BIRCHWOOD, TECHNOLOGIES

2.3

SAFETY DATA SHEET

SDS Revision: 2.0

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SDS Revision Date: 3/14/2017

1. PRODUCT & COMPANY IDENTIFICATION Product Name 11 PRESTO BLACK[®] MKP 1.2 Chemical Name: Acid Mixture 1.3 Synonyms 560250, 560251, 560258, 560250INT, 560258INT Presto Black® MKP Trade Names: 1.4 1.5 Product Use: Blackening Iron and Steel Distributor's Name: **Birchwood Laboratories LLC** 1.6 Distributor's Address: 7900 Fuller Road, Eden Prairie, MN 55344 USA 1.7 ChemTrec +1 (800) 424-9300 / +1 (703) 527-3887 or Poison Control Center +1 (855) 281-1742 18 Emergency Phone: 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! TOXIC IF SWALLOWED. MAY CAUSE SEVERE SKIN BURNS OR EYE DAMAGE. MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE. Classification: Acute Toxicity 3; Skin Corrosion1B; STOT-RE 2; Skin Corrosion 1A; Chronic Aquatic Toxicity 1 Label Elements: 2.2 Hazard Statements (H): H301 - Toxic if swallowed. H314 - Causes severe skin burns and eye damage. H373 - May cause damage to organs through prolonged or repeated exposure. H410 -Very toxic to aquatic life with long lasting effects. Precautionary Statements (P): P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P220 - Keep/Store away from clothing/ combustible materials. P273 - Avoid release to the environment. 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. P370 - In case of fire: Use fire-extinguishing media appropriate for surrounding materials to extinguish. P391 - Collect spillage. P501 - Dispose of contents/ container to an approved waste disposal plant.

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

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

								EXPC	SURE L	IMITS IN	I AIR (m	g/m³)	
					AC	GIH		NOHSC	;		OSHA		
					pp	om		ppm			ppm		
CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	TLV	STEL	ES- TWA	ES- STEL	ES- PEAK	PEL	STEL	IDLH	OTHER
WATER	7732-18-5	ZC0110000	231-791-2	60-100	NE	NE	NF	NF	NF	NE	NE	NE	
WATER													
	7783-00-8	VS7175000	231-974-7	1-5	(0.2)	NA	(0.2)	NF	NF	(0.2)	NA	NA	
SELENIOUS ACID	Acute Toxicity H400, H410	-Inh 3; Acute To:	xicity-Oral 3; ST0)T-Repeate	d Exp 2	; Acute	Aquati	c Toxici	ity 1; Cl	nronic A	quatic	Toxicity	1; H301, H331,
NITRIC ACID	7697-37-2	QU5775000	231-714-2	1-5	2	4	2	NF	NF	2	NA	25	
	Oxidizing Liqu	id 3; Skin Corros	sion 1A; H272, H	314									
	7798-23-4	232-254-5	232-254-5	1-5	(1)	NA	NF	NF	NF	(0.1)	NA	NA	FUME, DUST
COPPER (II) PHOSPHATE	Acute Toxicity-Oral 3: H301, H410												
	Acute TOXICITY												
PHOSPHORIC ACID	7664-38-2	TB6300000	231-633-2	1-5	(1)	(3)	NF	NF	NF	NA	NA	1000	

			4. FIRST AID MEASURES
4.1	First Aid:	Ingestion:	Do not induce vomiting. Call +1 (855) 281-1742 for emergency medical advice. If vomiting occurs, keep victim's head lowered (forward) to keep vomit from entering the lungs. Call 911 for emergency medical transport if any symptoms noted.
		<u>Eyes</u> :	Remove and discard contact lenses if worn and flush eyes with large amounts of water for at least 20 minutes. Seek immediate medical attention when done rinsing eyes.
		<u>Skin</u> :	Remove contaminated clothing and wash exposed skin with large amounts of soap and water. Seek medical attention if any blistering, swelling or open sores develop.
		Inhalation:	Move victim to fresh air. Contact emergency medical services (911) if any difficulty in breathing occurs or if victim loses consciousness.
4.2	Effects of Exposure:	Eyes:	Severe or permanent eye damage.
		<u>Skin</u> :	Burns upon direct contact.
		Ingestion:	Severe burns of mouth, throat, stomach.
		Inhalation:	Severe irritation or burns in respiratory tract and mucous membranes. Possible lung damage.



