SAFETY DATA SHEET

Pbs Prep **Revision Date** 12/5/2018

SECTION – 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name **Pbs Prep** **Item** PREP

Product Use Pbs Boot Sealant Remover & Cleaner

Company Name Jet Stream Aviation Products **Office** (972) 542-2400
1971 University Business Dr. Suite 102 **Fax** (972) 542-0238
McKinney Tx 75071 **Web** www.jetstreamproducts.com

EMERGENCY TELEPHONE NUMBER INFOTRAC (800) 535-5053

SECTION – 2 HAZARDS INFORMATION

Pictogram

Signal Word Danger

Hazards	PHYSICAL / HEALTH / ENVIRONMENTAL HAZARD STATEMENTS	HAZARD CATEGORY CLASSIFICATION	CODE
	Causes severe skin burns and eye damage	Category 1C Skin & Eye	H314
	Causes serious eye damage	Category 1 Eyes	H318
	May cause respiratory irritation	Category 3 STOT Single Exposure	H335

Precautions	HANDLING / PROTECTION / FIRE / STORAGE / DISPOSAL	CODE
	Keep out of reach of children	P102
	Read label before use	P103
	Avoid breathing dust / fume / gas / mist / vapours / spray	P261
	Do not get in eyes, on skin, or on clothing	P262
	Wash thoroughly after handling	P264
	Do not eat, drink or smoke when using this product	P270
	Wear protective gloves / protective clothing / eye protection / face protection	P280
	In case of inadequate ventilation wear respiratory protection	P285
	Store locked up	P405
	Dispose of material in accordance with all State and Federal Guidelines and Regulations	P501

SECTION – 3 COMPOSITION INFORMATION

(Exact percentage of the listed chemicals of composition has been withheld as a trade secret)

CHEMICAL NAME	COMMON NAME AND SYNONYMS	CAS #	IMPURITIES	PERCENT
2-butoxyethanol	Ethylene Glycol Monobutyl Ether	111-76-2		1 - 5%
Monoethanolamine	Ethanolamine, 2-aminoethanol	141-43-5	Water <15%	1 - 15%

SECTION – 4 FIRST AID MEASURES

Eye Contact Immediately flush eyes with cold water for at least 15 minutes while lifting upper and lower eyelids, Remove contact lenses if present and easy to do without injury to the eye and continue rinsing, Obtain immediate medical attention, preferably from an ophthalmologist or Emergency Room

Skin Contact Immediately wash contaminated skin with a nonabrasive soap and plenty of water for at least 15 minutes, Be sure to remove any contaminated clothing and wash before reuse, If irritation is present or occurs obtain medical attention

Inhaled Not applicable under normal use. If irritation is experienced, move person to fresh air.

Ingested DO NOT INDUCE VOMITING, rinse mouth with water, and drink small quantities of water, Call a physician, or poison control center, and get medical attention, If victim feels nauseous stop drinking, If vomiting occurs, keep head below hips to prevent aspiration into the lungs

Important Effects Corrosive to, eyes, skin

Important Symptoms Symptoms may include, corrosive burns, respiratory irritation

SECTION – 5 FIRE FIGHTING MEASURES

Extinguishing Media Not flammable: Use extinguishing media for surrounding fire

Explosion Hazard Not applicable

Hazardous Decomposition Burning or thermal decomposition can produce, aldehydes, carbon dioxide, carbon monoxide, ketones, nitrogen oxides, organic acids, silicon oxides, sodium oxides

Protective Equipment Use MSHA/NIOSH approved self-contained breathing apparatus and full protective gear

SECTION – 6 ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Warn personnel of spill, Stop spill or release only if it can be done safely, Ventilate area, Keep unprotected personnel from entering the spill area
Personal Precautions	Follow all safety precautions, Wear Personal Protective Equipment, Do not walk through spill
Protective Equipment	Safety Glasses, Chemical Gloves and Rubber Boots
Containment	Use rags, towels, absorbent socks or pads to prevent spill from spreading, Prevent spill from spreading or entering the environment
Clean Up Procedures	Small Spills: Use wet vacuum or mop and wringer to pick up spilled material then mop area with clean water, Large Spills: Absorb spill with inert material, place in a chemical waste container, mop area with clean water
Disposal	Dispose of material in accordance with all State and Federal Guidelines and Regulations

