SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

PRODUCT NAME: HI-CLEAR™, EPA Reg. No. 92704-1

MAUNUFACTURER: **DODHIA CHEM-TEX PVT. LTD.**
Office No. 1001, 10th Floor, Filix Tower, Mumbai – 400078, Maharashtra India

DISTRIBUTOR: **UNITED MINERAL & CHEMICAL CORPORATION**
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Tel: 201-507-3300 ■ Fax: 201-507-1506 ■ E-Mail: inquiry@umccorp.com
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US D.O.T. / UN NAME: UN 2880 CALCIUM HYPOCHLORITE, HYDRATED MIXTURES, 5.1, PG II

RECOMMENDED USES: WATER TREATMENT
USE RESTRICTIONS: MIX ONLY WITH WATER

EMERGENCY TELEPHONE NOS.:
USA – CHEMTREC: 1-800-424-9300
OUTSIDE USA: +1 703-527-3887
MEDICAL: POISON CENTER: 1-800-222-1222

SECTION 2 – HAZARD IDENTIFICATION

Hazards Identification

Classification of the substance or mixture
Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]
- Oxidizing Solids Cat. 2, H272
- Acute Toxicity (oral) Cat. 4, H302 , H336
- Skin Corrosion Cat. 1B, H314
- Specific Target Organ Toxicity, single exposure, Cat. 3 (inhalation) – Respiratory System H335
- Aquatic Toxicity Acute Cat.1, H400

Signal Word: Danger
- Symbols: GHS03, GHS05, GHS07, GHS09

Hazard phrases
- May intensify fire; oxidizer.
- Harmful if swallowed.
- Causes severe skin burns and eye damage.
- Very toxic to aquatic life.
- May cause respiratory irritation
- May cause drowsiness or dizziness
- Contact with acids liberates toxic gas (EUH 031)
- Warning! Do not use together with other products. May release dangerous gases (chlorine).

Precautionary Phrases
- Store locked up / do not store with combustibles / keep out of reach of children / keep container closed.
- Wash hands thoroughly after handling.
- Do not eat, drink, or smoke while using this product.
- Do not breathe dusts or mists. Use only outdoors or in well ventilated area.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Keep away from heat, hot surfaces, open flames, sparks, and other ignition sources.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- IF INHALED – remove to fresh air and keep comfortable for breathing.
- IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Call a poison control center or doctor, if victim feels unwell.
- IF ON SKIN (or hair) – remove contaminated clothing. Rinse with water / shower.
- Wash contaminated clothing before re-use.
- IF exposed or concerned: Get medical advice/attention.
- Avoid release to the environment. Collect spillage.

Other hazards
- Marine pollutant

DISPOSAL: DISPOSE OF CONTENTS/CONTAINER IN ACCORDANCE WITH ALL LOCAL/ REGIONAL/ NATIONAL/ INTERNATIONAL REGULATIONS.

OTHER HAZARDS / U.S. - HAZARDS NOT OTHERWISE CLASSIFIED / UN GHS - OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION:
NOTE THE FOLLOWING EFFECTS IF PROCESSING TO A DUST, MIST, OR FUME – MAY IRRITATE THE SKIN, NOSE, THROAT, AND RESPIRATORY SYSTEM.

N/A = NOT APPLICABLE

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL COMPOSITION:	COMPONENTS:	CAS NO.	%
	CALCIUM HYPOCHLORITE	7778-54-3	60-80
	SODIUM CHLORIDE	7647-14-5	10-20
	CALCIUM CHLORIDE	10043-52-4	0-5
	CALCIUM HYDROXIDE	1305-62-0	0-4
	CALCIUM CARBONATE	471-34-1	0-5
	CALCIUM CHLORATE	10137-74-3	0-5
	WATER (AS MOISTURE)	7732-18-5	5.5-10

SECTION 4 – FIRST AID MEASURES

FIRST AID/ RESPONSE **FIRST AID RESPONDERS SHOULD WEAR PERSONAL PROTECTIVE EQUPMENT**

SKIN : IF ON SKIN: PROMPTLY WASH OFF WITH SOAP & WATER. REMOVE CONTAMINATED CLOTHING. GET MEDICAL ADVICE/ATTENTION IF IRRITATION OCCURS. WASH CONTAMINATED CLOTHING BEFORE REUSE.

