

SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

PRODUCT NAME : POTASSIUM PERMANGANATE, AWWA
COMPANY: UNITED MINERAL & CHEMICAL CORPORATION
160 Chubb Ave, Ste. 206, Lyndhurst, NJ 07071
US D.O.T. / UN NAME : POTASSIUM PERMANGATE
Tel: 201-507-3300 Fax: 201-507-1506
e-mail: inquiry@umccorp.com
RECOMMENDED USES : WATER TREATMENT, MUNICIPAL &
INDUSTRIAL WASTEWATER TREATMENT,
OXIDIZER - FOR INDUSTRIAL USE ONLY
EMERGENCY TELEPHONE NO.:
USA – CHEMTREC: 1-800-424-9300
Outside USA: +1 703-527-3887

SECTION 2 – HAZARD IDENTIFICATION



GHS HAZARD CLASSIFICATION:

OXIDIZING SOLIDS, CATEGORY 2
ACUTE TOXIC, ORAL CATEGORY 4
SKIN CORROSION / IRRITATION, CATEGORY 1B
SPECIFIC TARGET ORGAN TOXICITY, SINGLE EXPOSURE, CATEGORY 1 (RESPIRATORY SYS.)
SPECIFIC TARGET ORGAN TOXICITY, REPEATED EXPOSURE, CATEGORY 1 (RESPIRATORY SYSTEM, CENTRAL NERVOUS SYSTEM)
HAZARDOUS TO THE AQUATIC ENVIRONMENT – ACUTE HAZARD, CATEGORY 1
HAZARDOUS TO THE AQUATIC ENVIRONMENT – LONG-TERM HAZARD, CATEGORY 1

GHS LABEL ELEMENTS:

SIGNAL WORD: **DANGER**

LABEL CODES / PICTOGRAMS: GHS03, GHS05, GHS07, GHS08, GHS09

HAZARD STATEMENTS: H272 MAY INTENSIFY FIRE; OXIDIZER
H302 HARMFUL IF SWALLOWED
H314 CAUSES SEVERE SKIN BURNS AND EYE DAMAGE
H370 CAUSES DAMAGE TO ORGANS - RESPIRATORY SYSTEM
H372 CAUSES DAMAGE TO ORGANS - RESPIRATORY SYSTEM,
CENTRAL NERVOUS SYSTEM - THROUGH PROLONGED OR
REPEATED EXPOSURE
H400 VERY TOXIC TO AQUATIC LIFE
H410 VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS

PRECAUTIONARY STATEMENTS

PREVENTION : P210 KEEP AWAY FROM HEAT
P220 KEEP/STORE AWAY FROM CLOTHING/COMBUSTIBLE MATERIALS
P221 TAKE ANY PRECAUTION TO AVOID MIXING WITH COMBUSTIBLES
P260 DO NOT BREATHE DUSTS OR MISTS
P280 WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE PROTECTION/ FACE PROTECTION
P264 WASH THOROUGHLY AFTER HANDLING
P270 DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT
P273 AVOID RELEASE TO THE ENVIRONMENT

RESPONSE : P370+378: **IN CASE OF FIRE:** USE LARGE QUANTITY OF WATER TO EXTINGUISH.
P301+P330+P331+312: **IF SWALLOWED:** RINSE MOUTH. DO NOT INDUCE VOMITING. CALL A POISON CENTER/DOCTOR/PHYSICIAN IF YOU FEEL UNWELL.
P303+P361+P353: **IF ON SKIN** (OR HAIR): REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING RINSE SKIN WITH WATER/SHOWER. P363: WASH CONTAMINATED CLOTHING BEFORE REUSE.
P304+P340: **IF INHALED:** REMOVE PERSON/VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING. P310: IMMEDIATELY CALL A POISON CENTER/DOCTOR/PHYSICIAN
P305+P351+P338: **IF IN EYES:** RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO SO. CONTINUE RINSING.
P307+P311: **IF EXPOSED:** CALL A POISON CENTER/DOCTOR/PHYSICIAN.
P391 COLLECT SPILLAGE.

STORAGE : P405: STORE LOCKED UP.

DISPOSAL : P501: DISPOSE OF CONTENTS AND CONTAINER IN ACCORDANCE WITH ALL LOCAL / REGIONAL / NATIONAL / INTERNATIONAL REGULATIONS.