SECTION – 7 HANDLING AND STORAGE

Handling	Do not get in eyes, on skin, or clothing, Use appropriate safety equipment, and adequate ventilation, Do not smoke, eat or drink while using, Wash thoroughly after handling, Avoid release to the environment, Empty containers retain product residue (vapors, liquid or solids) observe all precautions when handling
Storage	KEEP OUT OF REACH OF CHILDREN, Keep container closed when not in use, Keep only in original container, Store away from incompatible materials
Incompatible Materials	Incompatible with, strong acids, strong bases, strong oxidizers

SECTION – 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

CHEMICAL NAME	ACGIH (TWA 8)	ACGIH (STEL)	OSHA PEL (TWA 8)	OSHA (CEIL)	Significant Exposure
Monoethanolamine	3 ppm	6 ppm	3 ppm (8 mg/m³)	6 ppm (15 mg/m³)	ED,SD
2-butoxyethanol	20 ppm		50 ppm (240 mg/m³)		SA

PERSONAL PROTECTION

HMIS HAZARD RATINGS

Health	2
Flammability	0
Reactivity	0
Personal Protection	B

Eyes	Wear safety glasses with side protection when handling / using this material
Hands	Wear impervious gloves when handling / using this material
Response	Access to an eye wash station is a recommended safety precaution for handling / using this type of material
Ventilation	General Ventilation

SECTION – 9 PHYSICAL AND CHEMICAL PROPERTIES

Flash Point	> 93.3ºC (200ºF) - TAG Closed Cup	**Specific Gravity / Density**	1.00
Flammable Limits	ND	**pH (± 0.3)**	11.7
Auto-Ignition Temp.	ND	**Viscosity**	ND
Physical State	Viscous Liquid	**Freeze Point**	ND
Appearance	Yellow	**Boiling Point**	ND
Odor	Mild Ammonia	**Vapor Density (air=1)**	ND
Odor Threshold	ND	**Vapor Pressure (mmHg)**	ND
Solubility	100%	**Evaporation Rate (nBuAc=1)**	ND
Volatiles	< 90%	**Partition Coefficient**	ND
VOC	< 12%	**Molecular Weight (g/mol)**	~ 33.05
LVP-VOC	0.0%	**Decomposition Temperature**	ND

SECTION – 10 STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity available for this product or its ingredients
Chemical Stability	Stable under normal ambient and anticipated conditions of use
Hazardous Polymerization	Will not occur
Conditions To Avoid	Incompatible materials
Incompatible Materials	Incompatible with, strong acids, strong bases, strong oxidizers
Hazardous Decomposition	Burning or thermal decomposition can produce, aldehydes, carbon dioxide, carbon monoxide, ketones, nitrogen oxides, organic acids, silicon oxides, sodium oxides

SECTION – 11 TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE

Eyes (Yes), Skin (Yes), Inhalation (Yes "Mist"), Ingestion (Yes)

ACUTE SYMPTOMS OF SINGLE OVEREXPOSURE

Eyes	Causes serious eye irritation, redness, tearing, pain, corneal injury, or possible eye damage
Skin	Can cause serious skin irritation, redness, burning, drying, cracking, or possible corrosive burns
Inhalation	Mist may cause irritation, to mucus membranes or respiratory tract
Ingestion	May be harmful if swallowed, Can cause irritation, of the mouth, throat, and esophagus, and may affect target organs

CHRONIC SYMPTOMS OF PROLONGED OR REPEATED OVEREXPOSURE

Eyes	Causes serious eye damage, severe pain, corrosive burns, or possible corneal injury
Skin	Can cause serious skin damage, itching, inflammation, redness, burning, drying, cracking, defatting of the skin which may lead to dermatitis
Inhalation	Mist may cause serious irritation, to nose, throat, mucus membranes or respiratory tract
Ingestion	May be harmful if swallowed, Can cause serious irritation, throat, and esophagus, Ingestion may cause vomiting which may be harmful if it enters airways, Ingestion can affect, liver, kidneys

Acute Tox Calculate **Oral:** 7,422 mg/kg **Dermal:** 8,381 mg/kg **Inhaled:** 53.8 mg/L

Acute Tox Category Not applicable (Oral >5,000 mg/kg), Not applicable (Dermal >5,000 mg/kg), Not applicable (Inhaled >50 mg/L) Vapors

