Product Name: Firewater-MAX
Revision Date: 4-29-20

SAFETY DATA SHEET

SECTION 1 MATERIAL AND MANUFACTURER IDENTIFICATION

PRODUCT

Product Identifier: Firewater-MAX
Product Use: Carpet Cleaner
Product Identifier: 3062, 3062C

MANUFACTURER

CTI (Chemical Technologies International Inc.)
PO Box 968
Rancho Cordova, CA 95741
Phone: (916) 638-1315 Fax: (916) 638-0712
Emergency Assistance Calls: Chemtrec (800) 424-9300 (U.S.A.) 24hrs.

SECTION 2 HAZARD(S) INDENTIFICATION

GHS CLASSIFICATION:
Not Established

Routes of Exposure: Eye contact, skin contact, inhalation, and ingestion.
Inhalation: Unlikely to occur when used as directed. Excessive exposure may cause irritation of the respiratory tract
Eye Contact: May cause severe irritation with possible permanent eye damage.
Skin Contact: Repeated, prolonged exposure may cause skin irritation, drying, chapping.
Ingestion: Very small quantity is unlikely to cause injury. Larger quantity may cause injury; if swallowed can cause Gastrointestinal irritation; including but limited to nausea, vomiting and diarrhea.
Carcinogenic Potential: Not established
Acute Effects: This product is considered to be a potential irritant. This product should not be used for any other purpose than the intended use in section 1.
Chronic Effects: Not established

Health hazard	2
Flammability hazard	0
Reactivity hazard	0
Other hazard	

Signal word: **WARNING**
Hazard statement(s):

H302: Harmful if swallowed;
H313: May be harmful in contact with skin;
H320: Causes eye irritation;
H333: Maybe harmful if inhaled.

SECTION 3 COMPOSITON/INFORMATION ON INGREDIENTS

COMPONENT	CAS #	CONCENTRATIONS	FUNCTION
1. Proprietary Surfactant Blend	not established	10-30%	Detergency
2. Sodium Tripolyphosphate	7758-29-4	1-10%	Builder
3. Glycol Ether EB	111-76-2	1-10%	Solvent
4. Tetra potassium pyrophosphate	7320-34-5	1-10%	Builder
5. D-Limonene	5989-27-5	1-10%	Solvent
6. Fragrance	n/a	.5-2%	Fragrance

SECTION 4 FIRST-AID MEASURES

Inhalation: Remove from further exposure to fresh air. If respiratory irritation, dizziness, or nausea occurs seek immediate medical attention.
Eye Contact: Flush eyes with a directed stream of water for 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. Washing eyes immediately after exposure is essential to achieve maximum effectiveness and minimize potential irritation. If irritation persists, seek immediate medical attention.
Skin Contact: Wash contact areas with soap and water. Launder exposed clothing before reuse.
Ingestion: If swallowed, do not induce vomiting. Seek immediate medical attention.

SECTION 5 FIRE-FIGHTING MEASURES

FLAMMABILITY PROPERTIES

Flashpoint: Non-flammable nor combustible
Flammable Limits: Not Available
Auto ignition Temperature: Not Available

FIREFIGHTING PROCEDURES

General Hazard: Smoke may contain original material, in addition to toxic and/or irritating compounds. Avoid heat or open flames
Firefighting Instructions: Evacuate all unnecessary personnel. Use dry chemical, CO_2, water, foam or appropriate extinguishing media for fires where water is not appropriate. No special firefighting instructions.
Firefighting Equipment: Firefighters should wear NICSH/MSHA approved self-contained, positive pressure breathing apparatus and full protective clothing.
Hazardous Combustion Products: Combustion may release oxides of carbon and sulfur.
Unusual Fire and Explosion Hazards: This material will not burn until the water has evaporated.
Residue can burn. Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds.

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Persons performing the cleanup should wear personal protective equipment sufficient to keep material away from skin. Avoid direct contact with material. See section 4 for First-Aid Advice. See section 5 for Firefighting Advice.

PROTECTIVE MEASURES

To minimize exposure to all chemicals, including this product, use good industrial hygiene and common sense. Use only in well ventilated area. If necessary, use exhaust ventilation to insure adequate ventilation. Insure that water is readily available and that you are prepared to properly wash out your eyes should the need arise. (See section 4 for more advice). Wear NIOSH/MSHA approved organic respirator when ventilation is not adequate or when the sufficiency of ventilation to maintain concentrations below exposure limits is in question. Wear chemical safety goggles to protect against splashes or contact with eyes. See OSHA 29 CFR 1910.33

CLEAN-UP PROCEDURES

Small Spills: Wipe up or mop to dispose of spill in DOT approved waste container.