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4.3	Symptoms of Overexposure:	Eyes: Redness, burning	g, irritation, a	and swell	ing around	deves						
		Skin: Redness, burning			•							
		Ingestion: Nausea, vomiting										
		Inhalation: Coughing, wheez				in mucou	s membr	anes dif	ficulty bre	athing		
4.4	Acute Health Effects:	May be harmful if inhaled. Mate	<u> </u>		,			,		Ŭ	ner resr	irato
		tract. May be harmful if swallow								and up		mate
1.5	Chronic Health Effects:	May damage the nervous syste	m, kidney a	nd/or live	r.							
1.6	Target Organs:	Eyes, skin, nervous system, kid	Ineys, liver, i	respirato	ry system.							
1.7	Medical Conditions	Pre-existing dermatitis, other sl						LTH				3
	Aggravated by Exposure:	organs (eyes, skin, and respire				ey functior		MMABI	ITV			(
		may be more susceptible to the	effects of th	nis substa	ance.							
							PHY	SICAL	HAZARI	JS		2
							PRO	TECTI	/E EQUI	PMEN ⁻	Г	ŀ
							EYES	3 5	SKIN	LUNG	GS	
.8	Notes to Physician:	This product contains <u>Selenio</u> should be considered in asymp edema and multi-organ failure r	ptomatic or	minimally	/ symptom	natic patier	nts as de	elayed to	xic effect	s includ	ing puln	
		5. FIR	EFIGHT	ING N	IEASU	RES						
5.1	Fire & Explosion Hazards:	Non-flammable. May react with with air. May intensity fire; oxid								ures		
5.2	Extinguishing Methods:	Use fire-extinguishing media ap										
		As with any fire, firefighters sh approved or equivalent self-cor as for surrounding materials. degradation may produce oxic and/or derivatives. Fire should I fire is out. Use water spray to Prevent runoff from fire control natural waterway.	ntained brea Hazardo des of carbo be fought fro cool fire-ex	thing ap us deco on, phos om a safe posed su	paratus (S mposition phorous, s distance. Infaces and	CBA) and products selenium a Keep cor d to protect	protectiv may be and/or ni ntainers o ct person	ve clothir e releas trogen, l cool until aal. Figh	ng. Fight f ed. Thei hydrocarb well after it fire upw	fires rmal oons the <i>i</i> nd.	3	2
		6. ACCIDE	NTAL R	ELEA	SE ME	ASUR	ES					
5.1	Spills:	Before cleaning any spill or I Equipment (PPE). Use safety apron, boots, etc.) to prevent si <u>Small Spills</u> : Wear appropriate inert material such as vermiculi <u>Large Spills</u> : Keep incompatib or release. Isolate immediate f done with minimal risk. Wear Recover as much free liquid as discharging liquid directly into a	glasses or s kin contact. protective e te or sand to le materials nazard area appropriate s possible a	equipmer soak up (e.g., or and keep protectind collect	ggles and t including the produ ganics suc o unauthor ve equipm t in acid-re	face shield g gloves and lot and pla ch as oil) a rized perso nent includ	d; use glo nd protec ce into a way fron onnel out ing respi	oves and ctive eye containe n spill. S of area. iratory p	wear. Us wear. Us or for later Stay upwin Stop spi rotection	otective se a nor disposand and a ll or rele as cond	clothing n-combu al. away fro ase if it litions w	ı (e.ı ıstib ım s can arra
	•											
7.1	Work & Hygiene Practices:	7. HANDLING Avoid breathing mists or spray.						nma=1 ··	han her -	11100	duct 1/-	
		of the reach of children. Do not expose to heat and flame. Use decontaminate any spills or res	t eat, drink o e only in ver	r smoke	when han	dling this I	oroduct.	Wash th	noroughly	after ha	ndling.	Do i
	Storage & Handling:	Use and store in a cool, dry, sunlight. Store in acid-resistan (120°F). Keep away from incor	well-ventilate t containers.	. Keep c	ontainers	covered w	hen not i	in use. 1	Avoid tem	perature	es above	
7.2												
	Special Precautions:	Empty containers may retain ha										
	Special Precautions:	8. EXPOSURE CON		& PE	RSON	<u>AL PR</u>	<u> </u>	<u>TION</u>				
.3	Exposure Limits:				RSON	NOHSC			OSHA		OTHER	
.3	· ·	8. EXPOSURE CON		3IH		NOHSC ES-	ES-		OSHA		OTHER	
7.3	Exposure Limits:	8. EXPOSURE CON		SIH STEL	ES-TWA	NOHSC ES- STEL	ES- PEAK	PEL	OSHA STEL	IDLH NA	OTHER	
7.3	Exposure Limits:	8. EXPOSURE CON <u>CHEMICAL NAME(S)</u> SELENIOUS ACID		SIH STEL NA	ES-TWA (0.2)	NOHSC ES- STEL NF	ES- PEAK NF	PEL (0.2)	OSHA STEL NA	NA	OTHER	
7.3	Exposure Limits:	8. EXPOSURE CON <u>CHEMICAL NAME(S)</u> SELENIOUS ACID NITRIC ACID	ITROLS 	SIH STEL NA 4	ES-TWA (0.2) 2	NOHSC ES- STEL NF NF	ES- PEAK NF	PEL (0.2) 2	OSHA STEL NA NA	NA 25		DUS
7.2	Exposure Limits:	8. EXPOSURE CON <u>CHEMICAL NAME(S)</u> SELENIOUS ACID		SIH STEL NA	ES-TWA (0.2)	NOHSC ES- STEL NF	ES- PEAK NF	PEL (0.2)	OSHA STEL NA	NA	OTHER	DUS



