Safety Data Sheet
BREW BRITE PLUS

SECTION 1- PRODUCT IDENTIFICATION

PRODUCT NAME	BREW BRITE PLUS
SYNONYMS	Product is a mixture: No synonyms are available
PRODUCT USE	Highly Acidic Material
SUPPLIER	WESMAR CO. INC.
SUPPLIER'S ADDRESS	5720 204TH ST. SW, LYNNWOOD, WA 98036 (206) 783-5344
EMERGENCY RESPONSE PHONE	PERS: 1-800-633-8253

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SECTION 2 – HAZARD IDENTIFICATION

GHS – US CLASSIFICATION	:	H290	Metal corrosion Category 1
	:	H300	Acute Toxicity, Oral, Category 1
		H304	Aspiration Hazard, Category 1
	:	H312	Acute Toxicity, Dermal, Category 4
	:	H314	Skin/Corrosion/Irritation, Category 1
	:	H332	Acute Toxicity, Inhalation, Category 4
HAZARD PICTOGRAMS	:		
SIGNAL WORD	:	**DANGER**	
GHS LABEL ELEMENTS	:	The product is classified and labeled according to the Globally Harmonized System (GHS).	
GHS PHYSICAL HAZARDS	:	H290	May be corrosive to metals.
GHS HEALTH HAZARDS	:	H300	Fatal if swallowed.
	:	H304	May be fatal if swallowed and enters airways.
	:	H312	Harmful in contact with skin
	:	H314	Causes severe skin burns and eye damage.
	:	H318	Causes serious eye damage.
	:	H332	Harmful if inhaled.
GHS PRECAUTIONARY HAZARDS	:	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.
	:	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	:	P220	Store away from clothing / combustibles.
	:	P260	Do not breathe dust/fume/gas/mist/vapors/spray.
	:	P264	Wash skin and contaminated clothing thoroughly after handling.
	:	P270	Do not eat, drink or smoke when using this product.
	:	P280	Wear suitable protective gloves / protective clothing / eye protection / face protection.
	:	P284	Wear respiratory protection.
	:	P301+P330 +P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	:	P310	Immediately call a POISON CENTER or doctor/physician.
	:	P303+P361 +P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	:	P305+P351 +P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

	:	P305+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position.
	:	P330	Rinse mouth if ingested.
	:	P405	Store locked up.
	:	P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

CLASSIFICATION SYSTEM: : NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme.
NFPA ratings (scale 0-4): : Health = 3, Fire = 0, Reactivity = 1
HMIS ratings (scale 0-5): : Health = 3, Fire = 0, Reactivity = 1

SECTION 3 – COMPOSITON/INFORMATION ON INGREDIENTS

CHEMICAL CHARACTERIZATION : Mixtures
DESCRIPTION : Mixture of the substances listed below with nonhazardous additions.

COMPONENT	PERCENT	CAS #	EC #	GHS CLASS
Nitric Acid	20-30	6797-37-2	231-714-2	Metal Corr Cat 1, Skin Corr Cat 1 Acute Tox Oral Cat 1, Acute Tox Inhal Cat 4 Acute Tox Dermal Cat 4
Phosphoric acid	5-10	7664-38-2	231-633-2	Skin Corr Cat 1B, Eye Dam Cat 1
Methyl-oxirane polymer with oxirane	0.1-1	9003-11-6	Not Found	No need for classification according to GHS criteria for this product.

Corr. = Corrosion, Cat = Category, Tox = Toxicity, Inhal. = Inhalation, Dam = Damage, STOT SE = Specific Target Organ Toxicity Single Exposure

SECTION 4 – FIRST AID MEASURES

EYE CONTACT : Immediately flush eyes with water for at least 15 minutes. Hold eyelids open to ensure adequate flushing. Remove contact lenses, if present and easy to do so. Continue rinsing. Immediate call a POISON CENTER or doctor/physician.