U.S. - HAZARDS NOT OTHERWISE CLASSIFIED / UN GHS - OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION: NONE KNOWN

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL COMPOSITION :	COMPONENTS:	CAS NO.	%
	POTASSIUM PERMANGANATE	7722-64-7	97 MINIMUM
	FREE-FLOW / ANTICAKING ADDITIVE	1344-00-9	<3

SYNONYMS : PERMANGANATE OF POTASH; CHAMELEON MINERAL; PERMANGANIC ACID, POTASSIUM SALT
CHEMICAL FAMILY : INORGANIC MANGANESE COMPOUNDS; OXIDIZERS

SECTION 4 – FIRST AID MEASURES

FIRST AID/ RESPONSE	FIRST AID RESPONDERS SHOULD WEAR PERSONAL PROTECTIVE EQUIPMENT
SKIN :	IF ON SKIN: REMOVE CONTAMINATED CLOTHING AND SHOES. WASH WITH PLENTY OF SOAP AND WATER. IF IRRITATION OCCURS: GET IMMEDIATE MEDICAL ADVICE/ATTENTION. WASH CONTAMINATED CLOTHING BEFORE REUSE.
EYES :	IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR UP TO 15 MINUTES. REMOVE CONTACT LENSES IF PRESENT AND EASY TO DO SO. CONTINUE RINSING. IF EYE IRRITATION PERSISTS: GET IMMEDIATE MEDICAL ADVICE/ATTENTION.
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.
INGESTION :	IF INGESTED: IF CONSCIOUS, IMMEDIATELY RINSE MOUTH. DRINK PLENTY OF WATER. DO NOT INDUCE VOMITING (DUE TO RISK OF PERFORATION) CALL A POISON CENTER/DOCTOR/PHYSICIAN IMMEDIATELY. NEVER GIVE ANYTHING BY MOUTH IF THE VICTIM IS UNCONSCIOUS.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED

SKIN :	CONTACT WITH DRY CRYSTALS OR CONCENTRATED SOLUTIONS ON SKIN CAN CAUSE REDNESS, SEVERE BURNS, BROWN STAINS (DUE TO INSOLUBLE MANGANESE OXIDE), AND POSSIBLE HARDENING OF THE OUTER SKIN LAYER. DILUTED SOLUTIONS ARE ONLY MILDLY IRRITATING TO THE SKIN. REPEATED OR PROLONGED SKIN CONTACT MAY CAUSE DEFATTING AND DERMATITIS.
EYES :	CONTACT WITH EYES CAN CAUSE SEVERE IRRITATION, REDNESS, BLURRED VISION, POSSIBLE BURNS AND PERMANENT DAMAGE.
INHALATION :	INHALATION CAN IRRITATE RESPIRATORY TRACT, CAUSING COUGHING AND SHORTNESS OF BREATH. DELAYED/CHRONIC: CHRONIC MANGANESE POISONING CAN RESULT FROM EXCESSIVE INHALATION EXPOSURE TO MANGANESE DUST AND INVOLVES IMPAIRMENT OF THE CENTRAL NERVOUS SYSTEM. EARLY SYMPTOMS INCLUDE SLUGGISHNESS, SLEEPINESS, AND WEAKNESS IN THE LEGS.
INGESTION :	CAUSES SEVERE DISTRESS OF GASTROINTESTINAL SYSTEM WITH POSSIBLE BURNS, SHOCK WITH FALL OF BLOOD PRESSURE. MAY BE FATAL. INGESTION OF CONCENTRATIONS UP TO 1% CAN CAUSE BURNING OF THE THROAT, NAUSEA, VOMITING, ABDOMINAL PAIN; 2-3% CAUSES ANEMIA AND SWELLING OF THE THROAT WITH POSSIBLE SUFFOCATION; 4-5% MAY CAUSE KIDNEY DAMAGE.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED, IF NECESSARY
IF EXPOSED: CALL A POISON CENTER/DOCTOR/PHYSICIAN