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		EXPOSURE CONTROLS & PERSONAL PROTECTION – cont'd
3.3	Respiratory Protection:	In instances where vapors or sprays of this product are generated, and respiratory protection is needed, use only protection authorized by 29 CFR §1910.134, applicable U.S. State regulations, or the Canadian CAS Standard Z94.4-93 and applicable standards of Canadian Provinces, EC member States, or Australia.
8.4	Eye Protection:	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.
3.6	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:	Clear, blue liquid
9.2	Odor:	Odorless
9.3	Odor Threshold:	0.29 to 0.98 ppm (Nitric Acid)
9.4	pH:	
9.5		0.85
	Melting Point/Freezing Point:	NA
9.6	Initial Boiling Point/Boiling Range:	> 100 °C (> 212 °F)
9.7	Flashpoint:	NA
9.8	Upper/Lower Flammability	NA
	Limits:	
9.9	Vapor Pressure:	NA
9.10	Vapor Density:	< 1.0 (air = 1.0)
9.11	Relative Density:	1.055
9.12	Solubility:	Complete (water)
9.13	Partition Coefficient (log Pow):	NA
9.14	Autoignition Temperature:	NA
9.15	Decomposition Temperature:	NA
9.16	Viscosity:	NA
9.17	Other Information:	Evaporation Rate: < 1.0 (ethyl ether = 1.0)
		10. STABILITY & REACTIVITY
10.1	Stability:	Stable at normal temperatures.
10.2	Hazardous Decomposition Products:	Reaction with organics and strong reducing agents can produce organoselenides and hydrogen selenide. The decomposition may produce selenium, nitrogen, phosphoric and copper oxides.
10.3	Hazardous Polymerization:	Will not occur.
		Will Hot ocean.
10.4	Conditions to Avoid:	Excessive heat shock friction
10.4 10.5	Conditions to Avoid: Incompatible Substances:	Excessive heat, shock, friction. Cyanides, water-reactive substances, strong reducing agents, chlorinated cleaners or sanitizers, combustible org materials, most metals.
		Cyanides, water-reactive substances, strong reducing agents, chlorinated cleaners or sanitizers, combustible org
10.5		Cyanides, water-reactive substances, strong reducing agents, chlorinated cleaners or sanitizers, combustible org materials, most metals.
10.5	Incompatible Substances:	Cyanides, water-reactive substances, strong reducing agents, chlorinated cleaners or sanitizers, combustible org materials, most metals. 11. TOXICOLOGICAL INFORMATION Inhalation: YES Absorption: YES Ingestion: NO
10.5 11.1 11.2	Incompatible Substances: Routes of Entry:	Cyanides, water-reactive substances, strong reducing agents, chlorinated cleaners or sanitizers, combustible org materials, most metals.
10.5 11.1 11.2 11.3	Incompatible Substances: Routes of Entry: Toxicity Data:	Cyanides, water-reactive substances, strong reducing agents, chlorinated cleaners or sanitizers, combustible org materials, most metals. 11. TOXICOLOGICAL INFORMATION Inhalation: YES NO Phosphoric Acid: LD50 (oral, rat) = 1530 mg/kg; LD50 (oral, rat) = 4640 mg/kg
10.5 11.1 11.2 11.3 11.4	Incompatible Substances: Routes of Entry: Toxicity Data: Acute Toxicity:	Cyanides, water-reactive substances, strong reducing agents, chlorinated cleaners or sanitizers, combustible org materials, most metals. 11. TOXICOLOGICAL INFORMATION Inhalation: YES Absorption: YES Inhealation: YES Phosphoric Acid: LD ₅₀ (oral, rat) = 1530 mg/kg; LD ₅₀ (oral, rat) = 4640 mg/kg See Section 4.4 See Section 4.5
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10.5 11.1 11.2 11.3 11.4 11.5	Incompatible Substances: Routes of Entry: Toxicity Data: Acute Toxicity: Chronic Toxicity: Suspected Carcinogen:	Cyanides, water-reactive substances, strong reducing agents, chlorinated cleaners or sanitizers, combustible org materials, most metals. 11. TOXICOLOGICAL INFORMATION Inhalation: YES Ingestion: NO Phosphoric Acid: LD50 (oral, rat) = 1530 mg/kg; LD50 (oral, rat) = 4640 mg/kg See Section 4.4 See Section 4.4 See Section 4.5 Selenious Acid is listed by IARC on Group 3 (not classifiable as to its carcinogenicity to humans)
