

Skin:

Inhalation:

### SAFETY DATA SHEET

Page 1 of 6

**BTI-010** Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision Date: 3/14/2017 SDS Revision: 2.0 1. PRODUCT & COMPANY IDENTIFICATION 11 Product Name PRESTO® PREP P2 1.2 Chemical Name: Phosphoric Acid Solution 1.3 Synonyms 880151, 880158 Presto® Prep P2 1.4 Trade Names: Product Use: 1.5 Distributor's Name: 1.6 Birchwood Laboratories LLC Distributor's Address: 1.7 7900 Fuller Road, Eden Prairie, MN 55344 USA 18 Emergency Phone: ChemTrec +1 (800) 424-9300 / +1 (703) 527-3887 or Poison Control Center +1 (855) 281-1742 1.9 Business Phone / Fax: +1 (952) 937-7900 / +1 (952) 937-7979 2. HAZARDS IDENTIFICATION 2.1 Hazard Identification: This product is classified as a hazardous substance and as dangerous goods according to the classification criteria of [NOHSC: 1088 (2004)] and ADG Code (Australia). DANGER! HARMFUL IF SWALLOWED OR IN CONTACT WITH SKIN. CAUSES SKIN IRRITATION. CAUSES SERIOUS EYE DAMAGE. Classification: Acute Tox. (Dermal; Oral) 4; Skin Irrit. 1 Label Elements: 2.2 Hazard Statements (H): H302+H312 - Harmful if swallowed or in contact with skin. H318 -Causes serious eye damage. Precautionary Statements (P): P261 - Avoid breathing fumes/mist/vapors/spray. P280 - Wear protective gloves/ protective clothing/eye protection/face protection. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER/doctor. P501 -Dispose of contents/ container to an approved waste disposal plant. Other Warnings: In the event of an exposure or medical inquiry involving this product, please contact a physician or local poison control center, who may seek advice from the U.S. manufacturer, and show them this SDS. Keep out of reach of children. 3. COMPOSITION & INGREDIENT INFORMATION EXPOSURE LIMITS IN AIR (mg/m<sup>3</sup>) ACGIH NOHSC **OSHA** ppm ppm ppm FS-FS-FS-CHEMICAL NAME(S) CAS No. RTECS No. EINECS No. STEL TWA STEL PEAK PEL STEL IDLH OTHER 7664-38-2 TB6300000 231-633-2 10-30 (1) (3) NF NF NF NA NA 1000 PHOSPHORIC ACID Metal Corrosion 1; Skin Corrosion1B; H290, H314 KJ5775000 141-43-5 205-483-3 10-30 3 NA 3 NF NF 3 NA 30 3 NIOSH MONOETHANOLAMINE Acute Toxicity-Oral 4; Acute Toxicity-Dermal 4; Skin Corrosion 1B; Acute Toxicity-Inhalation 4; H302, H312, H314, H332 DODECYLBENZENE SULFONIC 68584-22-5 NA 271-528-9 5-10 NA NA NF NF NF NA NA NA ACID Eye Irritation 2; H319 16961-83-4 241-034-8 1-5 NA NA NF NF NF NA NA NA NA FLUOROSILICIC ACID Skin Corrosion 1B; H314 NA 204-857-3 1-5 NA NA NF NF NF AN NA NA SODIUM M-NITROBENZENE 127-68-4 SULPHORIC ACID Skin Sensitization 1; Eye Irritation 2; H317, H319 4. FIRST AID MEASURES DO NOT INDUCE VOMITING. Contact SafetyCall +1 (855) 281-1742 or the nearest Poison Control 4.1 First Aid: Ingestion: Center or local emergency telephone number for assistance and instructions. Seek immediate medical attention. If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration. Eyes: If product gets in the eyes, flush eyes thoroughly with copious amounts of water for at least 15 minutes, holding eyelid(s) open to ensure complete flushing. If the eyes or face become swollen during or following use, consult a physician or emergency room immediately. Remove contaminated clothing and wash affected areas with soap and water. If discomfort persists Skin: and/or the skin reaction worsens, contact a physician immediately. Do not wear contaminated clothing until after it has been properly cleaned. Inhalation: Remove victim to fresh air at once. Under extreme conditions, if breathing stops, perform artificial respiration. Seek immediate medical attention. 4.2 Effects of Exposure: Severe burns of mouth, throat and stomach. Ingestion: Eyes: Severe or permanent eye damage. Severe irritation and possible burns. May be absorbed through skin and cause adverse effects to bones.

