SAFETY DATA SHEET

COMPANY IDENTITY: HD CHEM
PRODUCT IDENTITY: FREEZER CLEANER (C-FZ01)

SDS DATE: 10/15/2015
REPLACES: 05/20/2009

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements and the International Chemical Safety Cards of the Global Harmonizing System.
THIS SDS COMPLIES WITH CFR 1910.1200 (HAZARD COMMUNICATIONS STANDARD)
IMPORTANT: Read this SDS before handling & disposing of this product.
Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY: FREEZER CLEANER
COMPANY IDENTITY: HD CHEM
COMPANY ADDRESS: 707 W. 16TH ST. LONG BEACH, CA 90813
COMPANY PHONE: (888) 443-2436
EMERGENCY PHONE: Call (888) 443-2436

EXPOSURE PREVENTION: **DANGER!!**

HAZARD STATEMENTS:
H100s = General, H200s = Physical, H300 = Health, H400s = Environmental

H226	Flammable liquid and vapor.
H302+H332	Harmful if swallowed or inhaled.
H315+H320	Causes irritation to skin and eyes.
H335	May cause respiratory irritation.

PRECAUTIONARY STATEMENTS:
P100s = General, P200s = Prevention, P300s = Response, P400s = Storage, P500s = Disposal

P262	Do not get in eyes, on skin, or on clothing.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present & easy to do – Continue rinsing.
P309+311	If exposed or you feel unwell: Call a POISON CENTER or doctor/physician.
P405+102	Store locked up. Keep out of reach of children.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	CAS#	WT %
Glycol Ether PM	107-98-2	50-65
Potassium Hydroxide	1310-53-2	1-2

Trace components: Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, reproductive toxins, respiratory tract mutagens, and sensitizers). None of the trace ingredients contribute significant Additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).

SECTION 4. FIRST AID MEASURES

EYE CONTACT:

If this product enters the eyes, open eyes while under gently running water. Use sufficient force to open eyelids. Roll eyes to expose more surface. Minimum flushing is for 15 minutes. Seek immediate medical attention.

SKIN CONTACT:

If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.

INHALATION:

After high vapor exposure, remove to fresh air. If it is suspected that the fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest, breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR). Seek immediate medical attention. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

SWALLOWING:

If swallowed, CALL PHYSIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, give two glasses of water to drink. DO NOT INDUCE VOMITING. Never induce vomiting or give liquids to someone who is unconscious, having convulsions, or unable to swallow. Seek immediate medical attention.

NOTES TO PHYSICIAN:

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis Should be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (such as: Gastric lavage after endotracheal intubation).

Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take a copy of the label and SDS to physician or health professional with victim.

SECTION 5. FIRE FIGHTING MEASURES

FIRE FIGHTING MEASURES:
FLASH POINT: 90°F (Closed cup)
AUTOIGNITION TEMPERATUES: 290°C/554°F
FLAMMABLE LIMITS IN AIR % BY VOLUME: 1.6%-13.8%

EXTINGUISHING MEDIA:

Dry chemical, alcohol foam or carbon dioxide. Water may be ineffective. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak and disperse vapors.

SPECIAL FIRE FIGHTING PROCEDURES:

In the event of a fire, wear full protective clothing and NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS.

EXPLOSION:

Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Vapors can flow along surfaces to distant ignition sources and flash back. Contact with strong oxidizers may cause fire. Sealed containers may rupture when heated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE AND ENVIRONMENTAL PRECAUTIONS:

Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond with trained personnel.

PERSONAL PROTECTIVE EQUIPMENT:

The proper protective equipment for incidental releases (such as: 1 Litter of the product released in a well-ventilated area), use impermeable gloves (triple-gloves, rubber gloves and nitrile gloves, over latex gloves), goggles, face shield, and appropriate body protection. In the event of a large release, use impermeable gloves, specific for the material handled, chemically resistant suit and boots, and hard hat. Self-Contained Breathing Apparatus or respirator may be required where engineering controls are not adequate or conditions for potential exposure exist. When respirators are required, select NIOSH/MSHA approved based on actual or potential airborne concentrations in accordance with latest OSHA and/or ANSI recommendations.

ENVIRONMENTAL PRECAUTIONS:

Stop spill at source. Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Close or cap valves and/or block or plug hole in leaking container and transfer to another container, keep from entering storm sewers and ditches which lead to waterways, and if necessary, call the local fire or police department for immediate emergency assistance.

CONTAINMENT AND CLEAN-UP MEASURES:

Absorb spilled liquid with poly pads or other suitable absorbent materials. Clean up with non-combustible absorbent (such as: sand, soil, and so on). Shovel up and place all spill residue in suitable containers. Dispose of at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal (see Section 13- Disposal Considerations).

SECTION 7. HANDLING AND STORAGE

HANDLING AND STORAGE:

Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be no smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues.