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10.5 11.1 11.2 11.3 11.4 11.5	Incompatible Substances: Routes of Entry: Toxicity Data: Acute Toxicity: Chronic Toxicity: Suspected Carcinogen: Reproductive Toxicity: Mutagenicity:	Cyanides, water-reactive substances, strong reducing agents, chlorinated cleaners or sanitizers, combustible org materials, most metals. 11. TOXICOLOGICAL INFORMATION Inhalation: YES Ingestion: NO Phosphoric Acid: LD50 (oral, rat) = 1530 mg/kg; LD50 (oral, rat) = 4640 mg/kg See Section 4.4 See Section 4.4 See Section 4.5 Selenious Acid is listed by IARC on Group 3 (not classifiable as to its carcinogenicity to humans) This product is not reported to cause reproductive toxicity in humans. This product is not reported to produce mutagenic effects in humans. This product is not reported to produce mutagenic effects in humans.
10.5 11.1 11.2 11.3 11.4 11.5	Incompatible Substances: Routes of Entry: Toxicity Data: Acute Toxicity: Chronic Toxicity: Suspected Carcinogen: Reproductive Toxicity: Mutagenicity: Embryotoxicity:	Cyanides, water-reactive substances, strong reducing agents, chlorinated cleaners or sanitizers, combustible org materials, most metals. 11. TOXICOLOGICAL INFORMATION Inhalation: YES Absorption: YES Ingestion: NO Phosphoric Acid: LD50 (oral, rat) = 1530 mg/kg; LD50 (oral, rat) = 4640 mg/kg See Section 4.4 See Section 4.5 Selenious Acid is listed by IARC on Group 3 (not classifiable as to its carcinogenicity to humans) This product is not reported to cause reproductive toxicity in humans. This product is not reported to produce mutagenic effects in humans. This product is not reported to produce embryotoxic effects in humans.
10.5 11.1 11.2 11.3 11.4 11.5 11.6	Incompatible Substances: Routes of Entry: Toxicity Data: Acute Toxicity: Chronic Toxicity: Suspected Carcinogen: Reproductive Toxicity: Mutagenicity: Embryotoxicity: Teratogenicity:	Cyanides, water-reactive substances, strong reducing agents, chlorinated cleaners or sanitizers, combustible org materials, most metals. 11. TOXICOLOGICAL INFORMATION Inhalation: YES Absorption: YES Ingestion: NO Phosphoric Acid: LD ₅₀ (oral, rat) = 1530 mg/kg; LD ₅₀ (oral, rat) = 4640 mg/kg See Section 4.4 See Section 4.4 See Section 4.5 Selenious Acid is listed by IARC on Group 3 (not classifiable as to its carcinogenicity to humans) This product is not reported to cause reproductive toxicity in humans. This product is not reported to produce mutagenic effects in humans. This product is not reported to produce embryotoxic effects in humans. This product is not reported to cause teratogenic effects in humans. This product is not reported to cause teratogenic effects in humans.
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10.5 11.1 11.2 11.3 11.4 11.5 11.6 11.7 11.8	Incompatible Substances: Routes of Entry: Toxicity Data: Acute Toxicity: Chronic Toxicity: Suspected Carcinogen: Reproductive Toxicity: Mutagenicity: Embryotoxicity: Teratogenicity: Reproductive Toxicity: Irritancy of Product: Biological Exposure Indices:	Cyanides, water-reactive substances, strong reducing agents, chlorinated cleaners or sanitizers, combustible org materials, most metals. 