If sprayed, severe irritation of respiratory tract and mucous membranes; coughing, difficulty breathing.



Page 2 of 6 BTI-010

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 2.0 SDS Revision Date: 3/14/2017

4.3	Τ	4. FIRST A					J C						
	Symptoms of Overexposure:	Eyes: Redness, burning, ir			0	,							
		Skin: Redness, burning, it	-		-								
		Ingestion: Possible symptoms			-		•	1100					
	A	Inhalation: Coughing, wheezing											
1.4	Acute Health Effects:	May be harmful if swallowed, absorb	orbed thro	ough skir	n, or inhaled	l. Cause	s severe b	urns to e	yes and	skin.			
1.5	Chronic Health Effects:	May cause damage to bones.											
1.6	Target Organs:	Eyes, Skin, Lungs (Corrosive), Bor											
4.7	Medical Conditions Aggravated by Exposure:	Pre-existing dermatitis, other skin conditions, and disorders of the HEALTH						3					
		target organs (eyes, skin, respiratory system, bones) or impaired kidney function may be more susceptible to the effects of this			FLAMM	ABILIT'	<b>1</b>			0			
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		Substance.								CNIT	_		
						-	PROTEC	1				В	
							EYES	SKIN	L	UNGS			
		5. FIREF	ICHT	ING N	1E A SI IE	DEC							
5.1	Fire & Explosion Hazards:	Non-flammable. Contact with meta					ase						
5.2	Extinguishing Methods:	Water spray, dry chemical, alcohol				yarogeri	gas.			-			
5.3	Firefighting Procedures:	As with any fire, firefighters				nrotectiv	a aduinm	ent inc	ludina a	_	_		
-	3 . 3	MSHA/NIOSH approved or equiva											
		clothing. Fight fires as for surrou										4	
		released. Thermal degradation n									3	1	
		hydrogen fluoride, hydrocarbons									<b>\</b> )	<b>/</b>	
		Keep containers cool until well aft									$\vee$		
		and to protect personal. Fight fire				fire cor	itrol or dilu	tion from	entering	3			
		sewers, drains, drinking water sup	ply, or an	y natura	l waterway.								
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4	Caille	6. ACCIDENT									D		
5.1	Spills:	Before cleaning any spill or lea Equipment (PPE). Use safety gla											
		apron, boots, etc.) to prevent skin		salety go	iggles and i	ace sille	eiu, use git	oves and	other pr	otective	Clouring	) (e.	
		Small Spills: Wear appropriate pro		auinma	at including	alovos	and protoc	tivo ovo	woor He	co o no	n combi	ıctibl	
		inert material such as vermiculite	or sand to	soak ur	the produc	rt and nl	ace into a	containe	r for later	r dispos	al	istibi	
		Large Spills: Keep incompatible										iiwai	
		and away from spill or release. Isolate immediate hazard area and keep unauthorized personnel out of area.											
		or release if it can be done with m				e protec	or release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection conditions warrant. Recover as much free liquid as possible and collect in acid-resistant container. Use absorbent to pi						
			ninimal ris	sk. Wea	r appropriat								
			ninimal ris uch free l	sk. Wea iquid as	r appropriat possible an	d collect	in acid-re						
		conditions warrant. Recover as mu up residue. Avoid discharging liqui	ninimal risuch free lid directly	sk. Wea iquid as / into a s	r appropriat possible an ewer or surf	d collect face wat	in acid-re ers.						
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Environmental Stability

Effects on Aquatic Life:

Effects on Plants & Animals:

No data available.