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT:

Follow practices indicated in section 6 (Accidental Release Measures). Make sure certain application equipment is locked and tagged-out safely. Always use this product in areas where adequate ventilations is provided. Collect all rinsates and dispose of according to applicable Federal, State, Provincial, or local procedures.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

MATERIAL	CAS#	EINECS#	TWA (OSHA)	TLV (ACGIH)
Potassium hydroxide	1310-58-3	215-181-3	None Known	None Known
Glycol Ether PM	107-98-2	----------	100/370 mg/m3	100/370 mg/m3

MATERIAL	CAS#	EIENECS#	CEILING	STEL (OSHA/ACGIH)	HAP
Potassium Hydroxide	1310-58-3	215-181-3	2 ppm	None Known	No

RESPIRATORY EXPOSURE CONTROLS:

A respiratory protective program that meets OSHA CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

VENTILATION:

LOCAL EXHAUST: Recommended MECHANICAL (General): Recommended
SPECIAL: None OTHER: None
Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

PERSONAL PROTECTION:

Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse.

WORK & HYGIENIC PRACTICES:

Provide readily accessible eye wash stations & safety showers. Wash at the end of each work shift & before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES:

APPEARANCE:	Clear, colorless, liquid
ODOR:	Mild pleasant odor
ODOR THRESHOLD:	Not Available
Ph (Neutrality):	N/A
MELTING POINT/FREEZING POINT:	-20°F
BOILING RANGE (760 mmHg):	82° C (180 °F)
FLASH POINT (TEST METHOD):	90°F (Closed cup)
EVAPORATION RATE (n-BUTYL ACETATE=1):	Approx.1
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	NA
UPPER FLAMMABLE LIMIT IN AIR (% by vol):	NA
VAPOR PRESSURE (mm of Hg)@20 C:	NA
VAPOR DENSITY (air = 1):	NA
GRAVITY @ 68/68F / 20/4C:	0.995
POUNDS/GALLON:	8.3
WATER SOLUBILITY:	Complete
AUTO IGNITION TEMPERATURE:	554°F

SECTION 10. STABILITY & REACTIVITY

STABILITY:
Stable under most conditions.

CONDITIONS TO AVOID:
Isolate from extreme heat, and open flame.

INCOMPATIBILITIES:
Aldehydes, halogenated organics, halogens, strong acids, strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS:
Decomposition products depend upon temperatures, air supply and the presence of other material. Avoid static discharge.

HAZARDOUS POLYMERIZATION:
Will not occur.

SECTION 11. TOXICOLOGIGAL INFORMATION

ORAL RAT LD50:4010- 7510 MG/KG (rat)

SKIN ABSORPTION LD50: RABBIT 11,000-13,755 MG/KG

INHALATION LC50: 8HR, VAPOR, RAT FEMAL 15,000 PPM

SECTION 12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE:
Bio concentration potential is low (BCF less than 100 or log less than 3). Potential for mobility in soil is very high (KOC between 0 and 50).

SECTION 13. DISPOSAL CONSIDERATIONS

Processing, use or contamination may change the waste management options. Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If in doubt, contact appropriate agencies.

SECTION 14. TRANSPORT INFORMATION

DOT/TDG SHIP NAME: UN 2924, Flammable Liquids, Corrosive N.O.S. (Contains Ethylene Glycol Mono Methyl Ether & Potassium Hydroxide), 3, (8) PG II.
DRUM LABEL: (FLAMMABLE LIQUIDS)
IATA / ICAO: UN 2924, Flammable Liquids, Corrosive N.O.S. (Contains Ethylene Glycol Mono Methyl Ether & Potassium Hydroxide), 3, (8) PG II.

IMO / IMDG: UN 2924, Flammable Liquids, Corrosive N.O.S. (Contains Ethylene Glycol Mono Methyl Ether & Potassium Hydroxide), 3, (8) PG II.

SECTION 15. REGULATORY INFORMATION

OSHA Hazard Communication Standard
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986) this product contains no listed substances known to the state of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

Toxic Substances Control Act (TSCA)
All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40CFR 720.30
CEPA- Domestic Substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

SECTION 16. OTHER INFORMATION

HAZARD RATINGS:
HEALTH (NFPA): 1, HEALTH (HMIS): 1, FLAMMABILITY: 3, PHYSICAL HAZARD: 0
(Personal Protection Rating to be supplied by user based on use conditions.)
This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating system.

EMPLOYEE TRAINING:
See Section 2 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

NOTICE

All information, recommendations, and suggestions appearing herein concerning this product are based upon data obtained from the manufacturer and/or recognized technical sources; however, HD Chem makes no warranty, representation or guaranty as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of the product. Additional product literature may be available upon request. Since actual use by others is beyond our control, no warranty, express or implied is made by HD Chem as to the effects of such use, the results to be obtained or the safety and toxicity of the product nor does HD Chem assume any liability arising out of use by others of this product.