11. TOXICOLOGICAL INFORMATION Inhalation: YES Inhalation: YES Phosphoric Acid: LD ₅₀ (oral, rat) = 1530 mg/kg; LD ₅₀ (oral, rat) = 4640 mg/kg See Section 4.4 See Section 4.5 Selenious Acid is listed by IARC on Group 3 (not classifiable as to its carcinogenicity to humans) This product is not reported to cause reproductive toxicity in humans. This product is not reported to produce mutagenic effects in humans. This product is not reported to cause teratogenic effects in humans. This product is not reported to cause teratogenic effects in humans. This product is not reported to cause teratogenic effects in humans. This product is not reported to cause teratogenic effects in humans. This product is not reported to cause teratogenic effects in humans. This product is not reported to cause teratogenic effects in humans. This product is not reported to cause reproductive effects in humans. This product is not reported to cause reproductive effects in humans. This product is not reported to cause reproductive effects in humans. See Section 4.2 NE
10.5 11.1 11.2 11.3 11.4 11.5 11.6 11.7 11.8 11.9	Incompatible Substances: Routes of Entry: Toxicity Data: Acute Toxicity: Chronic Toxicity: Suspected Carcinogen: Reproductive Toxicity: Mutagenicity: Embryotoxicity: Teratogenicity: Reproductive Toxicity: Irritancy of Product: Biological Exposure Indices:	Cyanides, water-reactive substances, strong reducing agents, chlorinated cleaners or sanitizers, combustible org materials, most metals. 11. TOXICOLOGICAL INFORMATION Inhalation: YES Inhalation: YES Phosphoric Acid: LD ₅₀ (oral, rat) = 1530 mg/kg; LD ₅₀ (oral, rat) = 4640 mg/kg See Section 4.4 See Section 4.5 Selenious Acid is listed by IARC on Group 3 (not classifiable as to its carcinogenicity to humans) This product is not reported to cause reproductive toxicity in humans. This product is not reported to produce mutagenic effects in humans. This product is not reported to cause teratogenic effects in humans. This product is not reported to cause reproductive effects in humans. This product is not reported to cause reproductive effects in humans. This product is not reported to cause reproductive effects in humans. This product is not reported to cause reproductive effects in humans. See Section 4.2 NE Treat symptomatically.
10.4 10.5 11.1 11.2 11.3 11.4 11.5 11.6 11.7 11.8 11.9 12.1 12.2	Incompatible Substances: Incompatible Substances: Routes of Entry: Toxicity Data: Acute Toxicity: Chronic Toxicity: Suspected Carcinogen: Reproductive Toxicity: Embryotoxicity: Teratogenicity: Reproductive Toxicity: Irritancy of Product: Biological Exposure Indices: Physician Recommendations:	Cyanides, water-reactive substances, strong reducing agents, chlorinated cleaners or sanitizers, combustible org materials, most metals. Inhalation: YES Ingestion: NO Phosphoric Acid: LD ₅₀ (oral, rat) = 1530 mg/kg; LD ₅₀ (oral, rat) = 4640 mg/kg See Section 4.4 See Section 4.4 See Section 4.5 Selenious Acid is listed by IARC on Group 3 (not classifiable as to its carcinogenicity to humans) This product is not reported to cause reproductive toxicity in humans. This product is not reported to produce mutagenic effects in humans. This product is not reported to cause teratogenic effects in humans. This product is not reported to cause reproductive effects in humans. This product is not reported to cause teratogenic effects in humans. This product is not reported to cause reproductive effects in humans. This product is not reported to cause teratogenic effects in humans. This product is not reported to cause reproductive effects in humans. This product is not reported to cause reproductive effects in humans. This product is not reported to cause reproductive effects in humans. This product is not reported to cause reproductive effects in humans. This product is not reported to cause reproductive effects in humans. This product is not reported to cause reproductive effects in humans. See Section 4.2 NE Treat symptomatically.



