# SAFETY DATA SHEET
# QUAKE

## SECTION 1- PRODUCT IDENTIFICATION

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| **PRODUCT NAME** | : | QUAKE |
| **SYNONYMS** | : | Product is a mixture: No synonyms are available. |
| **PRODUCT USE** | : | Moderately Alkaline Material |
| **SUPPLIER** | : | HYDRAMASTER CORP. |
| **SUPPLIER'S ADDRESS** | : | 11015 47TH AVE. SE, MUKILTEO, WA 98275<br>(425) 775-7272 |
| **EMERGENCY RESPONSE PHONE** | : | PERS: 1-800-633-8253 |

## SECTION 2 – HAZARD IDENTIFICATION

**CLASSIFICATION OF THE SUBSTANCE OR MIXTURE**

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|---|---|---|---|
| **GHS U.S. – CLASSIFICATION** | : | H302 | Harmful if swallowed. |
| | | H315 | Causes skin irritation |
| | | H319 | Causes serious eye irritation |

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

**HAZARD PICTOGRAMS** :

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| **SIGNAL WORD** | : | DANGER | |
| **HAZARD STATEMENTS (GHS-US)** | : | H302 | Harmful if swallowed. |
| | : | H314 | Causes severe skin burns and eye damage. |
| | : | H318 | Causes serious eye damage. |
| **PRECAUTIONARY STATEMENTS (GHS-US)** | : | 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. |
| | : | 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+ P312 | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. |
| | : | P302+P352 | : IF ON SKIN: Wash with plenty of soap and water. |
| | : | P305+351+ P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| | : | P332+P313 | If skin irritation occurs: Get medical advice/attention. |
| | : | P337+P313 | If eye irritation persists: Get medical advice/attention. |
| | : | P501 | Dispose of contents/container in accordance with local/regional/national/international regulations |

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| **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 |
|---|---|---|---|---|
| Potassium Hydroxide | 1-5 | 1310-58-3 | 215-181-3 | Metal Corr. Cat 1, Skin Corr. Cat. 1A Eye Dam. Cat. 1, Aquatic Acute Cat. 4 |
| Sodium Tripolyphosphate | 1-5 | 7758-29-4 | 231-838-7 | Skin & Inhalation Irrit. Cat 4 |
| Ethylene Glycol Monobutyl Ether | | 111-76-2 | 203-905-0 | Acute Oral Tox Cat 4, Eye Irrit Cat 2A, Skin Irrit Cat 2 |
| Sodium Dodecylbenzene Sulfonate | 1-5 | 25155-30-0 | 246-680-4 | Skin Irrit Cat 4, Eye Dam Cat 2 Acute Tox Cat 4, STOT SE Cat 3 |
| Laurydimethylamine Oxide | 1-5 | 1643-20-5 | 216-700-6 | Eye Irrit Cat 2B |

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 |
|---|---|---|---|
| Potassium Hydroxide | 2 mg/$m^3$ | Not Established | 2 mg/$m^3$ (Celing) |
| Sodium Tripolyphosphate | Not Established | Not Established | Not Established |
| Ethylene Glycol Monobutyl Ether | 50 ppm | 20 ppm | Not Established |
| Sodium Dodecylbenzene Sulfonate | Not Established | Not Established | Not Established |
| Laurydimethylamine Oxide | 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 light amber liquid with mild odor.

**ODOR** : Slight sweet odor.

**ODOR THRESHOLD** : Not available

**PH** : > 13.5

**MELTING POINT/FREEZING POINT** : Not available

**BOILING POINT** : Approx. 212°

**FLASH POINT** : Above 200 Degr. F

**EVAPORATION RATE** : Not available

**FLAMMABILITY** : Non flammable-Non combustible

**LOWER FLAMMABILITY LIMIT** : Not available

**UPPER FLAMMABILITY LIMIT** : Not available

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| **VAPOR PRESSURE** | : | Not available |
| **VAPOR DENSITY (AIR=1)** | : | Not available |
| **RELATIVE DESNITY** | : | 1.06 |
| **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