SKIN CONTACT : Remove contaminated clothing and shoes. Wash affected skin area with water for at least 15 minutes. Delayed skin damage is possible if product is not completely washed off. Get immediate medical attention. Wash contaminated clothing before reuse.

SWALLOWING (INGESTION) : If ingested, dilute swallowed material by drinking water. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person. Immediate call a POISON CENTER or doctor/physician.

INHALATION : When symptoms occur, go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER/doctor/physician.

GENERAL MEASURES : Never give anything by mouth to an unconscious person. Rescue personnel must wear appropriate protective equipment during removal of victims from contaminated areas. Treat symptomatically and supportively.

SECTION 5 – FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA : Water spray, fog, carbon dioxide, foam, dry chemical

SPECIAL HAZARDS (FIRE) : Not flammable. Contains sodium hypochlorite which may act as an oxidizer in some cases intensifying a fire.

EXPLOSION HAZARDS : Product is not explosive.

REACTIVITY (FIRE) : Thermal decomposition generates: Corrosive vapors. If the product is involved in a fire, it can release explosive hydrogen gas. When heated to decomposition, emits toxic fumes. May be corrosive to metals.

SPECIAL INSTRUCTIONS TO FIRE FIGHTERS

PRECAUTIONARY MEASURES	:	Exercise caution when fighting any chemical fire.
FIREFIGHTING INSTRUCTIONS	:	Use water spray or fog for cooling exposed containers.
PROTECTION DURING FIREFIGHTING	:	Do not enter fire area without proper protective equipment, including respiratory protection.
HAZARDOUS COMBUSTION PRODUCTS	:	Potassium oxides. May liberate toxic gases. Sodium oxides. Phosphorous oxides. Nitrogen oxides. Carbon oxides (CO, CO_2). Explosive Hydrogen gas.
OTHER INFORMATION (FIRE)	:	Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUSTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES	:	Restrict access to keep out unauthorized or unprotected personnel. Wear protective equipment. Avoid inhalation and direct contact.
ENVIRONMENTAL PRECAUTIONS	:	Keep spilled material away from sewage/drainage systems and waterways. If amounts exceeding the Reportable Quantity (5000 lbs. as phosphoric acid) are released, notification of the National Response Center (800) 424-8802 is required. See section15 for more information.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP	:	All clean-up personnel must be properly trained. Confine the spill and remove incompatible materials and ignition sources. Ensure adequate ventilation. Secure the source of the leak if conditions are safe. Neutralize spill and collect using an appropriate absorbent material such as clay or vermiculite. Place waste in an appropriate container for disposal. Use care during clean-up to avoid exposure to the material and injury from broken containers.

SECTION 7 – HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	:	Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and again when leaving work. Do not eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling.
CONDITIONS FOR SAFE STORAGE	:	Store in a dry, cool and well ventilated place. Keep container closed when not in use. Keep/store away from extremely high or low temperatures, direct sunlight, heat and incompatible materials (Strong acid, Strong oxidizers).

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

TLV (THRESHOLD LIMIT VALUE)	:	The TLV in section in section III is the ACGIH/TLV-TWA (threshold limit value/time weighted average concentration for an eight hour work day). The STEL is the short term exposure limit and the (Ceil) is the ceiling limit.

COMPONENT	USA OSHA PEL – TWA	USA ACGIH TWA	USA ACGIH – STEL
Nitric Acid	2 ppm	2 ppm	4 ppm
Phosphoric acid	1 mg/m^3	1mg/m^3	3mg/m^3
Methyl-oxirane polymer with oxirane	Not Established	Not Established	Not Established

EYE PROTECTION	:	Wear chemical splash goggles or face shield.