Additional Info

Target Organs Blood, Kidneys, Liver, Respiratory Tract, Eyes (Lens or cornea), Skin

Medical Conditions Preexisting, eye, skin, liver, kidney, blood, respiratory, disorders may be aggravated by exposure to this product

Notes to Physician In case of ingestion, gastric lavage with activated charcoal can be used promptly to prevent absorption

CARCINOGENIC – This product contains concentrations above 0.1% of the following:

CHEMICAL NAME	NTP	ACGIH	IARC	GHS Category
None Listed	NA	NA	NA	NA

MUTAGENIC AND REPRODUCTIVE EFFECTS – This product contains concentrations above 0.1% of the following:

CHEMICAL NAME	Germ Cell Mutagenicity	Toxic to Reproduction
None Listed	NA	NA

COMPONENTS ACUTE TOXICITY

CHEMICAL NAME	Type	Form	Subject	Result Value	Exposure Time	GHS Category
2-butoxyethanol	LD50	Oral	Rat	1,746 mg/kg		4 (>300, ≤2000 mg/kg)
	LC50	Inhaled	Rat	2.4 mg/L	4 Hours (Mist)	4 (>1.0, ≤5 mg/L)
	LD50	Dermal	Rat	1,060 mg/kg		4 (>1000, ≤2000 mg/kg)
Ethanolamine	LD50	Oral	Rat	1,720 mg/kg		4 (>300, ≤2000 mg/kg)
	LC50	Inhaled	Estimate	11.59 mg/L	4 Hours (Vapor)	4 (>10, ≤20 mg/L)
	LD50	Dermal	Rabbit	1,015 mg/kg		4 (>1000, ≤2000 mg/kg)

SECTION – 12 ECOLOGICAL INFORMATION

CHEMICAL NAME	Type	Subject	Subject Latin	Result Value	Exposure Time	GHS Category
2-butoxyethanol	EC50	Water Flea	(Daphnia magna)	1,815 mg/L	24 Hours	4 (>100 mg/L)
	EC50	Algae	(Pseudokirchneriella s.)	1,840 mg/L	72 Hours	4 (>100 mg/L)
	LC50	Bluegill	(Lepomis macrochirus)	220 mg/L	96 Hours	4 (>100 mg/L)
Monoethanolamine	LC50	Fathead Minnow	(Pimephales promelas)	227 mg/L	96 Hours	4 (>100 mg/L)
	LC50	Water Flea	(Daphnia magna)	65 mg/L	48 Hours	3 (>10, ≤100 mg/L)

Presistence And Degradability This product is inherently biodegradable according to the OECD definition

Bioaccumulative Potential No data available

Mobility In Soil This material is a partially mobile liquid

Other Adverse Effects May be harmful to aquatic life

SECTION – 13 DISPOSAL CONSIDERATIONS

Disposal Statement DO NOT DUMP INTO ANY STORM SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER
Dispose of any waste in accordance with all State and Federal Guidelines and Regulations

Container Disposal Empty containers retain product residue (vapors, liquid or solid) observe all precautions when handling, Triple rinse empty container then offer for recycling. If not available, puncture and dispose in a sanitary landfill

Material Disposal Under RCRA rules, it is the responsibility of the user of the product to determine, at the time of disposal, whether the material is a hazardous waste, Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate, or otherwise inappropriate

SECTION – 14 TRANSPORT INFORMATION

DOT CLASSIFICATION

UN Number Ltd Qty

Proper Shipping Name n.o.s. (Chemicals) or "Limits"
"Limited Quantity" (Monoethanolamine)

Hazard Class	Packing Group	Label Codes	Reportable Quantity (lb)	Response	Marine Pollutant	Hazard Label	Secondary
None	None	None	None	128	No		

Additional Info:

SECTION – 15 REGULATORY INFORMATION

TSCA

CHEMICAL NAME	Sec 8(b) Inventory	Sec 8(d) Health And Safety	Sec 4(a) Chemical Test Rules	Sec 12(b) Export Notification
2-butoxyethanol	Yes	Yes		
Ethanolamine	Yes			

