SAFETY DATA SHEET
GRUNGESLAYER

SECTION 1- PRODUCT IDENTIFICATION

PRODUCT NAME	:	GRUNGESLAYER
SYNONYMS	:	Product is a mixture: No synonyms are available.
PRODUCT USE	:	Moderately Alkaline Material
SUPPLIER	:	HYDRAMASTER CORP.
SUPPLIER'S ADDRESS	:	1500 Industry St. Suite 300 Everett, WA 98203 (425) 775-7272
EMERGENCY RESPONSE PHONE	:	PERS: 1-800-633-8253

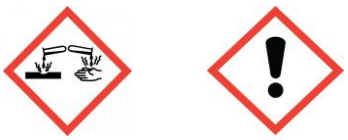
SECTION 2 – HAZARD IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS – US CLASSIFICATION	:	H290	Metal corrosion Category 1
	:	H314	Skin Corrosion Category 1B
	:	H318	Serious Eye Damage Category 1B
	:	H412	Aquatic Acute Category 3

LABEL ELEMENTS : **GHS – US HAZARD PICTOGRAMS** The product is classified and labeled according to the Globally Harmonized System (GHS).

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.
	:	H314	Causes severe skin burns and eye damage.
	:	H318	Causes serious eye damage.
	:	H412	Harmful to aquatic life with long lasting effects.

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.
	:	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.
	:	P301+P330 +P331	IF SWALLOWED. Rinse mouth. Do NOT induce vomiting.
	:	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.
	:	P310	Immediately call a POISON CENTER or doctor/physician.
	:	P330	Rinse mouth if ingested.
	:	P405	Store locked up.
	:	P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

OSHA HAZARDS : Target Organ Effect (Glycol Ether DPM)
TARGET ORGANS : Kidney, Liver, Nerves (Glycol Ether DPM).
CLASSIFICATION SYSTEM : NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme.
NFPA RATINGS (SCALE 0-4) : Health = 2, Fire = 0, Reactivity = 0
HMIS RATINGS (SCALE 0-5) : Health = 2, Fire = 0, Reactivity = 0

SECTION 3 – COMPOSITON/INFORMATION ON INGREDIENTS

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

COMPONENT	PERCENT	CAS #	EINECS #	GHS CLASSIFICATION
Sodium Hydroxide	1-5	1310-73-2	215-185-5	Metal Corr Cat 1, Skin Corr. Cat. 1A Eye Dam. Cat. 1, Aquatic Acute Cat 3
Sodium Tripolyphosphate	10-20	7758-29-4	231-838-7	Skin & Inhalation Irrit. Cat 4
Trisodium Phosphate Dodecahydrate	10-20	10101-89-0	231-509-8	Acute Oral Tox Cat 4, Skin Irrit Cat 2 Eye Irrit Cat 2A
Sodium Metasilicate	10-20	6834-92-0	229-912-9	Skin Corr: Cat 1C, Eye Corr. Cat 1
Dipropylene glycol methyl ether	1-5	34590-94-8	252-104-2	Eye Irrit: Cat 2B
Propylene Glycol Butyl Ether	1-5	5131-66-8 & 18821-83-7	225-878-4	Skin Irrit. Cat 2, Eye Irrit. Cat 2A --
Ethylenediamine Tetraacetate Na salt	1-5	64-02-8	200-573-9	Skin Irrit Cat 2, Eye Dam Cat 2A
D-Limonene (Citrus Terpenes)	1-5	5989-27-5	227-813-5	Flam Liq Cat 3, Acute Tox Oral Cat 5, Skin Irrit Cat 2, Eye Irrit Cat 2A, Skin Sens Cat 1, Acute Tox Aquatic Cat1

Irrit. = Irritation, Corr. = Corrosion, Cat. = Category, Dam = Damage, Tox = Toxic, STOT SE = Single Target Organ Toxicity Single exposure.

SECTION 4 – FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

GENERAL : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice. Show the label where possible.

EYE CONTACT : Immediately flush eyes with water for at least 15 minutes. Hold eyelids open to ensure adequate flushing. Get immediate medical attention.

SKIN CONTACT : Remove contaminated clothing and shoes. Wash affected skin area with soap and water. Delayed skin damage is possible if product is not completely washed off. Get immediate medical attention.