SKIN PROTECTION	:	Minimize contact with product. Wear chemical resistant coveralls, boots, gloves, apron and/or suitable long-sleeved clothing.
RESPIRATORY PROTECTION	:	In case of brief exposure use respiratory filter device. In case of intensive or longer exposure, use respiratory protective device that is independent of circulating air.
VENTILATION	:	Ensure adequate ventilation.
ADDITIONAL MEASURES	:	Emergency eyewash and safety shower facilities should be available in the immediate work area.
REQUIRED WORK/HYGIENE	:	Wash hands thoroughly after handling. Keep away from all food stuffs, beverages and feed. Do not eat, drink or smoke in work area.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	:	Clear red liquid with mild odor
ODOR	:	Mild odor
ODOR THRESHOLD	:	Not available
PH	:	< 2.0
MELTING POINT/FREEZING POINT	:	Not available
BOILING POINT	:	Not available
FLASHPOINT	:	Not applicable
EVAPORATION RATE	:	Not available
FLAMMABILITY	:	Non flammable, Non combustible
LOWER FLAMMABILITY LIMIT	:	Not applicable
UPPER FLAMMABILITY LIMIT	:	Not applicable
VAPOR PRESSURE	:	Not available
VAPOR DENSITY (AIR=1)	:	Not available
RELATIVE DENSITY	:	1.2
SOLUBILITY IN WATER	:	Soluble in water
PARTITION COEFFICIENT n-OCTANOL/WATER	:	Not available
AUTOIGNITION TEMPERATURE	:	Not available
DECOMPOSITION TEMPERATURE	:	Not available

SECTION 10 – STABILITY AND REACTIVITY

REACTIVITY	:	Thermal decomposition generates: Corrosive vapors. If the product is involved in a fire, it can release explosion hydrogen gas. When heated to decomposition, emits toxic fumes. May be corrosive to metals.
STABILITY	:	Stable under recommended storage conditions.
HAZARDOUS CONDITIONS TO AVOID	:	Direct sunlight. Extremely high or low temperatures. Heat. Combustible materials. Incompatible materials.
INCOMPATIBLE MATERIALS	:	Chlorinated products such as bleach, alkaline materials, metals, metal powder, carbides, chlorates, fumigates, nitrates, picrates, strong oxidizers, reducing or combustible organic material. Hazardous gases are evolved on contact with chemicals such as chlorine bleach, cyanides, sulfides and carbides.
HAZARDOUS DECOMPOSITION PRODUCTS	:	Carbon oxides (CO, CO_2). Thermal decomposition generates: Corrosive vapors. Toxic gases. Hydrogen gas. Nitrogen oxides. Phosphorous oxides. Sodium oxides. Potassium oxides.

SECTION 11 – TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION	:	**Nitric Acid**
ACUTE TOXICITY	:	Inhalation, rat: LC50 = 260 mg/m3/30M; Inhalation, rat: LC50 = 130 mg/m3/4H;

Inhalation, rat: LC50 = 67 ppm(NO2)/4H

ROUTES OF EXPOSURE	:	
SYMPTOMS RELATED TO TOXICOLOGICAL CHARACTERISTICS	:	When nitric acid is exposed to air or comes in contact with organic matter, it decomposes to yield a mixture of toxic oxides of nitrogen, including nitric oxide and nitrogen dioxide. Exposure to high concentrations of nitric acid vapor or mist causes pneumonitis and pulmonary edema which may be fatal.
ACUTE AND CHRONIC EFFECTS	:	Onset of symptoms may be delayed for 4 to 30 hours. In contact with the eyes, the liquid produces severe burns which may result in permanent damage and visual impairment. On the skin, the liquid or concentrated vapor produces immediate, severe and penetrating burns; concentrated solutions cause deep ulcers and stain the skin a bright yellow or yellowish brown color. The vapor and mist may erode the exposed teeth. Ingestion of the liquid will cause immediate pain and burns of the mouth, esophagus, and gastrointestinal tract
CARCINOGENICITY	:	NTP: No, IARC: No, OSHA Regulate: Yes
TOXICOLOGICAL INFORMATION	:	**Phosphoric Acid**
ACUTE ORAL TOXICITY	:	LD50 (rat) is greater than 1,530 mg/kg; not acutely toxic by oral exposure. (TFI Product Testing Results, OECD Guideline 425).
ACUTE DERMAL TOXICITY	:	LD50 (rat) is greater than 3,160 mg/kg (ppm); not acutely toxic by dermal exposure. (TFI Product Testing Results, OECD Guideline 402).
ACUTE INHALATION TOXICITY	:	LC50 (guinea pig, mouse, rat, rabbit) is 61-1,689 mg/m3; highly toxic by inhalation. (TFI Product Testing Results)
ACUTE FISH TOXICITY	:	96-hour LC_{50} is 3.0-3.5 mg/L (ppm); moderate toxicity to aquatic organisms. (TFI Product testing Results, OECD Guideline 203).
CARCINOGENICITY	:	No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC, ACGIH, NTP, and OSHA.
TOXICOLOGICAL INFORMATION	:	**Methyl-oxirane polymer with oxirane**
ACUTE ORAL TOXICITY	:	LD50 Oral (rat): > 2000 mg/kg, LD50 Dermal (rabbit): 10,200 mg/kg
SKIN AND EYE IRRITATION	:	Draize Test: Eyes: Non irritant, Skin: Non irritant.
SENSITISATION	:	Skin sensitizing effects were not observed in animal studies.
SYMPTOMS OF EXPOSURE	:	No significant symptoms are expected due to the non-classification of the product.