Large Spills: Contain by diking with soil or other non-combustible absorbent material, and dispose into DOT approved waste container. If possible complete clean up on a dry basis. Comply with all applicable governmental regulations on spill reporting, handling and disposal of waste. Contain all spills or leaks to prevent discharge into the environment. Responsibility of all spills or releases reported to the appropriate local, state and federal agencies falls upon the user.

SECTION 7 HANDLING AND STORAGE

HANDLING

This product is professional strength product to be used by professionals only. Avoid breathing dust of this product. Always keep container tightly closed and properly labels. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Impervious boots/shoes covering should be used if material is anticipated to contact feet. As with all chemicals, practice good industrial hygiene when handling this product. In other words, always work in a well-ventilated area and avoid inhalation of product dust do not ingest or have contact with your eyes or skin.

The manufacturer and seller warrant that this product conforms to its standard specifications when used according to directions. As the conditions of method of its use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for use of this product. Information contained herein is believed to be true but all statements and suggestions are made without any warranty, expressed or implied, regarding accuracy of the information. The hazards connected with the use of this material and the results to be obtained from the use thereof.

STORAGE

Avoid excessive heat. Avoid storage with oxidizing or reducing agents and acids. Employees should be trained to handle this product safely. Store the product in a cool dry area away from ignition sources. Loosen closures cautiously. Product may become a solid at temperatures below 0°C (32°F).

Storage temperature: Store in cool dry place

Storage pressure: Atmospheric

SECTION 8 | EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS

Exposure limits have not been established for this mixture. Avoid, as far as reasonably practicable, inhalation of vapor, mists or fumes generated. However, limits for components listed below:

	OSHA PEL	ACGIH TLV	NIOSH
COMPONENT #	**TWA STEL**	**TWA STEL**	**TWA STEL**
1. Proprietary Surfactant Blend	Not established	Not established	Not established
2. Sodium Tripolyphosphate	Not established	Not established	Not established
3. Glycol Ether EB	25 ppm	25 ppm	50ppm
4. Tetra potassium pyrophosphate	Not established	Not established	Not established
5. D-Limonene	Not available	50 ppm	Not available
6. Fragrance	Not established	Not established	Not established

ENGINEERING CONTROLS

The level of protection and types of control will vary depending upon potential exposure conditions. If user operations generate dust, fume or mist, use adequate ventilation to keep exposure below exposure limit.

PERSONAL PROTECTION

Ventilation and engineering controls: Use only in well-ventilated area. If necessary, use exhaust ventilation to insure adequate ventilation. Insure that water is readily available and that you are prepared to properly wash out your eyes should the need arise. (Refer to section 4).

Respiratory: Wear NIOSH/MSHA approved respirator when ventilation is not adequate. A NIOSH /MSHA –approved air purifying respirator with an organic vapor cartridge or canister may be advisable under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure, air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstances where air-purifying respirators may not provide adequate protection.

Eye Protection: Wear safety goggles to protect against eye contact. See OSHA 29 CFR 1910.33

Skin: Wear chemical impervious gloves. Wear protective clothing to minimize skin contact. Wash skin after use. Wash contaminated clothing and dry before reuse.

Other: One should always use chemicals with an awareness of the potential hazard of the effect on the human system. To minimize employee exposure to all chemicals, including this product, use good industrial hygiene practices.

SECTION 9 | PHYSICAL AND CHEMICAL PROPERTIES

Physical State and Appearance: Liquid
Odor: citrus scent
Boiling point: Not Available
Melting point: Not Available
Density: Not Available
Viscosity: Not Available
Relative density: Not Available
Decomposition temperature: Not Available

Color: Off White
pH: 10.5 at 30:1, 12.0 as shipped
Freezing point: Not Available
Solubility in water: soluble
Flammability: Not Flammable
Flash point: Non-flammable/combustible
Flammability (solid, gas): Not available
Vapor pressure: Not Available

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Stable under ambient temperature and atmospheric pressure. Stable under recommended storage and handling conditions.
Conditions to avoid: Keep away from heat or excessive pressure. Active ingredient decomposes at elevated temperatures.
Incompatibility with other materials: Although the mixture has no known incompatibilities, some **components** of this mixture are not compatible with acids, metals, oxidizing or reducing materials.
Hazardous decomposition products: Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Sulfur oxides and Carbon oxides.
Hazardous polymerization: Major components of this mixture show no hazardous polymerization.
Conditions to Avoid: Strong Acids, Lead, Tin/Tin Oxides, Zinc and Aluminum.