SECTION 5 – FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA :	WATER : (X-AS SPRAY/FOG) FOAM : () CO₂ : () DRY CHEMICAL : () EXTINGUISH WITH LARGE QUANTITIES OF WATER FROM A DISTANCE TO COOL DOWN FLAMES AND SPRAY WATER TO CREATE BLANKET ON THE FIRE EXPOSED AREA. DO NOT ALLOW RUN-OFF TO ENTER SEWERS OR THE ENVIRONMENT. DO NOT EXTINGUISH WITH FOAM, CO₂, OR HALOGENATED MATERIALS.
SPECIFIC HAZARDS IN CASE OF FIRE :	PRODUCT IS NOT COMBUSTIBLE BUT IS A STRONG OXIDIZER. CONTACT WITH OXIDIZABLE SUBSTANCES CAN CAUSE EXPLOSIVE AND / OR FLAMMABLE REACTIONS. THIS OXIDIZER INCREASES FLAMMABILITY OF COMBUSTIBLE MATERIALS. WATCH FOR RAPID BURNING AND BE PREPARED TO RETREAT TO A SAFE DISTANCE. CORROSIVE / POISONOUS GASES/VAPORS CAN BE PRODUCED IN A FIRE INVOLVING THIS MATERIAL.
SPECIAL PROTECTIVE EQUIPMENT & PRECAUTION FOR FIRE FIGHTERS :	CORROSIVE AND/OR POISONOUS GASES ARE PRODUCED IN A FIRE - WEAR A NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS OPERATED IN PRESSURE DEMAND OR POSITIVE PRESSURE MODE AND FULL PROTECTIVE GEAR. CONTAINERS MAY EXPLODE IN FIRE. COOL FIRE EXPOSED CONTAINERS WITH FLOODING QUANTITIES OF WATER SPRAY. MOVE CONTAINERS FROM FIRE AREA IF IT CAN BE DONE WITHOUT RISK. NOTE - STRONG OXIDIZERS MAY EXPLODE AND DECOMPOSE SPONTANEOUSLY IF EXPOSED TO INTENSE HEAT, CONCENTRATED ACIDS, HYDROGEN PEROXIDE, REDUCING AGENTS OR ORGANIC SUBSTANCES. VIOLENT REACTION MAY OCCUR WITH FINELY DIVIDED AND READILY OXIDIZABLE SUBSTANCES.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS :	CLEAN SPILL PROMPTLY. VENTILATE AREA. ELIMINATE ALL SOURCES OF IGNITION. WEAR FULL PROTECTIVE EQUIPMENT (SEE SECTION 8). AVOID CONTACT WITH SKIN & EYES. DO NOT INHALE DUSTS/MISTS/VAPORS. ISOLATE AREA WHERE SPILL OCCURRED. KEEP COMBUSTIBLES AWAY FROM SPILL.
ENVIRONMENTAL PRECAUTIONS :	DO NOT RELEASE TO DRAINS, SEWERS AND OTHER BODIES OF WATER.
METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP :	USING NON-SPARKING UTENSILS, SCOOP OR SHOVEL UP SPILLED MATERIAL PLACE IN A LABELED CONTAINER (PLASTIC OR METAL DRUM) FOR PROPER DISPOSAL. AVOID GENERATING DUST. AVOID CONTACT WITH COMBUSTIBLE MATERIALS.

SECTION 7 – HANDLING & STORAGE

PRECAUTIONS FOR SAFE HANDLING: USE IN WELL VENTILATED AREA TO MEET PERMISSIBLE EXPOSURE / TLV LIMITS (SEE SECTION 8). [P280] WEAR PROTECTIVE GLOVES/ EYE PROTECTION/ FACE PROTECTION (SEE SECTION 8). WEAR PROTECTIVE CLOTHING. [P264] WASH THOROUGHLY AFTER HANDLING. [P270] DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT. DO NOT RE-USE CONTAMINATED CLOTHING.

CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES: [P210]: KEEP AWAY FROM HEAT. [P220] KEEP/STORE AWAY FROM CLOTHING/COMBUSTIBLE MATERIALS. [P221] TAKE ANY PRECAUTION TO AVOID MIXING WITH COMBUSTIBLES. KEEP CONTAINER TIGHTLY CLOSED. AVOID CONTACT WITH INCOMPATIBLES (SEE SECTION 10).

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS:

EXPOSURE LIMITS: U.S. OSHA PEL : 5 mg/m³ OSHA CEILING LIMIT FOR MANGANESE AND INORGANIC COMPOUNDS, AS Mn
U.S. ACGIH TLV : 0.02 mg/m³ TWA FOR RESPIRABLE FRACTION AS Mn; 0.1 mg/m³ TWA INHALABLE AS Mn

APPROPRIATE ENGINEERING CONTROLS : USE LOCAL/ MECHANICAL EXHAUST TO MAINTAIN AIR CONCENTRATIONS BELOW OCCUPATIONAL EXPOSURE STANDARDS (SEE ABOVE)

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION : USE NIOSH APPROVED RESPIRATOR SUITABLE TO MEET PERMISSIBLE EXPOSURE LIMIT. SEE U.S. OSHA RESPIRATORY STANDARD (20 CFR 1910.134).