SECTION 12 – ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION	:	**Nitric Acid**
ECOTOXICITY	:	Nitric acid has moderate volatility. Harmful to aquatic organisms. Large discharges may contribute to the acidification of water and be fatal to fish and other aquatic life, due low pH and decomposition of nitric acid into nitrates. If discharged into an effluent treatment system, nitric acid can contribute to acidification of the system and injure sewage treatment organisms. Can cause damage to vegetation due to corrosive action.
PERSISTENCE AND DEGRADABILITY	:	Expected to be readily biodegradable.
MOBILITY	:	Nitric acid is soluble in water and has high mobility in soil. During transport through the soil, nitric acid will dissolve some of the soil material; in particular, the carbonate based materials. The acid will be neutralized to some degree with adsorption of the proton also occurring on clay materials. However, significant amounts of acid are expected to remain for transport down towards the ground water table.
ECOLOGICAL INFORMATION	:	**Phosphoric Acid**
AQUATIC TOXICITY	:	Mild water pollutant (surface water). May cause eutrophication. Toxic to plankton.

Slightly harmful to bacteria. Slightly harmful to aquatic organisms. pH shift. Insufficient data available on eco-toxicity. LC50/96hour:138mg/L (Gambusia Afinis).

PERSISTENCE AND DEGRADABILITY : No relevant information available.

BIOACCUMULATIVE POTENTIAL : No relevant information available.

NOTES : Water hazard class 1 (Self assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of this product to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or un-neutralized. Rinsing larger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms.

ECOLOGICAL INFORMATION : **Methyl-oxirane polymer with oxirane**

ECOTOXICITY : Toxicity to fish: LC50 (96 h) 105 mg/l, Oncorhynchus mykiss
Aquatic invertebrates: EC50 (48 h) 1,033 mg/l, Daphnia magna
Aquatic plants: EC50 (72 h) 370 mg/l, algae

PERSISTENCE AND BIODEGRADABILITY : Assessment: Readily biodegradable (according to OECD criteria)

MOBILITY : The substance will not evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is possible.

SECTION 13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL RECOMMENDATIONS : This product must be disposed of in accordance with Federal, state and local environmental regulations. Discarded materials may be considered hazardous waste due to pH/corrosivity. It is the responsibility of the product user to determine at the time of disposal whether a material containing, or derived from this product, should be classified as a hazardous waste.

ECOLOGY-WASTE MATERIALS : This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14 – TRANSPORTATION INFORMATION

DOT/IMDG/ IATA PROPER SHIPPING NAME : UN3264, CORROSIVE LIQUID, ACIDIC, N.O.S. (NITRIC ACID, PHOSPHORIC ACID) 8 PGII

HAZARD CLASS AND LABEL : 8 (Corrosive)

UN NUMBER : UN3264

PACKAGING GROUP : PGII

EPA REPORTABLE QUANTITY (RQ) : 1000 LBS. (454 KG) as Nitric acid 100%.
5000 LBS. 2270 KG) as Phosphoric acid 100%.