SWALLOWING (INGESTION) : If ingested, dilute swallowed material by drinking water. DO NOT INDUCE VOMITING. If vomiting occurs spontaneously, keep airway clear. Give more water when vomiting stops. Never give anything by mouth to an unconscious person. Get immediate medical attention.

INHALATION : Remove to fresh air. Get immediate medical attention.

OTHER INSTRUCTIONS : 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 : Dry chemical, foam, water, or carbon dioxide.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS : In the event of a fire, wear a NIOSH (USA) or CEN (EU) approved, positive pressure, self-contained breathing apparatus (SCUBA) and full protective clothing. Evacuate all non-essential personnel from the danger area.

UNUSUAL FIRE AND EXPLOSION HAZARDS : No further relevant information is available.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT & EMERGENCY PROCEDURES : Restrict access to keep out unauthorized or unprotected personnel. Wear protective equipment. Avoid inhalation and direct contact.

ENVIRONMENTAL PROCEDURES : Keep spilled material away from sewage/drainage systems and waterways.

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 : Use with adequate ventilation. Wear proper protective equipment. Do not mix with water or acids without proper dilution and agitation to prevent a potentially violent reaction.

CONDITIONS FOR SAFE STORAGE : Store in closed, properly labeled containers. Protect containers from heat, physical damage, ignition sources and incompatible materials. Have emergency equipment for fires and spills readily available.


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	OSHA PEL – TWA	ACGIH – TLV	ACGIH – STEL
Sodium Hydroxide	2 mg/m^3 (Ceiling)	2mg/m^3	2mg/m^3 (Ceiling)
Sodium Tripolyphosphate	Not Established	Not Established	Not Established
Trisodium Phosphate	Not Established	Not Established	Not Established
Sodium Metasilicate	8hr Recommended: 3mg/m^3	Not Established	Not Established
Dipropylene glycol methyl ether	Not Established	Not Established	Not Established
Propylene Glycol Butyl Ether	Not Established	Not Established	Not Established
Ethylenediamine Tetraacetate Na salt	Not Established	Not Established	Not Established
D-Limonene (Citrus Terpenes)	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	:	Free flowing powder.
ODOR	:	Mild odor.
ODOR THRESHOLD	:	Not available
PH	:	12.0 ± 0.5 (1% Solution)
MELTING POINT/FREEZING POINT	:	Not available
BOILING POINT	:	NOT EST.
FLASH POINT	:	> 200° F.
EVAPORATION RATE	:	Not available
FLAMMABILITY	:	Nonflammable, Noncombustible
LOWER FLAMMABILITY LIMIT	:	Not available
UPPER FLAMMABILITY LIMIT	:	Not available
VAPOR PRESSURE	:	Not available
VAPOR DENSITY (AIR=1)	:	Not available
RELATIVE DESNITY	:	0.85 ± 0.05
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

STABILITY	:	Stable under recommended storage conditions.
HAZARDOUS CONDITONS TO AVOID	:	No decomposition if used according to specifications
INCOMPATIBLE MATERIALS	:	Keep away from strong acids.
HAZARDOUS DECOMPOSITION PRODUCTS	:	No dangerous decomposition products known.

SECTION 11 – TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION : **Sodium Hydroxide**

ACUTE TOXICITY :
Draize test, rabbit, eye: 400 ug Mild.
Draize test, rabbit, eye: 1% Severe.
Draize test, rabbit, eye: 50 ug/24H Severe.
Draize test, rabbit, eye: 1 mg/24H Severe.
Draize test, rabbit, skin: 500 mg/24H Severe.

EYE CONTACT : Causes severe eye damage.

SKIN CONTACT : Causes skin burns. Onset of symptoms may be delayed following exposure.

INHALATION : Corrosive to respiratory tract.

INGESTION : Corrosive to respiratory tract.