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| **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

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| **TOXICOLOGICAL INFORMATION** | : | **Potassium Hydroxide** |
| **ACUTE TOXICITY** | : | Draize test, rabbit, skin: 50 mg/24H Severe; Oral, rat: LD50 = 273 mg/kg; <BR. LD50 values: Potassium Hydroxide: Oral (rat): 214 mg/kg. LC50 dermal and inhalation: Not listed. |
| **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** | : | May be harmful if swallowed. Ingestion may cause chemical burns, pain, vomiting, difficulty breathing and other gastrointestinal effects. |
| **CARCINOGENICITY** | : | The components of this product are not classified as carcinogenic by OSHA, NTP IARC or CA Prop 65. |
| **MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE** | : | Asthma and other respiratory conditions, skin disorders. |

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| **TOXICOLOGICAL INFORMATION** | : | **Sodium Tripolyphosphate** |
| **ACUTE TOXICITY** | : | Oral - rat LD50 - 5,400 mg/kg; practically non-toxic<br>Dermal - rabbit LD50 - > 7,940 mg/kg; practically non-toxic<br>Eye Irritation - rabbit - 3.3/110.0; slightly irritating<br>Skin Irritation - rabbit - 0-0/8.0 (24-hr exp.); not irritating<br>Inhalation - LC50 > 0.39 mg/L (rat, 4 hr) (maximum attainable concentration) |

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| **TOXICOLOGICAL INFORMATION** | : | **Ethylene Glycol Monobutyl Ether** |
| **ACUTE ORALTOXICITY** | : | LD50 Oral: 1,414 mg/kg Species: guinea pig Remarks: Ingestion may cause weakness, confusion, anxiety, decreased blood pressure, and CNS depression with collapse and coma. LD50 Oral (rat): 1746 mg/kg. |
| **ACUTE INHALATION TOXICITY** | : | LC50: ~ 932 ppm Exposure time: 4 HOURS Species: guinea pig Remarks: Exposure to vapor may cause irritation of the eyes, nose, and respiratory tract. May cause nausea. May cause headaches. Extensive and prolonged contact with skin may cause confusion, anxiety, decreased blood pressure, and CNS depression with collapse and coma. LC50 Inhalation (rat) 7hr: ~ 700 ppm. |
| **ACUTE DERMAL TOXICITY** | : | LD50: > 2,000 mg/kg Species: guinea pig Remarks: Minimal hazard by skin contact with liquid or vapor. This material may be absorbed through the skin. High dermal doses (most likely achieved from exposure to undiluted liquid) may cause weakness, headache and nausea. Extensive and prolonged contact with skin may cause |

confusion, anxiety, decreased blood pressure, and CNS depression with collapse and coma.

**IRRITATION** : Skin: Repeated or prolonged contact may cause skin irritation.
Eyes: Moderate to severe eye irritant.

**SENSITISATION** : Did not cause sensitization on lab animals.

**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** : **Sodium Dodecylbenzene Sulfonate**

**ACUTE TOXICITY** : LD50 Oral rat: 438 mg/kg.

**INHALATION TOXICITY** : No data available

**DERMAL TOXICITY** : No data available

**SKIN CORROSION/IRRITATION** : Skin – rabbit Result: Skin irritation - 24 h

**SERIOUS EYE DAMAGE/IRRITATION** : Eyes – rabbit Result: Severe eye irritation - 24 h

**RESPIRATORY/SKIN SENSITISATION** : No data available

**GERM CELL MUTAGENICITY** : No data available

**CARCINOGENICITY** : No components of this product present at levels greater than or equal to 0.1% are identified as probable, possible or confirmed human carcinogen by IARC ACGIH, NTP or OSHA.

**TOXICOLOGICAL INFORMATION** : **Lauryldimethylamine Oxide**

**ACUTE TOXICITY** : LD50 Oral (Rat): >2000mg/kg, Skin (rabbit): Moderate to severe irritant, Eyes (rabbit): Severe irritant.