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	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:	U.S. EPA Hazardous Waste – Characteristic - Corrosive (D002), Characteristic - Toxic (D010)			

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.

14.1	49 CFR (GND):	UN3264, CORROSIVE LIQUIDS, ACIDIC, INORGANIC, N.O.S. (SELENIOUS ACID, PHOSPHORIC ACID), 8, III, LTD QTY (IP VOL ≤ 5.0 L)	\diamond
14.2	IATA (AIR):	UN3264, CORROSIVE LIQUIDS, ACIDIC, INORGANIC, N.O.S. (SELENIOUS ACID, PHOSPHORIC ACID), 8, III, LTD QTY (IP VOL ≤ 0.5 L)	\otimes
14.3	IMDG (OCN):	UN3264, CORROSIVE LIQUIDS, ACIDIC, INORGANIC, N.O.S. (SELENIOUS ACID, PHOSPHORIC ACID), 8, III, LTD QTY (IP VOL ≤ 5.0 L) MARINE POLLUTANT	\diamond
14.4	TDGR (Canadian GND):	UN3264, CORROSIVE LIQUIDS, ACIDIC, INORGANIC, N.O.S. (SELENIOUS ACID, PHOSPHORIC ACID), 8, III, LTD QTY (IP VOL ≤ 5.0 L)	\diamond
14.5	ADR/RID (EU):	UN3264, CORROSIVE LIQUIDS, ACIDIC, INORGANIC, N.O.S. (SELENIOUS ACID, PHOSPHORIC ACID), 8, III, LTD QTY (IP VOL ≤ 5.0 L)	\diamond
14.6	SCT (MEXICO):	UN3264, LIQUIDOS, CORROSIVOS, ACIDO, INORGANICO, N.E.P. (ACIDO SELENIO, ACIDO FOSFORICO), 8, III, CANTIDAD LIMITADA (IP VOL ≤ 5.0 L)	\diamond
14.7	ADGR (AUS):	UN3264, CORROSIVE LIQUIDS, ACIDIC, INORGANIC, N.O.S. (SELENIOUS ACID, PHOSPHORIC ACID), 8, III, LTD QTY (IP VOL ≤ 5.0 L)	\diamond

15. REGULATORY INFORMATION

15.1	SARA Reporting Requirements:	This product contains <u>Selenious Acid</u> , <u>Nitric Acid</u> and <u>Phosphoric Acid</u> , substances subject to SARA Title III, section 313 reporting requirements.
15.2	SARA TPQ:	302 TPQ (Nitric Acid): 1,000 lbs (454 kg)
15.3	TSCA Inventory Status:	The components of this product are listed on the TSCA Inventory.
15.4	CERCLA Reportable Quantity:	Selenious Acid: 10 lbs (4.54 kg); Nitric Acid: 1,000 lbs (454 kg); Phosphoric Acid: 5,000 lbs (2,270 kg)
15.5	Other Federal Requirements:	NA
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 D1 (Materials Causing Immediate and Serious Toxic Effects).
15.7	State Regulatory Information:	Selenious Acid is found on the following state criteria lists: Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Minnesota Hazardous Substances List (MN), Pennsylvania Right-to-Know List (PA), and Wisconsin Hazardous Substances List (WI). <u>Nitric Acid</u> is found on the following state criteria lists: FL, MA, MN, New Jersey Right-to-Know List (NJ), PA, and Washington Permissible Exposures List (WA). <u>Phosphoric Acid</u> is found on the following state criteria lists: FL, MA, MN, New Jersey Right-to-Know List (NJ), PA, and Washington Permissible Exposures List (WA). <u>Phosphoric Acid</u> is found on the following state criteria lists: FL, MA, MN, PA. 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), Substances List (WI), Wisconsin Hazardous Substances List (WI), Substances List (WI), Wisconsin Hazardous Substances List (WI), Substances List (WI), Wisconsin Hazardous Substances List (WI), Wisconsin Hazardous Substances List (WA), Wisconsin Hazardous Substances List (WI), Wisconsin Hazardous Substances List (WI), Wisconsin Hazardous Substances List (WA), Wisconsin Hazardous Substances List (WI), Wisconsin Hazardous Substances List (WI
15.8	Other Requirements:	NA