HAND PROTECTION : USE CHEMICAL RESISTANT GLOVES (RUBBER OR PLASTIC)

EYE PROTECTION : SAFETY GOGGLES OR GLASSES WITH SIDE SHIELDS OR FULL FACE SHIELD; HAVE 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 :	DARK PURPLE CRYSTALS	FLAMMABLE LIMITS :	LEL: (N/A)	UEL: (N/A)
ODOR :	NO ODOR	VAPOR PRESSURE (mm Hg) :		
ODOR THRESHOLD :	N/A	VAPOR DENSITY (AIR=1) :	N/A	
pH (% IN WATER) :	NOT KNOWN	DENSITY (g/cm³) :	2.703	
MELTING POINT / FREEZING POINT (°C) :	>240°C; DECOMPOSES AT >150°C (302°F)			
BOILING POINT (°C) :	N/A	SOLUBILITY IN WATER (@20°C) :	SOLUBLE, 6.38g/100cc	
FLASH POINT (°F) :	N/A	PARTITION COEFFICIENT (n-OCTANOL/WATER) :	NOT KNOWN	
EVAPORATION RATE :	N/A	AUTO IGNITION TEMP. (° F) :	NOT KNOWN	
FLAMMABILITY :	N/A	DECOMPOSITION TEMP. :	>150°C (302°F)	

SECTION 10 – STABILITY AND REACTIVITY

CHEMICAL STABILITY : STABLE UNDER NORMAL CONDITIONS
POSSIBILITY OF HAZARDOUS REACTIONS : POTASSIUM PERMANGANATE IS A STRONG OXIDIZER, SPONTANEOUSLY EXPLOSIVE OR FLAMMABLE ON CONTACT WITH MANY INCOMPATIBLES (SEE BELOW). CONTACT WITH HYDROCHLORIC ACID WILL LIBERATE CHLORINE GAS. DO NOT MIX WITH FORMALDEHYDE.

CONDITIONS TO AVOID : CONTACT WITH INCOMPATIBLE MATERIALS; EXCESSIVE HEAT (>150°C); PHYSICAL IMPACT OR FRICTION

INCOMPATIBLE MATERIALS : AVOID CONTACT WITH ALCOHOLS, ARSENITES, IODIDES, ACIDS, FORMALDEHYDE, CHARCOAL, COMBUSTIBLE ORGANIC MATERIALS, FERROUS AND MERCUROUS SALTS, HYPOPHOSPHITES, HYPOSULFITES, SULFITES, PEROXIDES, OXALATES, INORGANIC OXIDIZABLE MATERIALS, METAL POWDERS, WOOD, GLYCERINE, POLYPROPYLENE, AND HEAT.

HAZARDOUS DECOMPOSITION PRODUCTS : TOXIC, CORROSIVE METAL FUMES OF K₂O MAY EVOLVE WHEN IN A FIRE

SECTION 11 – TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS:

ROUTES OF EXPOSURE : SKIN, EYES, INHALATION, INGESTION

SKIN : CONTACT WITH DRY CRYSTALS OR CONCENTRATED SOLUTIONS WILL IRRITATE AND ACT AS A CORROSIVE, CAUSING BURNS TO SKIN AND BODY TISSUE ON CONTACT. CONTACT AREA WILL BE STAINED BROWN AND THE OUTER LAYER OF SKIN WILL POSSIBLY HARDEN.

EYES : CONTACT WITH EYES CAN CAUSE SEVERE BURNS RESULTING IN EYE DAMAGE.

INHALATION : INHALATION OF DUST, MIST, OR SOLUTION SPRAY CAN IRRITATE NOSE, THROAT, AND RESPIRATORY TRACT CAUSING COUGHING, CHEST TIGHTNESS, AND POSSIBLE DAMAGE TO THE RESPIRATORY SYSTEM. HIGH INHALATION EXPOSURES CAN CAUSE A BUILDUP OF FLUID IN THE LUNGS (PULMONARY EDEMA) WHICH MAY RESULT IN DEATH.