12.1

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12.3

## SAFETY DATA SHEET

Page 3 of 6 BTI-010

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision Date: 3/14/2017 SDS Revision: 2.0 8. EXPOSURE CONTROLS & PERSONAL PROTECTION - cont'd Eye Protection: 8 4 Safety glasses with side shields must be used when handling or using this product. A protective face shield is also recommended. 8.5 Hand Protection: Wear protective, chemical-resistant gloves (e.g., neoprene) when using or handling this product. 8.6 Body Protection: A chemical resistant apron and/or protective clothing are recommended when handling or using this product 9. PHYSICAL & CHEMICAL PROPERTIES 9.1 Appearance: Amber liquid 9.2 Odor Mild odor 9.3 Odor Threshold: NA 9.4 :Hq 4.0 – 4.5 9.5 Melting Point/Freezing Point: NA Initial Boiling Point/Boiling 9.6 > 100 °C (> 212 °F) Range: Flashpoint 9.7 NA 9.8 Upper/Lower Flammability NΑ Limits: 9.9 Vapor Pressure: NA 9.10 Vapor Density: < 1 9.11 Relative Density: 1.15 - 1.219.12 Solubility: Complete (water) 9.13 Partition Coefficient (log Pow): NA 9.14 Autoignition Temperature: NA 9.15 Decomposition Temperature: NA 9.16 Viscosity: NA Other Information: 9.17 Evaporation Rate: > 1.0 (ethyl ether = 1.0) 10. STABILITY & REACTIVITY 10.1 Stability 10.2 Hazardous Decomposition Contact with metals such as aluminum and zinc may produce hydrogen gas. Thermal decomposition may produce Products: phosphoric, nitrogen, carbon or sulfur oxides. 10.3 Hazardous Polymerization: Will not occur. 10.4 Conditions to Avoid: Incompatible substances. 10.5 Incompatible Substances: Cyanides, water-reactive substances, chlorinated cleaners or sanitizers, metals such as aluminum, zinc and magnesium. May generate heat or form flammable gases when mixed with a wide variety of substances. TOXICOLOGICAL INFORMATION Routes of Entry: Inhalation: YES Absorption: YES 11.2 Toxicity Data: Phosphoric Acid: LD<sub>50</sub> (oral, rat) = 1530 mg/kg; Monoethanolamine: LD<sub>50</sub> (oral, rat) = 1720 mg/kg; Dodecylbenzene Sulfonic Acid: LD<sub>50</sub> (oral, rat) = 890 mg/kg Acute Toxicity: 11.3 See Section 4.4 114 Chronic Toxicity: See Section 4.5 11.5 Suspected Carcinogen: NA 11.6 Reproductive Toxicity: This product is not reported to cause reproductive toxicity in humans. Mutagenicity: This product is not reported to produce mutagenic effects in humans. Embryotoxicity: This product is not reported to produce embryotoxic effects in humans. Teratogenicity: This product is not reported to cause teratogenic effects in humans. Reproductive Toxicity: This product is not reported to cause reproductive effects in humans 11.7 Irritancy of Product: See Section 4.2 11.8 Biological Exposure Indices: NE 11.9 Physician Recommendations: Treat symptomatically. 12. ECOLOGICAL INFORMATION

Phosphates may persist indefinitely if released into groundwater.