**FURTHER INFORMATION** : Information given is based on data on the components and the toxicology of similar products. No data is available on the product itself.

## SECTION 12 – ECOLOGICAL INFORMATION

**ECOLOGICAL INFORMATION** : **Potassium Hydroxide**

**ECOTOXICITY** : Fish: Mosquito Fish: LC50 = 80.0 mg/L; 24 Hr.; Unspecified No data available.

**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 schrimp). [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.

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| **ECOLOGICAL INFORMATION** | : | **Ethylene Glycol Monobutyl Ether** |
| **ECOTOXICITY** | : | **Fish:** 96h LC50:>100 mg/L (Oryzias latipes)<br>**Crustacea:** 48h EC50:>1000 mg/L (Daphnia magna)<br>**Algae:** 72h EC50:630 mg/L (Selenastrum capricornutum) |
| **PERSISTENCE AND DEGRADABILITY** | : | 96.0% (by BOD), 96.0% (by TOC), 100% (by GC). |
| **MOBILITY IN SOIL** | : | No data available. |
| **ECOLOGICAL INFORMATION** | | **Lauryldimethylamine Oxide** |
| **ECOTOXICITY (Aquatic Toxicity):** | : | LC50 Species: Brachydanio rerio (zebra fish) Concentration: 10,00 - 100,00 mg/l Exposure time: 96 h. |
| **TOXICITY TO DAPHNIA / AQUATIC INVERTEBRATES** | : | Immobilization EC50 Species: Daphnia magna (Water flea) Concentration: 4,40 mg/l Exposure time: 48 h. |
| **BIODEGRADATION** | : | This material is subject to biodegradation. |
| **PERSISTENCE** | : | This material is believed to persist in the environment. |
| **BIOCONCENTRATION** | : | This material is not expected to bio-concentrate in organisms. |

## SECTION 13 – DISPOSAL CONSIDERATIONS

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| **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

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| **DOT/IMDG/ IATA PROPER SHIPPING NAME** | : | UN-1814, POTASSIUM HYDROXIDE, SOLUTION 8 PG-II |
| **HAZARD CLASS AND LABEL** | : | 8 (Corrosive) |
| **UN NUMBER** | : | UN-1814 |
| **PACKAGING GROUP** | : | PG-II |
| **EPA REPORTABLE QUANTITY (RQ)** | : | 1000 LBS: (as Potassium Hydroxide 100%) |
| **MARINE POLLUTANT** | : | Marine Pollutant |
| **EMERGENCY RESPONSE GUIDE** | : | ERG-154 |

## 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 |
| **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. |

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| **NFPA HEALTH** | : | 2 |
| **NFPA FLAMMABILITY** | : | 0 |
| **NFPA REACTIVITY** | : | 0 |

**EUROPEAN UNION REGULATORY INFORMATION:**

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|---|---|---|
| **EC CLASSIFICATION** | : | C: Corrosive, Xn: Harmful |
| **DSD/DPD RISK (R) PHRASES** | : | R22: Harmful is swallowed.<br>R36/38: Irritating to eyes and skin. |
| **DSD/DPD SAFETY (S) PHRASES** | : | S1/2: Keep locked up and out of reach of children.<br>S24/25: Avoid contact with eyes and skin.<br>S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.<br>S36/S37/39: Wear suitable protective clothing, gloves and eye/face protection.<br>S45: In case of accidents or if you feel unwell, seek medical advice immediately. Show label where possible.<br>S61: Avoid release to the environment.<br>S62: If swallowed, do not induce vomiting.<br>S64: If swallowed, rinse mouth with water if victim is conscious. |
| **DSD/DPD HAZARD SYMBOL** | : | C: Corrosive, Xn: Harmful |

**CANADIAN REGULATORY INFORMATION:**

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

## SECTION 16 – OTHER INFORMATION

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| **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. Hydramaster 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, 2012 |

**DATE REVISED** : DEC 20, 2018