INGESTION : INGESTION OF POWDER OR SOLUTION CAN CAUSE SEVERE IRRITATION OR BURNS TO MOUTH, THROAT, ESOPHAGUS, AND STOMACH WITH DIFFICULTY IN BREATHING, NAUSEA, GASTROINTESTINAL EFFECTS, SHOCK WITH FALL OF BLOOD PRESSURE, POSSIBLE KIDNEY DAMAGE. EXPERIMENTAL REPRODUCTIVE EFFECTS AND MUTATION DATA HAVE BEEN REPORTED IN LITERATURE.

CHRONIC : REPEATED OR PROLONGED SKIN CONTACT MAY CAUSE DEFATTING AND DERMATITIS. LONG TERM INHALATION OF MANGANESE DUSTS (USUALLY IN FORM OF MANGANESE OXIDES) MAY LEAD TO A HIGH INCIDENCE OF UPPER RESPIRATORY INFECTIONS, LUNG IRRITATION, AND POSSIBLE CENTRAL NERVOUS SYSTEM DISORDERS WITH SYMPTOMS SIMULATING PARKINSON'S DISEASE.

ACUTE TOXICITY : ORAL LD₅₀: 1090 mg/kg (RAT); 780 mg/kg MALE RAT; 525 mg/kg FEMALE RAT; ORAL-HUMAN LDLo: 143 mg/kg – DATA BASED ON LITERATURE OR TESTING OF SIMILAR PRODUCT

SKIN CORROSION / IRRITATION : DATA IS NOT AVAILABLE BUT EXPECTED TO BE IRRITATING

SERIOUS EYE DAMAGE / IRRITATION : DATA IS NOT AVAILABLE BUT EXPECTED TO BE IRRITATING

RESPIRATORY OR SKIN SENSITIZATION : DATA IS NOT AVAILABLE

GERM CELL MUTAGENICITY : DATA IS NOT AVAILABLE

CARCINOGENICITY : U.S. LISTED CARCINOGEN: NONE (X) OSHA () NTP () IARC () OTHER ()

REPRODUCTIVE TOXICITY : NO DATA AVAILABLE

SPECIFIC TARGET ORGAN TOXICITY : SINGLE EXPOSURE - TEST DATA NOT AVAILABLE

REPEATED EXPOSURE – TEST DATA NOT AVAILABLE

ASPIRATION HAZARD : DATA IS NOT AVAILABLE

INTERACTIVE EFFECTS: NO DATA AVAILABLE

SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICITY : DANGEROUS TO THE ENVIRONMENT. DO NOT RELEASE TO THE ENVIRONMENT OR WATERWAYS.

TOXICITY - AQUATIC : NO TEST DATA AVAILABLE. TESTING OF SIMILAR PRODUCTS FOUND IT TO BE VERY TOXIC TO AQUATIC ORGANISMS; MAY CAUSE LONG TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT

TOXICITY - TERRESTIAL : NO TEST DATA AVAILABLE

PERSISTENCE & DEGRADABILITY: NO TEST DATA AVAILABLE – PERMANGANATE IS EXPECTED TO HAVE A LOW ESTIMATED LIFETIME AS IT IS READILY CONVERTED TO INSOLUBLE MANGANESE OXIDE BY OXIDIZABLE MATERIALS

BIOACCUMULATIVE POTENTIAL : NO DATA AVAILABLE

MOBILITY IN SOIL : NO TEST DATA AVAILABLE – MATERIAL SOLUBLE IN WATER

OTHER ADVERSE EFFECTS : NO DATA AVAILABLE

SECTION 13 – DISPOSAL CONSIDERATIONS

DISPOSAL METHODS:

[P501]: DISPOSE OF CONTENTS / CONTAINER IN ACCORDANCE WITH LOCAL, REGIONAL, NATIONAL, INTERNATIONAL REGULATIONS. DO NOT RELEASE TO THE ENVIRONMENT. DISPOSE OF IN SEALED CONTAINERS, USING A LICENSED CHEMICAL WASTE HAULER.