CARCINOGENICITY : The components of this product are not classified as carcinogenic by OSHA, NTP IARC or CA Prop 65

TOXICOLOGICAL INFORMATION : **Sodium Tripolyphosphate**

ACUTE TOXICITY : Oral - rat LD50 - 5,400 mg/kg; practically non-toxic

Dermal - rabbit LD50 - > 7,940 mg/kg; practically non-toxic
Eye Irritation - rabbit - 3.3/110.0; slightly irritating
Skin Irritation - rabbit - 0-0/8.0 (24-hr exp.); not irritating
Inhalation - LC50 > 0.39 mg/L (rat, 4 hr.) (maximum attainable concentration)

TOXICOLOGICAL INFORMATION : **Trisodium Phosphate Dodecahydrate**
ACUTE TOXICITY : Oral - rat LD50: 6,500 mg/kg; practically nontoxic
Dermal - rabbit LD50: > 7,940 mg/kg; practically nontoxic
Eye Irritation - rabbit (4-hr exp.): corrosive
Skin Irritation - rabbit: 3.3/8.0; moderately irritating

TOXICOLOGICAL INFORMATION : **Sodium Metasilicate**
ACUTE TOXICITY : LD50 Oral: 1280mg/kg (Rat), 2400mg/kg (mouse)
CHRONIC TOXICITY : No data were available regarding chronic exposure, reproductive or teratological effects, or carcinogenicity for sodium metasilicate.
CARCINOGENICITY : This product is not classified as a carcinogen by NTP, IARC or OSHA.

TOXICOLOGICAL INFORMATION : **Dipropylene Glycol Methyl Ether**
ACUTE TOXICITY : LD50 values: Oral LD50: 5152 mg/kg (rat). LC50 dermal and inhalation: Not listed. Eyes: Rabbit: Mild Irritation: 25 hours.
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 : **Propylene Glycol Butyl Ether**
ACUTE TOXICITY : LD 50 Rat: 2,200 mg/kg
ACUTE INHALATION TOXICITY : No data available
ACUTE DERMAL TOXICITY : LD 50 Rabbit: 3,100 mg/kg

TOXICOLOGICAL INFORMATION : **Ethylenediamine Tetraacetate**
ACUTE TOXICITY : LD50 Oral (rat): 630 - 1,260 mg/kg,
INHALATION LC50 : No data available
DERMAL LD50 : No data available
OTHER INFORMATION ON ACUTE TOXICITY : No data available

TOXICOLOGICAL INFORMATION : **D-Limonene (Citrus Terpenes)**
ACUTE TOXICITY : LD50 Oral (rat): >5000 mg/kg. LD50 Dermal (rabbit): >5,000 mg/kg, RD50 Inhalation (mice): > 1,000 mg/kg.
IRRITATION : Prolonged or repeated exposure can cause drying or dermatitis of skin.
BIOACCUMULATION : No appreciable bio-concentration is expected in the environment.
CARCINOGENICITY : This product is not classified as a carcinogen by OSHA, IARC, ACGIH or NTP.

