SAFETY DATA SHEET

Pbs Prep **Revision Date** 10/21/2015

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
1971 University Business Dr. Suite 102
McKinney Tx 75071

Office (972) 542-2400
Fax (972) 542-0238
Web www.jetstreamproducts.com

EMERGENCY TELEPHONE NUMBER **INFOTRAC (800) 535-5053**

SECTION – 2 HAZARDS INFORMATION

Health Hazards EYES-Category 1; SKIN-Category 2; STOT SINGLE EXPOSURE-Category 3


Respiratory Tract Irritant


Eye Damage
Skin Corrosion/Burns

DANGER Causes severe skin burns and eye damage, May cause respiratory irritation

May be harmful if swallowed, Do not get in eyes, on skin, or clothing, and avoid inhalation of mist, Do not smoke, eat or drink while using, Use personal protective equipment as required, Wash thoroughly with soap and water after handling, Avoid release into the environment

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, If irritation persists obtain immediate medical attention, preferably from an ophthalmologist

SKIN CONTACT Immediately wash contaminated skin with a nonabrasive soap and plenty of water for at least 15 minutes, Remove any contaminated clothing and wash before reuse, If irritation is present or occurs obtain medical attention

INHALATION Move person to fresh air, if they have problem breathing, show signs of overexposure or feel unwell obtain medical attention

INGESTION DO NOT INDUCE VOMITING. If person is fully conscious, rinse mouth out and give one to two glasses of water to dilute and obtain immediate medical attention. If vomiting occurs, keep head below hips to prevent aspiration into the lungs

Aspiration Hazard Not considered to be an aspiration hazard

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

SECTION – 5 FIRE FIGHTING MEASURES

Extinguishing Media Not flammable: Use extinguishing media for surrounding fire

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

Reactive With Reactive with, strong oxidizing agents, strong acids

Explosion Hazards Not applicable

Static Discharge Not applicable

Mechanical Impact Not applicable

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
Personal Precautions	Ventilate area, Avoid slipping on spilled product
Protective Equipment	Safety Glasses, Chemical Gloves and Rubber Boots
Containment	Use absorbent socks or pads to prevent spill from spreading, Prevent spill from 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 (e.g., dry sand or earth), then place in a chemical waste container Vacuum or sweep up material and place in a disposal container
Disposal	Dispose of material in accordance with all State and Federal Guidelines and Regulations

SECTION – 7 HANDLING AND STORAGE

Handling	Keep away from incompatible materials, Use appropriate safety equipment, and adequate ventilation, Avoid eye and skin contact, Avoid inhalation of mist, May cause respiratory irritation, May be harmful if swallowed, Do not smoke, eat or drink while using, Wash thoroughly after handling, Avoid release to the environment
Storage	KEEP OUT OF REACH OF CHILDREN, Keep container closed when not in use, Store away from incompatible materials
Incompatible Materials	Incompatible with, strong oxidizing agents, strong acids

SECTION – 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

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

PERSONAL PROTECTIVE EQUIPMENT

Chemical Safety Glasses, Goggles or Face Shield

Impervious Chemical Gloves

Eye Wash (Recommended)

Ventilation

General Ventilation

If exposure limits listed above are exceeded, or irritation is experienced, use a MSHA / NIOSH approved respirator

HMIS HAZARD RATINGS

Health	2
Flammability	0
Reactivity	0
Personal Protection	B

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 (mm Hg)**	ND
Solubility	100%	**Evaporation Rate (nBuAc=1)**	ND
Volatiles	< 90%	**Partition Coefficient**	ND
VOC	< 12%	**Molecular Weight (g/mol)**	~33.05
LVP-VOC	0%	**Decomposition Temperature**	ND

SECTION – 10 STABILITY AND REACTIVITY

Reactivity (Specific Test Data)	None available
Chemical Stability	Stable when stored below 49ºC (120ºF)
Hazardous Polymerization	Will not occur
Conditions To Avoid	Incompatible materials
Incompatible Materials	Incompatible with, strong oxidizing agents, strong acids
Thermal Decomposition	Burning or thermal decomposition can produce, aldehydes, carbon monoxide, carbon dioxide, nitrogen oxides, sodium oxides, silicon oxides, ketones, organic acids, and other toxic fumes

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 Calculated	**Oral:**	6,141 mg/kg	**Dermal:**	8,920 mg/kg	**Inhaled:** 103.4 mg/L
Acute Tox Category	No Data or NA (Oral >5000 mg/kg), No Data or NA (Dermal > 5000 mg/kg), No Data or NA (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	530 mg/kg		4 (>300, ≤2000 mg/kg)
	LC50	Inhaled	Rat	2.17 mg/L	4 Hours (Mist)	4 (>1.0, ≤5 mg/L)
	LD50	Dermal	Guinea Pig	1650 mg/kg		4 (>1000, ≤2000 mg/kg)
Ethanolamine	LD50	Oral	Rat	1,720 mg/kg		4 (>300, ≤2000 mg/kg)
	LD50	Dermal	Rabbit	1,015 mg/kg		4 (>1000, ≤2000 mg/kg)
	LC50	Inhaled	Estimate	11.59 mg/L	4 Hours (Vapor)	4 (>10, ≤20 mg/L)

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)
	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

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

ENVIRONMENTAL FATE

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

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

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 contains chemicals known to the state of California to cause:

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

WHMIS Classification

CHEMICAL NAME	DSL	Class	Description
2-butoxyethanol	Yes	D-2B	Materials Causing Other Toxic Effects; Toxic Material
Monoethanolamine	Yes	E	Corrosive Material

SECTION – 16 OTHER INFORMATION

SDS	LEGEND DESCRIPTION
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
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
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NE	Not Established
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

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