FOLLOW ALL LOCAL, STATE AND FEDERAL INFORMATION AND REGULATIONS

SECTION 14 – TRANSPORT INFORMATION

BY ROAD OR RAIL - U.S. D.O.T. REGULATED : YES (X) NO () **RQ: (100 LBS.*)**

IF REGULATED, UN PROPER SHIPPING NAME : POTASSIUM PERMANGANATE

HAZARD CLASS : (5.1)

UN IDENTIFICATION NO. : (UN1490)

PACKING GROUP : (II)

LABEL REQUIRED : (OXIDIZER)

U.S. LISTED MARINE POLLUTANT : YES () NO (X**)

SEVERE U.S. MARINE POLLUTANT: YES () NO (X)

EMERGENCY RESPONSE GUIDE NO. : (140)

INLAND B/L 25 KG DRUMS : UN1490, POTASSIUM PERMANGANATE, 5.1, PG II – OXIDIZER LABEL

INLAND B/L 150 KG DRUMS : RQ, UN1490, POTASSIUM PERMANGANATE, 5.1, PG II – OXIDIZER LABEL

* A SPILL/RELEASE OF THIS MATERIAL IS REPORTABLE UNDER CERCLA IN THE U.S.WHEN PACKAGED IN A DRUM SIZE THAT MEETS OR EXCEEDS THE REPORTABLE QUANTITY OF 100 LBS. OUR 25 KG DRUM IS NOT A REPORTABLE QUANTITY; OUR 150 KG DRUM IS A REPORTABLE QUANTITY.

**NOTE - MATERIAL MAY BE LABELED BY THE FACTORY IN ACCORDANCE WITH UN GHS & EU CLP LABELING REQUIREMENTS AND CARRIES THE ADDITIONAL TRANSPORT LABEL OF MARINE POLLUTANT. THIS PRODUCT IS NOT CURRENTLY LISTED AS A MARINE POLLUTANT UNDER US DOT 49CFR172.101 APPENDIX B. THE MARINE POLLUTANT LABEL IS PERMITTED TO REMAIN ON THE DRUM UNDER 49CFR172.401(c)(5) AND APPENDIX B TO 49CFR172.101(4) IN TRANSPORT TO OUR CUSTOMERS.

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

STOWAGE CATEGORY D

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

PKG INSTRUCTION NO.: 2.5kg LTD QTY-Y544; 5kg PASS.-558; 25kg CARGO-562

SPECIAL PRECAUTIONS : READ SDS AND EMERGENCY RESPONSE GUIDE / PROCEDURES BEFORE HANDLING

SECTION 15 – REGULATORY INFORMATION

U.S. TSCA : WE CERTIFY THAT ALL COMPONENTS OF THIS PRODUCT ARE REGISTERED UNDER THE REGULATIONS OF THE TOXIC SUBSTANCES CONTROL ACT.

U.S. SARA TITLE III, SECT. 313 : LISTED (X-AS MANGANESE COMPOUND) NOT LISTED ()

U.S. RCRA HAZARDOUS WASTE : NO (*) YES (*) RCRA # : (*)
* WASTE SHOULD BE TESTED TO SEE IF IT MEETS RCRA # D001 / D003 – UNLISTED HAZARDOUS WASTE CHARACTERISTIC OF IGNITABILITY / REACTIVITY; NO SPECIFIC RCRA LISTING UNDER POTASSIUM PERMANAGANATE

U.S. CERCLA : NO () YES (X) RQ (100 LBS.)

U.S. DRUG ENFORCEMENT ADMINISTRATION : LIST II CHEMICAL – POTASSIUM PERMANGANATE – DEA CODE #6579
NOTE – THIS MATERIAL MAY NOT BE EXPORTED FROM THE U.S. WITHOUT PRIOR PROPER DEA FILING / PERMISSION

U.S. DEPARTMENT OF HOMELAND SECURITY : APPENDIX "A" LISTED CHEMICAL; SCREENING THRESHOLD QUANTITY (STQ) = 400 LBS. FOR COMPLIANCE WITH CHEMICAL FACILITY ANTI-TERRORISM STANDARDS (CFATS) REGULATIONS

U.S. CALIFORNIA PROPOSITION 65 LISTED : YES () NO (X)

SECTION 16 – OTHER INFORMATION

REVISION DATE: DECEMBER 2, 2018 **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; TLV=THRESHOLD LIMIT VALUE; TWA=TIME WEIGHTED AVERAGE OVER 8 HOUR WORKDAY; LD₅₀ OR LC₅₀=LETHAL DOSE OR LETHAL CONCENTRATION THAT KILLS 50% OF DOSED GROUP; g=GRAM; kg=KILOGRAM; PPM=PARTS PER MILLION

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.

UNITED MINERAL & CHEMICAL CORPORATION