SECTION 12 – ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION : **Sodium Hydroxide**
ECOTOXICITY : Immobilization EC50/48h/Daphnia-40.38 mg/l. LC50 /96h/Mosquito fish-125 mg/l.
ENVIRONMENTAL : No information found.
PHYSICAL : No information found.
OTHER : No relevant information available.
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 no reach bodies of water or drainage ditch undiluted or un-neutralized. Rinse off larger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms.
ECOLOGICAL INFORMATION	:	**Sodium Tripolyphosphate**
ECOTOXICITY	:	Invertebrate: 48-hr LC50 Daphnia magna: > 1000 mg/L; Practically Nontoxic 96 hr. LC 50 > 100 mg/L, non-toxic (Rainbow trout, Inland silversides, and mysid shrimp). [FMC I89-1081, 1082 & 1083] 48 hr. LC 50> 100 mg/L, non-toxic (Daphnia magna) [FMC I89-1084]
PERSISTENCE and DEGRADABILITY	:	No data available.
ENVIRONMENTAL FATE	:	Phosphates: Inorganic phosphates, including this product, at high concentrations in the environment have the potential to cause eutrophication in aquatic systems. This condition is characterized by excessive algal growth, and subsequent decreases in oxygen levels. In general, proper use and disposal of this product should pose no adverse ecological risk.
ECOLOGICAL INFORMATION	:	**Trisodium Phosphate Dodecahydrate**
ECOTOXICITY	:	Invertebrate: 48-hr EC50 Daphnia magna: >1000 mg/L; Practically Nontoxic. Warm-water Fish: 96-hr LC50 Bluegill sunfish: 440 mg/L; Practically Nontoxic. Coldwater Fish: 96-hr LC50 Rainbow trout: 260 mg/L; Practically Nontoxic. No definitive algal toxicity data was available for this material.
ENVIRONMENTAL FATE	:	Phosphates: Inorganic phosphates, including this product, at high concentrations in the environment have the potential to cause eutrophication in aquatic systems. This condition is characterized by excessive algal growth, and subsequent decreases in oxygen levels. In general, proper use and disposal of this product should pose no adverse ecological risk.
ECOLOGICAL INFORMATION	:	**Sodium Metasilicate**
ECOTOXICITY (Aquatic Toxicity)	:	This material has exhibited moderate toxicity to aquatic organisms.
BIODEGRADATION	:	This material is inorganic and not subject to biodegradation.
PERSISTENCE	:	This material is believed to persist in the environment.
BIOCONCENTRATION	:	This material is not expected to bio-concentrate in organisms.
ECOLOGICAL INFORMATION	:	**Dipropylene Glycol Methyl Ether**
ECOTOXICITY (aquatic and terrestrial, where available):		
ACUTE FISH TOXICITY	:	LC50 / 96 hours Fathead Minnow - >10,000 mg/L
TOXICITY TO DAPHNIA	:	EC50 / 48 hours Water flea - 1,919 mg/L
PERSISTENCE AND DEGRADABILITY	:	No data available.
BIOACCUMULATIVE POTENTIAL	:	No data available.
ECOLOGICAL INFORMATION	:	**Propylene Glycol Butyl Ether**
ECOTOXICITY: TOXICITY TO FISH	:	No data available
TOXICITY TO DAPHNIA	:	No data available
TOXICITY TO ALGAE	:	No data available
TOXICITY TO BACTERIA	:	No data available
ECOLOGICAL INFORMATION	:	**Ethylenediamine Tetraacetate**
ECOTOXICITY	:	No data available.
PERSISTENCE AND DEGRADABILITY	:	No data available.
BIOACCUMULATIVE POTENTIAL	:	No data available.

ECOLOGICAL INFORMATION	:	**D-Limonene (Citrus Terpenes)**
ECOTOXICITY	:	There is no information available currently for this product. However, a spill may produce significant toxicity to aquatic organisms and ecosystems. Some studies have shown that certain bacteria and fungi can degrade citrus terpenes, decreasing their toxicity to fish. When spilled, this product may act as an oil, causing a film, sheen, emulsion, or sludge at or beneath the surface of a body of water
MOBILITY	:	Citrus Terpenes volatize rapidly.
PERSISTENCE AND DEGRADABILITY	:	Readily biodegradable.
BIOACCUMULATIVE POTENTIAL	:	Bio-concentration is not expected to occur.

SECTION 13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL	:	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.

SECTION 14 – TRANSPORTATION INFORMATION

DOT/IMDG/ IATA PROPER SHIPPING NAME	:	UN3262 CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, SODIUM METASILICATE) 8, PGII
HAZARD CLASS AND LABEL	:	8 (CORROSIVE)
UN NUMBER	:	UN3262
PACKAGING GROUP	:	PGII
EPA REPORTABLE QUANTITY (RQ)	:	1000 LBS. (Sodium Hydroxide)
MARINE POLLUTANT	:	Not listed.
EMERGENCY RESPONSE GUIDE	:	ERG-154

Note: Small sizes may be excepted from some Hazardous Material shipping regulations.

SECTION 15 – REGULATORY INFORMATION

U.N. GHS CLASSIFICATION & LABELING INFORMATION: See Section 2 for GHS Hazard Information

U.S. FEDERAL REGULATORY INFORMATION:

LISTED CARCINOGEN	:	Not listed.
TSCA STATUS	:	The ingredients of this product are listed in TSCA inventory (40CFR 710.)
SARA SECTION 302	:	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA SECTION 312	:	Chronic health hazard (Glycol Ether DPM).
SARA SECTION 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
NFPA HEALTH	:	2
NFPA FLAMMABILITY	:	0
NFPA REACTIVITY	:	0

CANADIAN REGULATORY INFORMATION:

WHMIS CATEGORY	:	D2B: Materials that cause other toxic effects (TOXIC).
DOMESTIC SUBSTANCES LIST (DSL)	:	Listed
INGREDIENT DISCLOSURE LIST	:	Listed

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. Hydramasster Corp. 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
DATE PREPARED	:	MAR 1, 2019
DATE REVISED	:	NOV 7, 2022