EYES : IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING. GET MEDICAL ADVICE/ATTENTION IF IRRITATION OCCURS.

INHALATION : IF INHALED: REMOVE VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING. CALL A POISON CENTER OR DOCTOR/PHYSICIAN IF YOU FEEL UNWELL.

INGESTION : IF SWALLOWED: RINSE MOUTH WITH WATER, THEN DRINK WATER TO DILUTE. INDUCE VOMITING ONLY UNDER THE DIRECTION OF MEDICAL PERSONNEL. NEVER GIVE ANYTHING BY MOUTH IF THE VICTIM IS UNCONSCIOUS. GET MEDICAL ADVICE/ATTENTION IF INGESTED IN QUANTITY OR IF EXPOSED PERSON FEELS UNWELL.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED

CONTACT WITH EYES MAY CAUSE IRRITATATION AND SERIOUS EYE DAMAGE. CONTACT WITH SKIN MAY CAUSE IRRITATION. PROLONGED OR REPEATED OVEREXPOSURE MAY CAUSE DERMATITIS / SKIN SENSITIZATION. INHALATION OF DUST OR PROCESSING FUMES MAY CAUSE RESPIRATORY IRRITATION, MUCOUS SECRETION OR INFLAMMATION.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED, IF NECESSARY

IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE/ATTENTION

SECTION 5 – FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA : **WATER : (x)** **FOAM : ()** **CO_2: ()** **DRY CHEMICAL: ()**

DO NOT USE DRY EXTINGUISHERS CONTAINING AMMONIUM COMPOUNDS, SUCH AS DRY POWDER.

SPECIFIC HAZARDS IN CASE OF FIRE : **SEE SECTION 10. EXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE HAZARD TO HEALTH. PRODUCT IS OXIDIZING AND CORROSIVE.**

SPECIAL PROTECTIVE EQUIPMENT & PRECAUTION FOR FIRE FIGHTERS: IN CASE OF FIRE INVOLVING THIS MATERIAL, DO NOT ENTER THE FIRE AREA WITHOUT FULL PROTECTIVE GEAR/EQUIPMENT INCLUDING SELF-CONTAINED BREATHING APPARATUS.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: WEAR FULL PROTECTIVE EQUIPMENT (SEE SECTION 8). KEEP UNPROTECTED PERSONNEL OUT OF THE AREA. KEEP AWAY FROM HIGH HEAT AND ALL SOURCES OF IGNITION. CONTROL DUST CREATION AND CLOUD FORMATION TO PREVENT POSSIBLE DUST/AIR EXPLOSION HAZARD. PROPERLY GROUND ALL HANDLING/PROCESSING EQUIPMENT.

ENVIRONMENTAL PRECAUTIONS: AVOID RELEASE TO SEWERS AND THE ENVIRONMENT. DISPOSE OF PROPERLY VIA LICENSED CHEMICAL WASTEHAULER.

METHODS AND MATERIAL FOR CONTAINMENT AND CLEAN UP: VACUUM OR SCOOP INTO A PROPERLY LABELED CONTAINER AND SEAL. AVOID GENERATING DUST.

SECTION 7 – HANDLING & STORAGE

PRECAUTIONS FOR SAFE HANDLING: AVOID BREATHING DUST AND CONTACT WITH SKIN & EYES. WEAR FULL PROTECTIVE EQUIPMENT (SEE SECTION 8). USE WITH ADEQUATE VENTILATION. AVOID SCATTERING INTO THE AIR. AVOID RELEASE TO THE SEWER SYSTEM. EMPLOY GOOD HOUSEKEEPING TECHNIQUES TO CONTROL DUST BUILD-UP ON EQUIPMENT AND WORK AREA. AVOID DUSTING IN AREAS OF FLAME, SPARKS, & STATIC BUILDUP. PROPERLY GROUND PROCESSING / HANDLING EQUIPMENT. WASH THOROUGHLY AFTER HANDLING.

CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES: STORE IN A SEALED CONTAINER IN A COOL, DRY, WELL-VENTILATED AREA. STORE AWAY FROM OTHER MATERIALS. KEEP ONLY IN ORIGINAL CONTAINERS.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS:

EXPOSURE LIMITS:
U.S. OSHA PEL: NONE ESTABLISHED FOR PRODUCT
U.S. ACGIH TLV: Calcium Hydroxide, CAS RN: **1305-62-0** – 5 mg/cubic meter, TWA 8-hr, ACGIH

APPROPRIATE ENGINEERING CONTROLS : USE LOCAL / MECHANICAL EXHAUST

PROTECTIVE ACTION CRITERIA (PAC) REV. 27 – CHEMICALS WITH AEGL'S, ERPG'S, OR TEEL'S (FEB 2012)
CAS RN: **7778-54-3**

Name: Calcium hypochlorite; (Calcium oxychloride)
PAC-1 is: 2.8 mg/m3.
PAC-2 is: 31 mg/m3.
PAC-3 is: 170 mg/m3.
Unit: mg/m3 mg/m3.

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION : IF USING WITHOUT ADEQUATE VENTILATION, USE NIOSH APPROVED RESPIRATOR WITH SUITABLE CARTRIDGES PER OSHA RESPIRATORY STANDARD (20 CFR 1910.134).
HAND PROTECTION : USE CHEMICAL RESISTANT GLOVES (RUBBER, PVC)
EYE PROTECTION : SAFETY GOGGLES OR GLASSES WITH SIDE SHIELDS OR FULL FACE SHIELD; ACCESS TO AN EYEWASH FOUNTAIN
OTHER PROTECTIVE EQUIPMENT : LABCOAT; COVERALLS TO PROTECT SKIN; ACCESS TO A SAFETY DRENCH SHOWER

SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE :	WHITE GRANULES	**FLAMMABLE LIMITS :**	LEL:& UEL: (N/A)
ODOR:	CHLORINE-LIKE	**VAPOR PRESSURE (mm Hg) :**	N/A
ODOR THRESHOLD :	N/A	**VAPOR DENSITY (AIR=1) :**	N/A
pH (1% IN WATER) :	10-12	**RELATIVE DENSITY/SPECIFIC GRAVITY :**	1.1 – 1.3 gr/cubic cm
MELTING POINT / FREEZING POINT (°C) :	180 C	**SOLUBILITY IN WATER (@20°C) :**	20 gr/L
BOILING POINT (°C) :	N/A	**PARTITION COEFFICIENT(n-OCTANOL/WATER) :**	NO DATA AVAILABLE
FLASH POINT (°F) :	N/A	**AUTO IGNITION TEMP. (°C) :**	N/A
EVAPORATION RATE :	NO DATA AVAILABLE	**DECOMPOSITION TEMP. :**	180 C
FLAMMABILITY :	NO DATA AVAILABLE	**VISCOSITY :**	N/A

SECTION 10 – STABILITY AND REACTIVITY

CHEMICAL STABILITY : STABLE WHEN STORED IN SEALED PACKAGE UNDER RECOMMENDED STORAGE CONDITIONS
POSSIBLITY OF HAZARDOUS REACTIONS : **STRONG OXIDIZING AGENT. DO NOT MIX WITH OTHER SUBSTANCES. MAY RELEASE DANGEROUS BYPRODUCTS, SUCH AS CHLORINE GAS.**
CONDITIONS TO AVOID : DO NOT HEAT ABOVE 180 C. OVERHEATING MAY CAUSE AN EXPLOSION. OVERHEATING CAUSES EXOTHERMIC REACTION. AVOID CONTACT WITH INCOMPATIBLES AND HIGH HEAT DUST IN VICINITY OF IGNITION SOURCES, ELECTRICAL OR SPARK GENERATING EQUIPMENT
INCOMPATIBLE MATERIALS : ACIDS, ALKALIS, COMBUSTIBLE MATERIALS, FOODSTUFFS, REDUCING AGENTS, MOISTURE, ALUMINUM, ZINC, COPPER, TIN.
HAZARDOUS DECOMPOSITION PRODUCTS : CONTACT WITH WATER MAY GENERATE EXPLOSIVE GASES. CONTACT WITH ACID GENERATES TOXIC GAS INCLUDING CHLORINE.