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		16. OTHER INFO	ORMATION
16.1	Other Information:	DAMAGE TO ORGANS THROUGH PROLONG use. Do not handle until all safety precautions combustible materials. Avoid release to the env face protection. IF SWALLOWED: Immediately	AUSE SEVERE SKIN BURNS OR EYE DAMAGE. MAY CAUSE GED OR REPEATED EXPOSURE. Obtain special instructions before is have been read and understood. Keep/Store away from clothing/ vironment. Wear protective gloves/ protective clothing/ eye protection/ y call a POISON CENTER or doctor/physician. IF IN EYES: Rinse we contact lenses, if present and easy to do. Continue rinsing. Collect ACH OF CHILDREN.
16.2	Terms & Definitions:	See last page of this Safety Data Sheet.	
16.3	Disclaimer:	government regulations must be reviewed for a Technologies' knowledge, the information contai suitability or completeness is not guaranteed an The information contained herein relates only	OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other applicability to this product. To the best of ShipMate's & Birchwood ined herein is reliable and accurate as of this date; however, accuracy, d no warranties of any type, either expressed or implied, are provided. to the specific product(s). If this product(s) is combined with other sidered. Data may be changed from time to time. Be sure to consult the
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



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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	NOHSC National Occupational Health and Safety Commission (Australia)		
OSHA	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:

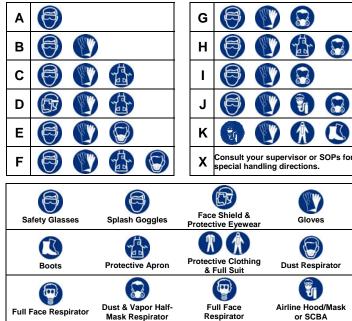
CPR	Cardiopulmonary resuscitation - method in which a person whose heart has
	stopped receives manual chest compressions and breathing to circulate blood
	and provide oxygen to the body.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

0	Minimal Hazard	HEALTH
1	Slight Hazard	FLAMMABILITY
2	Moderate Hazard	PHYSICAL HAZARDS
3	Severe Hazard	PERSONAL PROTECTION
4	Extreme Hazard	

PERSONAL PROTECTION RATINGS:



OTHER STANDARD ABBREVIATIONS:

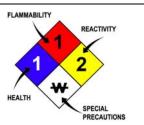
Carc	Carcinogenic		
Irrit	Irritant		
NA	Not Available		
NR	No Results		
ND	Not Determined		
NE Not Established			
NF Not Found			
SCBA	Self-Contained Breathing Apparatus		
Sens	Sensitization		
STOT RE	Specific Target Organ Toxicity – Repeat Exposure		
STOT SE	Specific Target Organ Toxicity – Single Exposure		

NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

FLAWIWADILITT LIWITS IN AIK.				
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	F		
1	Slight Hazard			
2	Moderate Hazard			
3	Severe Hazard			
4	Extreme Hazard			
ACD Acidic				
ALK	Alkaline			
COR	Corrosive			
W	Use No Water	н		
ох	Oxidizer			
TREFOIL	Radioactive			



TOXICOLOGICAL INFORMATION:

Lethal Dose (solids & liquids) which kills 50% of the expos					
LC ₅₀	Lethal concentration (gases) which kills 50% of the exposed animal				
ppm Concentration expressed in parts of material per million parts					
TD _{Io} Lowest dose to cause a symptom					
TCLo Lowest concentration to cause a symptom					
TD _{io} , LD _{io} , & LD _o or	Lowest dose (or concentration) to cause lethal or toxic effects				
TC, TC _o , LC _{io} , & LC _o					
IARC International Agency for Research on Cancer					
NTP	National Toxicology Program				
RTECS	Registry of Toxic Effects of Chemical Substances				
BCF	Bioconcentration Factor				
TLm	Median threshold limit				
log K _{ow} or log K _{oc}	Coefficient of Oil/Water Distribution				

REGULATORY INFORMATION:

WHMIS	Canadian Workplace Hazardous Material Information System			
DOT	U.S. Department of Transportation			
TC	Transport Canada			
EPA	U.S. Environmental Protection Agency			
DSL	Canadian Domestic Substance List			
NDSL	SL 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:

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