Phosphoric Acid: EC<sub>50</sub> (Daphnia magna, 12h) = 4.6 mg/L



Page 4 of 6 BTI-010

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision Date: 3/14/2017 SDS Revision: 2.0 13. DISPOSAL CONSIDERATIONS 13.1 Waste Disposal: Review current local, state and federal laws, codes, statutes and regulations to determine current status and appropriate disposal method for the ingredients listed in Section 2. Any disposal practice must be in compliance with local, state, and federal laws and regulations. Contact the appropriate agency for specific information. Treatment, transport, storage and disposal of hazardous waste must be provided by a licensed facility or waste hauler. 13.2 Special Considerations: NA 14. TRANSPORTATION INFORMATION The basic description (ID Number, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Additional descriptive information may be required by 49 CFR, IATA/ICAO, IMDG and the CTDGR. 49 CFR (GND): UN3264, CORROSIVE LIQUIDS, N.O.S. (PHOSPHORIC ACID, ARYL SULFONIC ACID), 8, III, LTD QTY (IP VOL ≤ 5.0 L) 14.2 IATA (AIR): UN3264, CORROSIVE LIQUIDS, N.O.S. (PHOSPHORIC ACID, ARYL SULFONIC ACID), 8, III, LTD QTY (IP VOL ≤ 0.5 L) IMDG (OCN): UN3264, CORROSIVE LIQUIDS, N.O.S. (PHOSPHORIC ACID, ARYL SULFONIC ACID), 8, III, LTD QTY (IP VOL  $\leq$  5.0 L) 14.4 TDGR (Canadian GND): UN3264, CORROSIVE LIQUIDS, N.O.S. (PHOSPHORIC ACID, ARYL SULFONIC ACID), 8, III, LTD QTY (IP VOL ≤ 5.0 L) 14.5 ADR/RID (EU): UN3264, CORROSIVE LIQUIDS, N.O.S. (PHOSPHORIC ACID, ARYL SULFONIC ACID), 8, III, LTD QTY (IP VOL ≤ 5.0 L) 14.6 SCT (MEXICO): UN3264, LIQUIDOS, CORROSIVOS, N.E.P. (ACIDO FOSFORICO, ACIDO ARIL SULFONICO), 8, III, CANTIDAD LIMITADA (IP VOL ≤ 5.0 L) 14.7 ADGR (AUS): UN3264, CORROSIVE LIQUIDS, N.O.S. (PHOSPHORIC ACID, ARYL SULFONIC ACID), 8, III, LTD QTY (IP VOL ≤ 5.0 L) 15. REGULATORY INFORMATION 15.1 SARA Reporting Requirements: This product contains Nitric Acid and Phosphoric Acid, substances subject to SARA Title III, section 313 reporting requirements. 15.2 SARA TPO: 15.3 TSCA Inventory Status: The components of this product are listed on the TSCA Inventory. CERCLA Reportable Quantity: Phosphoric Acid: 5,000 lbs (2,270 kg); Ammonium Fluosilicate: 1,000 lbs (454 kg); Dodecylbenzene Sulfonic Acid: 15.4 1,000 lbs (454 kg) 15.5 Other Federal Requirements: 15.6 Other Canadian Regulations: This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR. The components of this product are listed on the DSL/NDSL. None of the components of this product are listed on the Priorities Substances List. WHMIS Class E (corrosive material). WHMIS Class D2B (materials causing other toxic effects). 15.7 State Regulatory Information: Phosphoric Acid is found on the following state criteria lists: Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Minnesota Hazardous Substances List (MN), and Pennsylvania Right-to-Know List Monoethanolamine is found on the following state criteria lists: FL, MA, MN, PA, and WA. Fluorosilicic Acid is found on the following state criteria lists: MA. No other ingredients in this product, present in a concentration of 1.0% or greater, are listed on any of the following state criteria lists: California Proposition 65 (CA65), Delaware Air Quality Management List (DE), Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Michigan Critical Substances List (MI), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), New York Hazardous Substances List (NY), Pennsylvania Right-to-Know List (PA), Washington Permissible Exposures List (WA), Wisconsin Hazardous Substances List (WI). Other Requirements: NA



Page 5 of 6

BTI-010

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards

SDS Revision: 2.0

SDS Revision Date: 3/14/2017

		16. OTHER INFO	DRMATION			
16.1	Other Information:	SERIOUS EYE DAMAGE. Avoid breathing fun protection/face protection. IF SWALLOWED: In Rinse cautiously with water for several minutes.	IN CONTACT WITH SKIN. CAUSES SKIN IRRITATION. CAUSES nes/mist/vapors/spray. Wear protective gloves/ protective clothing/eye nmediately call a POISON CENTER or doctor/physician. IF IN EYES: Remove contact lenses, if present and easy to do. Continue rinsing. Wash contaminated clothing before reuse. KEEP LOCKED UP AND			
16.2	Terms & Definitions:	See last page of this Safety Data Sheet.				
16.3	Disclaimer:	This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of ShipMate's & Birchwood Technologies' knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product(s). If this product(s) is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.				
16.4	Prepared for:	Birchwood Technologies 7900 Fuller Road Eden Prairie, MN 55344 USA Tel: +1 (952) 937-7900 Fax: +1 (952) 937-7979 http://www.birchwoodtechnologies.com	BIRCHWOOD® TECHNOLOGIES			
16.5	Prepared by:	ShipMate, Inc. P.O. Box 787 Sisters, Oregon 97759-0787 USA Tel: +1 (310) 370-3600 Fax: +1 (310) 370-5700 http://www.shipmate.com	ShipMate*  Dangerous Goods Training & Consulting			



Page 6 of 6 **BTI-010** 

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 2.0 SDS Revision Date: 3/14/2017

#### **DEFINITION OF TERMS**

A large number of abbreviations and acronyms appear on a SDS. Some of these that are commonly used include the following:

#### **GENERAL INFORMATION:**

CAS No.	Chemical Abstract Service Number
RTECS No.	Registry of Toxic Effects of Chemical Substances Number
EINECS No.	European Inventory of Existing Commercial Chemical Substances Number

#### **EXPOSURE LIMITS IN AIR:**

ACGIH	ACGIH American Conference on Governmental Industrial Hygienists	
IDLH	IDLH Immediately Dangerous to Life and Health	
NOHSC	National Occupational Health and Safety Commission (Australia)	
OSHA	U.S. Occupational Safety and Health Administration	
PEL Permissible Exposure Limit		
STEL	Short Term Exposure Limit	
TLV Threshold Limit Value		
TWA	Time Weighted Average	

#### FIRST AID MEASURES:

CPR	Cardiopulmonary resuscitation - method in which a person whose heart has
	stopped receives manual chest compressions and breathing to circulate blood
	and provide oxygen to the body.

#### HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

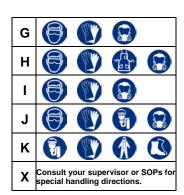
#### **HEALTH, FLAMMABILITY & REACTIVITY RATINGS:**

0	Minimal Hazard	
1	Slight Hazard	
2	Moderate Hazard	
3	Severe Hazard	
4	Extreme Hazard	

# HEALTH FLAMMABILITY PHYSICAL HAZARDS PERSONAL PROTECTION

#### PERSONAL PROTECTION RATINGS:

Α			
В			
С		THE STATE OF THE S	
D		THE STATE OF THE S	
Ε			
F		THE SECOND	





#### OTHER STANDARD ABBREVIATIONS:

Carc	Carcinogenic	
Irrit	Irrit Irritant	
NA	NA Not Available	
NR	No Results	
ND	Not Determined	
NE	Not Established	
NF Not Found		
SCBA	Self-Contained Breathing Apparatus	
Sens	Sensitization	
STOT RE	Specific Target Organ Toxicity - Repeat Exposure	
STOT SE	Specific Target Organ Toxicity - Single Exposure	

#### NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

FLAMMABILI	AMMABILITY LIMITS IN AIR:		
Autoignition Temperature	Minimum temperature required to initiate combustion in air with no other source of ignition		
LEL	Lower Explosive Limit - lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source		
UEL	Upper Explosive Limit - highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source		

#### **HAZARD RATINGS:**

0	Minimal Hazard	FLAMMABILITY
1	Slight Hazard	\
2	Moderate Hazard	REACTIVITY
3	Severe Hazard	
4	Extreme Hazard	
ACD	Acidic	
ALK	Alkaline	
COR	Corrosive	/ <b>\ \ \</b> \ <b>\</b>
W	Use No Water	HEALTH
ох	Oxidizer	SPECIAL
TREFOIL	Radioactive	PRECAUTIONS

#### TOXICOLOGICAL INFORMATION:

Lethal Dose (solids & liquids) which kills 50% of the exp LC 50 Lethal concentration (gases) which kills 50% of the exp ppm Concentration expressed in parts of material per million TD 10 Lowest dose to cause a symptom	osed animal
ppm Concentration expressed in parts of material per million	
	parts
TD <sub>Io</sub> Lowest dose to cause a symptom	
TCLo Lowest concentration to cause a symptom	
TD <sub>Io</sub> , LD <sub>Io</sub> , & LD <sub>o</sub> or Lowest dose (or concentration) to cause lethal or toxic	effects
TC, TC <sub>o</sub> , LC <sub>io</sub> , & LC <sub>o</sub>	
IARC International Agency for Research on Cancer	
NTP National Toxicology Program	
RTECS Registry of Toxic Effects of Chemical Substances	
BCF Bioconcentration Factor	
TL <sub>m</sub> Median threshold limit	
log Kow or log Koc Coefficient of Oil/Water Distribution	

#### REGULATORY INFORMATION:

WHMIS	MIS Canadian Workplace Hazardous Material Information System	
DOT	U.S. Department of Transportation	
TC	TC Transport Canada	
EPA	U.S. Environmental Protection Agency	
DSL	Canadian Domestic Substance List	
NDSL	Canadian Non-Domestic Substance List	
PSL	Canadian Priority Substances List	
TSCA	U.S. Toxic Substance Control Act	
EU	European Union (European Union Directive 67/548/EEC)	
WGK	Wassergefährdungsklassen (German Water Hazard Class)	

#### WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:

0	<b>®</b>		<b>②</b>	$\Theta$	(%)		
Class A	Class B	Class C	Class D1	Class D2	Class D3	Class E	Class F
Compressed	Flammable	Oxidizing	Toxic	Irritation	Infectious	Corrosive	Reactive

#### CLP/GHS (1272/2008/EC) PICTOGRAMS:

			$\Diamond$			$\Leftrightarrow$		*
GHS01	GHS02	GHS03	GHS04	GHS05	GHS06	GHS07	GHS08	GHS09
Explosive	Flammable	Oxidizer	Pressurized	Corrosive	Toxic	Harmful Irritating	Health Hazard	Environment