SECTION 11 – TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS:

ROUTES OF EXPOSURE : SKIN, EYES, INHALATION, INGESTION
SKIN, EYES, INHALATION, INGESTION : CONTACT WITH EYES CAUSES SEVERE IRRITATATION. CONTACT WITH SKIN CAUSES SEVERE IRRITATION AND BLISTERING. INHALATION OF DUST OR PROCESSING FUMES MAY CAUSE RESPIRATORY IRRITATION, MUCOUS SECRETION OR INFLAMMATION. INGESTION CAN CAUSE DAMAGE TO DIGESTIVE SYSTEM.
CHRONIC: NONE KNOWN. IN SOME INDIVIDUALS PRONE TO SENSITIVITIES, PROLONGED OR REPEATED OVEREXPOSURE MAY CAUSE RESPIRATORY SENSITIZATION.

ACUTE TOXICITY : LD50 (ORAL, RAT) 790-1260 MG/KG, (DERMAL, RAT) >2000 MG/KG
LC50 (INHALATION, RAT) 1 hr, 2.04 mg/L, 4 hr, 0.51 mg/L
SKIN CORROSION / IRRITATION : CAUSES BURNING SENSATION
SERIOUS EYE DAMAGE / IRRITATION : EYES (RABBIT) - CORROSIVE
RESPIRATORY OR SKIN SENSITIZATION : CAUSES BURNING SENSATION AND DAMAGE TO MUCOUS MEMBRANES.
GERM CELL MUTAGENICITY : AMES TEST – negative. CHROMOSOMAL ABERRATION TEST - negative
CARCINOGENICITY : U.S. LISTED CARCINOGEN: NONE (X) OSHA () NTP () IARC () OTHER ()
REPRODUCTIVE TOXICITY : NO TEST DATA AVAILABLE
SPECIFIC TARGET ORGAN TOXICITY : Respiratory System – may cause irritation.
ASPIRATION HAZARD : NO DATA AVAILABLE
INTERACTIVE EFFECTS: MAY AGGRAVATE COLDS, RESPIRATORY ALLERGIES, SKIN DISORDERS

N/A = NOT APPLICABLE

SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICITY : AVOID RELEASE TO THE ENVIRONMENT AS THIS PRODUCT IS MARINE POLLUTANT. HIGHLY TOXIC TO FISH AND MARINE ORGANISMS.
LC 50 (BLUEGILL FISH) 0.088 MG/L (96 HR), (RAINBOW TROUT) 0.16 MG/L (96 HR)
LC 50 (DAPHNIA MAGNA) 0.11 MG/L (48 HR)

TOXICITY - AQUATIC : MARINE POLLUTANT
TOXICITY TO DAPHNIA : MARINE POLLUTANT
TOXICITY - TERRESTIAL : NO TEST DATA AVAILABLE
PERSISTANCE & DEGRADABILITY: NO TEST DATA AVAILABLE
BIOACCUMULATIVE POTENTIAL : NO TEST DATA AVAILABLE
MOBILITY IN SOIL : MARINE POLLUTANT
OTHER ADVERSE EFFECTS : NO DATA AVAILABLE

SECTION 13 – DISPOSAL CONSIDERATIONS

DISPOSAL METHODS:
DISPOSE OF CONTENTS / CONTAINER IN ACCORDANCE WITH LOCAL, REGIONAL, NATIONAL, INTERNATIONAL REGULATIONS. DISPOSE OF IN SEALED CONTAINERS, USING A LICENSED CHEMICAL WASTE HAULER. DO NOT REUSE EMPTY CONTAINERS.

SECTION 14 – TRANSPORT INFORMATION

BY ROAD OR RAIL - U.S. D.O.T. REGULATED: YES (X) NO () RQ: (10 lbs)

IF REGULATED, UN PROPER SHIPPING NAME: CALCIUM HYPOCHLORITE, HYDRATED MIXTURES
UN IDENTIFICATION NO.: (UN 2880, 5.1,II) PACKING GROUP: (II) LABEL REQUIRED: (X)
U.S. MARINE POLLUTANT: **YES (X) NO ()** SEVERE U.S. MARINE POLLUTANT: **YES () NO (X)**
EMERGENCY RESPONSE GUIDE NO.: **(140)**

BY SEA - IMDG REGULATED: YES (X) NO ()
BY AIR - IATA REGULATED: YES (X) NO ()