MARINE POLLUTANT : No

EMERGENCY RESPONSE GUIDE : ERG-154

SECTION 15 – REGULATORY INFORMATION

U.S. FEDERAL REGULATORY INFORMATION:

LISTED CARCINOGEN : Not listed

TSC STATUS : The ingredients of this product are listed on TSCA (Toxic Substances Control Act) inventory (40CFR 710.)

SARA SECTION 302 : **Extremely Hazardous Substance (EHS):** CAS # 7697-37-2, 1000 Lbs. (454 Kilograms) (85 Gals.) Threshold Planning Quantity (TPQ)

SARA SECTION 304 : **Extremely Hazardous Substance (EHS):** CAS # 7697-37-2, 1000 Lbs. (454 Kilograms) (85 Gals.) Reportable Quantity (RQ)

CERCLA	:	**Hazardous Substance:** CAS #7697-37-2, 1000 Lbs. (454 Kilograms) (85 Gals.) Reportable Quantity (RQ)
SARA SECTION 313	:	Supplier Notification: CAS # 7697-37-2, % by Weight: 30-71%
NFPA HEALTH	:	3
NFPA FLAMMABILITY	:	0
NFPA REACTIVITY	:	1

EUROPEAN UNION REGULATORY INFORMATION:

EC CLASSIFICATION	:	C: Corrosive, Xn: Harmful.
DSD/DPD RISK (R) PHRASES	:	R34: Causes severe burns. R22: Harmful is swallowed.
DSD/DPD SAFETY (S) PHRASES	:	S1/2: Keep locked up and out of reach of children. S18: Handle and open containers with care. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/S37/39: Wear suitable protective clothing, gloves and eye/face protection. S45: In case of accidents or if you feel unwell, seek medical advice immediately. Show label where possible. S61: Avoid release to the environment. S64: If swallowed, rinse mouth with water if victim is conscious.
DSD/DPD HAZARD SYMBOL	:	C: Corrosive, Xn: Harmful

CANADIAN REGULATORY INFORMATION

WHMIS CATEGORY	:	Class E: Corrosive (Nitric and Phosphoric acids) Class D2B: Materials that cause other toxic effects (TOXIC). Class C: Oxidizing material (Nitric acid @ 70%)
DOMESTIC SUBSTANCES LIST (DSL)	:	Listed
INGREDIENT DISCLOSURE LIST	:	Listed, This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the sds contains all of the information required by the CPR.

SECTION 16 – OTHER INFORMATION

DISCLAIMER	:	The information contained herein has been compiled from sources believed to be realiable and accurate to the best of our knowledge at this date. It is provided without warranty, expressed or implied, as to the results of use of this information or to the product to which it relates. Wesmar Co. assumes no responsibility for injury to any person or property resulting from any use of the material. Each user assumes the risk in their use of this product and should review the data and recommendations in the specific context of their intended use.
CERCLA	:	Comprehensive Environmental Response, Compensation, and Liability Act.
EINECS	:	European Inventory of Existing Commercial Chemical Substances
IMDG	:	International Maritime Code for Dangerous Goods
IARC	:	International Agency for Research on Cancer
IATA	:	International Air Transportation Association
ACGIH	:	American Conference of Governmental Industrial Hygienists
NFPA	:	National Fire Protection Association (USA)

NTP	:	National Toxicology Program
SARA	:	Superfund Amendments and Reauthorization Act
TSCA	:	Toxic Substances Control Act
HMIS	:	Hazardous Materials Identification System (USA)
WHMIS	:	Workplace Hazardous Materials Information System
LC50	:	Lethal concentration, 50 percent
LD50	:	Lethal dose, 50 percent
STOT	:	Systemic Target Organ Toxicity
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