPER SHIPPNG NAME: ADHESIVE
IMDG UN CLASS: 3
IMDG UN NUMBER: 1133
IMDG PACKING GROUP: II
IMDG LABEL: FLAMMABLE LIQUID
IMDG VESSEL STOWAGE: B

Air shipping this product is not advised and if done must be handled by a certified carrier according to IATA rules.

15 - REGULATORY INFORMATION

⚠ WARNING: This product can expose you to chemicals including Propylene Oxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

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**GHS LABEL:****DANGER**

HIGHLY FLAMMABLE LIQUID AND VAPOR. VAPOR HARMFUL. CAUSES SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. HARMFUL OR FATAL IF SWALLOWED AND ENTERS AIRWAYS.

Refer to SDS for additional information on safe handling / use. - Keep out of reach of children. For Industrial Use Only.

Contains: Methyl Ethyl Ketone (40-50%), Acetone (40-50%), and Propylene Oxide ** (0-10%).

****This product contains one or more chemicals known to the State of California to cause cancer, birth defects, and/or other reproductive harm.**

Hazard Statements:

H224:	Extremely flammable liquid and vapour.
H225:	Highly flammable liquid and vapour
H302:	Harmful if swallowed
H311:	Toxic in contact with skin
H315:	Causes skin irritation.
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 P261: Avoid breathing mist/vapours/spray
 P264: Wash thoroughly after handling
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 P271: Use only outdoors or in a well-ventilated area
 P273: Avoid release to the environment
 P280: Wear eye protection/face protection

Response:

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Storage:

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 P403 + P235: Store in a well-ventilated place. Keep cool
 P405: Store locked up

Disposal:

P501: Dispose of contents/container to an authorized RCRA facility

16- DISCLAIMER

Above information is based on data supplied to us and is believed to be correct. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since the data made available subsequent to the date hereof may suggest modifications of the information, we do not assume responsibility for the results of its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose. It is the user's obligation to determine the safe use of it.