Hazard Class: 5.1
DOT Identification: UN 2880
Packing Group: II
Hazard Label: 5.1
Special Requirements: 165,IB8,IP2,IP4,IP13,W9
Exceptions: 152
Non-Bulk Requirements: 212
Bulk Requirements: 240
Max. Passgr. Air/Rail: 5 kg
Max. Cargo Only Air/Rail: 25 kg
Stowage: D
Other Requirements: 4,25,52,56,58,69,142

SPECIAL PRECAUTIONS: READ SDS BEFORE HANDLING

SECTION 15 – REGULATORY INFORMATION

U.S. TSCA: WE CERTIFY THAT ALL COMPONENTS OF THIS PRODUCT ARE TSCA LISTED

U.S. SARA TITLE III, SECT. 313 : LISTED () NOT LISTED (X)
U.S. RCRA HAZARDOUS WASTE : NO (X) YES () RCRA # : ()
U.S. CERCLA : NO () YES (X) RQ (10 LB)
U.S. CALIFORNIA PROPOSITION 65 LISTED : YES () NO (X)

HMIS: HEALTH (3) FLAMMABILITY (0) REACTIVITY (1)

FIFRA STATEMENT

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under Federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

DANGER: Corrosive. Causes irreversible eye damage and skin burns. Fatal if swallowed or absorbed through skin. Do not get in eyes, on skin or on clothing. Wear long-sleeved shirt, long pants, goggles or face shield and rubber gloves when handling this product. Irritating to nose and throat. Avoid breathing dust. Thoroughly wash with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Environmental Hazards

This product is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or public waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System ("NPDES") permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this

product into sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State Water Board or the Regional Office of the U.S. EPA.

Physical or Chemical Hazards

Strong Oxidizing Agent. Mix only with water. Add product to water; **do not** add water to product. Use clean, dry utensils. Do not add this product to any dispensing device containing remnants of any other product; such use may cause a violent reaction leading to fire or explosion. Contamination with moisture, organic matter or other chemicals will start a chemical reaction and generate heat, chlorine gas and possible fire and explosion. In case of contamination or decomposition, do not reseal container. If possible, isolate container in open air or well ventilated area then flood area with large volumes of water if necessary.

SECTION 16 – OTHER INFORMATION

REVISION DATE: MARCH 29, 2023

PREPARED BY: EHSA COORDINATOR / UNITED MINERAL & CHEMICAL CORP.

ABBREVIATIONS / ACRONYMS:

N/A=NOT APPLICABLE; **LEL=**LOWER EXPLOSION LIMIT; **UEL=**UPPER EXPLOSION LIMIT; **PEL=**PERMISSIBLE EXPOSURE LIMIT; **STEL**=SHORT TERM EXPOSURE LIMIT; **TLV=**THRESHOLD LIMIT VALUE; **TWA=**TIME WEIGHTED AVERAGE OVER 8 HOUR WORKDAY; **LD_{50}** OR **LC_{50}**=LETHAL DOSE OR LETHAL CONCENTRATION THAT KILLS 50% OF DOSED GROUP; **mg**=MILLIGRAM; **g=**GRAM; **kg=**KILOGRAM; **PPM**=PARTS PER MILLION; **m**=METER; **LOAEL**=LOWEST OBSERVED ADVERSE EFFECT LEVEL; **C.I.**=COLOUR INDEX

IN ACCORDANCE WITH GOOD PRACTICES OF PERSONAL HYGIENE, HANDLE WITH DUE CARE AND AVOID ANY UNNECESSARY CONTACT WITH THIS PRODUCT. USE RECOMMENDED PERSONAL PROTECTION WHEN HANDLING (SEE SECTION 8).

THIS INFORMATION IS BEING SUPPLIED TO YOU UNDER OSHA "RIGHT TO KNOW" REGULATION 29 CFR 1910.1200 AND IS OFFERED IN GOOD FAITH AS TYPICAL VALUES AND NOT AS PRODUCT SPECIFICATION. THE INFORMATION IS BELIEVED TO BE TRUE AND ACCURATE. NO WARRANTY, EXPRESSED OR IMPLIED, REGARDING THE ACCURACY OF THIS DATA, THE HAZARD CONNECTED WITH USE OF THE MATERIAL, OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF, IS MADE. UNITED MINERAL & CHEMICAL CORPORATION AND ITS SUPPLIERS ASSUME NO RESPONSIBILITY FOR DAMAGE OR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.

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