REPORTABLE QUANTITIES

	Extremely Hazardous		Reportable Quantity	Emission Reporting		
CHEMICAL NAME	EPCRA TPQ Sec 302	EPCRA RQ Sec 304	CERCLA RQ Sec 103	TRI Sec 313	RCRA Code	RMP TQ Sec 112r
Glycol Ethers				Yes		

SARA

	Section 311	Section 311 / 312 Hazards				
CHEMICAL NAME	Hazardous Chemical	Acute	Chronic	Flammable	Pressure	Reactive
2-butoxyethanol	Yes	Yes	Yes	Yes		
Monoethanolamine	Yes	Yes	Yes			

RIGHT TO KNOW

	STATE												
CHEMICAL NAME	CA	CT	FL	IL	LA	NJ	NY	PA	MI	MN	MA	RI	WI
2-butoxyethanol						Yes		Yes			Yes		
Ethanolamine		Yes		Yes		Yes		Yes		Yes	Yes	Yes	

CALIFORNIA **WARNING: This Product can expose you to chemicals (Listed below) known to the State of California to cause cancer, birth defects or reproductive harm. For more information go to** www.P65Warnings.ca.gov

CHEMICAL NAME	CAS #	Birth Defects	Reproductive Harm	Carcinogen	Developmental
None Listed					

CLEAN AIR WATER ACTS

		Clean Air Acts			Clean Water Acts		
CHEMICAL NAME	CAS #	HAP	Ozone Class 1	Ozone Class 2	HS	PP	TP
None Listed							

INTERNATIONAL REGULATIONS – The components of this product are listed on the chemical inventories of the following countries:

CHEMICAL NAME	Australia	Canada	Europe (EINECS)	Japan	Korea	UK
2-butoxyethanol	Yes	Yes	Yes	Yes	Yes	Yes

SECTION – 16 OTHER INFORMATION

SDS	LEGEND DESCRIPTION
~	Approximately
ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service Registry
CEIL	Ceiling Limit (15 minutes)
CERCL	Comprehensive Environmental Response, Compensation, and Liability Act
CI	Cochlear Impairment
CNS	Central Nervous System
EC50	Concentration of a chemical that gives half-maximal response
EPA	Environmental Protection Agency
Eye	(EI = Irritation) (ED = Damage) (EV = Visual Impairment)
FBG	Full Bunker Gear
GHS	Globally Harmonized System
HAP	California Hazardous Air Pollutant Clean Air Act
HMIS-A	Safety glasses
HMIS-B	Safety glasses, gloves
HMIS-C	Safety glasses, gloves, chemical apron
HMIS-D	Face shield, gloves, chemical apron
HMIS-E	Safety glasses, gloves, dust respirator
HMIS-F	Safety glasses, gloves, chemical apron, dust respirator
HMIS-G	Safety glasses, gloves, vapor respirator
HMIS-H	Splash goggles, gloves, chemical apron, vapor respirator
HMIS-I	Safety glasses, gloves, dust and vapor respirator
HMIS-J	Splash goggles, gloves, chemical apron, dust and vapor respirator
HMIS-K	Air line hood or mask, gloves, full chemical suit, boots
HMIS-X	Ask Supervisor
HS	California Hazardous Substance under the Clean Water Act
IG / IH	(IG = Ingested) / (IH = Inhaled - Vapors / Mists / Gas)
KD	Kidney Damage (nephropathy)
LC50	A concentration that is lethal to 50% of a given species in a given time
LD50	Dose that is lethal to 50% of a given species by a given route of exposure
LEL	Lower Explosive Limit
LD	Liver Damage
NA	Not Applicable
ND	Not Determined
NE	Not Established
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit (OSHA)
PNS	Peripheral Nervous System
PP	California Priority Pollutant under the Clean Water Act
REL	Recommended exposure limit (NIOSH)
RT	Upper Respiratory Tract
Skin	(SI = Irritation) (SD = Damage) (SA = Absorption) (SS = Sensitizer)
SARA	Superfund Amendments and Reauthorization Act
STEL	Short Term Exposure Limit (15 minutes)
TC Lo	Lowest concentration that is toxic to a given species in a given time
TD Lo	Lowest dose that is toxic to a given species
TLV	Threshold Limit Value (ACGIH)
TP	California Toxic Pollutant under the Clean Water Act
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average (8 hours)
UEL	Upper Explosive Limit

Jet Stream Aviation Products