SECTION 11 TOXICOLOGICAL INFORMATION

Toxicological information has not been established on this mixture. Toxicological information on components within this mixture is given by:

COMPONENT #	TOXICITY
1. Glycol Ether EB	LD_{50} Oral - rat - 470 mg/kg
	LC_{50} Inhalation - rat - 4 h - 450 ppm
	LD_{50} Dermal - rabbit - 220 mg/kg
	Eyes - rabbit - Moderate eye irritation - 24 h
2. Sodium Metasilicate	LD_{50} Oral - rat – 1,153 mg/kg
	Skin - rabbit – Severe skin irritation - 24 h
3. Surfactant Blend	Not Established
4. Sodium Tripolyphosphate	LD_{50} Oral - rat - 3100 mg/kg
	LD_{50} Dermal - rabbit - 4640 mg/kg
5. D-Limonene	Not established, not acutely toxic
6. Fragrance	Not established Not established Not established

SECTION 12 ECOLOGICAL INFORMATION

Ecological information has not been established for this product. Ecological information on components within this mixture is given by:

COMPONENT #	TOXICITY
1. Glycol Ether EB	Toxicity to fish LC_{50} - other fish - 220 mg/l - 96 h
	Toxicity to daphnia and other aquatic invertebrates
	EC_{50} - Daphnia magna (Water flea) - 1,815 mg/l - 24 h
2. Sodium Metasilicate	Not Established
3. Surfactant Blend	Not Established
4. Sodium Tripolyphosphate	Toxicity to fish LC_{50} – freshwater fish - 1650 mg/l - 48 h
5. D-Limonene	Not established
6. Fragrance	Not established

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of all waste, empty bottles and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations.

Do not dump into storm drains, sanitary sewers or any body of water. All disposal methods must be in compliance with all federal, State/ Provincial and local laws and regulations. Regulations may vary in different locations.

Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. The vendor has no control over the management practices or the processes by which the party who handles or uses this material. The information presented here pertains only to the product as shipped in its intended condition and recommended usage.

SECTION 14 TRANSPORT INFORMATION

DOT (US)
Not a hazardous material.
IMDG
Not a hazardous material.

SECTION 15 REGULARTORY INFORMATION

US Federal Regulations:
OSHA standards require that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheet (SDS) sheets, training and access to written records. We request that you, as per your legal duty to, make all information in this SDS available to your employees and those who handle or consume the product to aid our customers in complying with regulatory requirements regulatory information for components of this product are indicated below

This *mixture* has *no established regulatory information* all regulatory information given is based on individual Components of the mixture by component number

COMPONENT	**REGULATION**
1. Glycol Ether EB	**OSHA Hazards**: Combustible Liquid, Target Organ Effect, Harmful by ingestion. Harmful by skin absorption. Irritant, Carcinogen **SARA 313 Components**: 2-Butoxyethanol CAS-No.111-76-2 **SARA 311/312 Hazards**: Fire Hazard, Acute Health Hazard, and Chronic Health Hazard **MA, PA, and NJ Right to Know**: 2-Butoxyethanol CAS-No.111-76-2
2. Sodium Metasilicate	**OSHA Hazards**: Harmful by Ingestion; Corrosive **SARA 311/312 Hazards**: Acute Health Hazard **MA, PA, and NJ Right to Know**: Disodium metasilicate CAS-No.6834-92-0

3. Surfactant Blend	Not Established
4. Sodium Tripolyphosphate	Not Established
5. D-Limonene	GRAS by FDA. EPA has granted D-Limonene to be used as fragrance/solvent.
6. Fragrance	Not established

SECTION 16 OTHER INFORMATION

While the information is believed to be accurate, CTI makes no representations as to its accuracy or sufficiency. This SDS summarizes to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources of each individual component. Since CTI cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material. User assumes all risks incident to the use of this (these) product(s). Users are responsible to verify this data under their own operating conditions to determine whether this product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance on information contained herein. This information relates only to the product-designated herein, and does not relate to its use in combination with any other material or in any other process.