

SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

PRODUCT NAME: PHOSPHORESCENT PIGMENT: GSR, GSR-F
COMPANY: UNITED MINERAL & CHEMICAL CORPORATION
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US D.O.T. / UN NAME: NOT REGULATED FOR TRANSPORT

RECOMMENDED USES: GLOW-IN-THE-DARK PIGMENT FOR USE IN INKS, PAINTS, COATINGS, CHALKS, PLASTICS, ETC.

EMERGENCY TELEPHONE NO.:
USA – CHEMTREC: 1-800-424-9300
Outside USA: +1 703-527-3887

SECTION 2 – HAZARD IDENTIFICATION

GHS HAZARD CLASSIFICATION:
NOT CLASSIFIED

GHS LABEL ELEMENTS:
SIGNAL WORD: NO SIGNAL WORD
LABEL CODES / PICTOGRAMS: NO PICTOGRAMS
HAZARD STATEMENTS: NONE UNDER GHS CLASSIFICATION

PRECAUTIONARY STATEMENTS :

PREVENTION : NONE ASSIGNED UNDER GHS
RESPONSE : NONE ASSIGNED UNDER GHS
STORAGE : NONE ASSIGNED UNDER GHS
DISPOSAL : NONE ASSIGNED UNDER GHS

OTHER HAZARDS / U.S. - HAZARDS NOT OTHERWISE CLASSIFIED / UN GHS - OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION:
CONTACT WITH ACIDS CAN RELEASE TOXIC GAS. AVOID CONTACT WITH ACIDS.
TREAT AS NUISANCE DUST - AVOID INHALATION OF DUSTS

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL COMPOSITION:	COMPONENTS:	CAS NO.	%
	ZINC SULFIDE, COPPER AND MANGANESE DOPED (Cu CONTENT ≤0.1%; Mn CONTENT ≤0.12%)	68585-91-1	>98
SYNONYMS:	LUMINESCENT ZINC SULFIDE		
CHEMICAL FAMILY:	ZINC COMPOUNDS; MANGANESE COMPOUNDS; SULFIDES		

SECTION 4 – FIRST AID MEASURES

FIRST AID/ RESPONSE

SKIN : **FIRST AID RESPONDERS SHOULD WEAR PERSONAL PROTECTIVE EQUIPMENT**
IF ON SKIN: IMMEDIATELY WASH OFF WITH SOAP & WATER. REMOVE CONTAMINATED CLOTHING. GET MEDICAL ADVICE/ATTENTION IF IRRITATION OCCURS.

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. GET MEDICAL ADVICE / ATTENTION IF ANY ADVERSE SYMPTOMS OCCUR.

INGESTION : IF SWALLOWED: RINSE MOUTH WITH WATER. SEEK MEDICAL ATTENTION. INDUCE VOMITING ONLY UNDER THE DIRECTION OF MEDICAL PERSONNEL. NEVER GIVE ANYTHING BY MOUTH IF THE VICTIM IS UNCONSCIOUS.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED

AS AN INORGANIC POWDER, INHALATION OR CONTACT WITH DUST MAY CAUSE SLIGHT MECHANICAL IRRITATION TO RESPIRATORY TRACT, SKIN, OR EYES.

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

CALL A POISON CENTER/DOCTOR/PHYSICIAN IF YOU FEEL UNWELL.

SECTION 5 – FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA : **WATER : (X-AS SPRAY/FOG) FOAM : () CO₂ : (X) DRY CHEMICAL : ()**
PRODUCT IS NOT COMBUSTIBLE. DO NOT USE HIGH PRESSURE WATER JET.

SPECIFIC HAZARDS IN CASE OF FIRE : SULFIDE BASED PIGMENT MAY EMIT TOXIC SULFUR DIOXIDE OR HYDROGEN SULFIDE UNDER FIRE CONDITIONS. AVOID RELEASE TO THE ENVIRONMENT

SPECIAL PROTECTIVE EQUIPMENT & PRECAUTION FOR FIRE FIGHTERS : FIREFIGHTERS SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR IN FIGHTING FIRES INVOLVING CHEMICALS.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: WEAR FULL PROTECTIVE EQUIPMENT (SEE SECTION 8). KEEP UNPROTECTED PERSONNEL OUT OF THE AREA.

ENVIRONMENTAL PRECAUTIONS: AVOID RELEASE TO THE ENVIRONMENT/DRAINS/SEWERS/BODIES OF WATER. DISPOSE OF PROPERLY.

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

SECTION 7 – HANDLING & STORAGE

PRECAUTIONS FOR SAFE HANDLING: WHEN HANDLING OR POURING, WEAR FULL PROTECTIVE EQUIPMENT (SEE SECTION 8). USE WITH ADEQUATE VENTILATION. AVOID SCATTERING INTO THE AIR. AVOID RELEASE TO THE ENVIRONMENT. EMPLOY GOOD HOUSEKEEPING TECHNIQUES TO CONTROL DUST BUILD-UP ON EQUIPMENT AND WORK AREA.

CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES: STORE IN THE SEALED ORIGINAL CONTAINER IN A COOL, DRY AREA AWAY FROM ACIDS.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION**CONTROL PARAMETERS:**

EXPOSURE LIMITS: U.S. OSHA PEL : 5 mg/m³ OSHA CEILING as Mn; AS NUISANCE DUST: 15 mg/m³ TWA TOTAL DUST; 5 mg/m³ TWA RESPIRABLE,

U.S. ACGIH TLV : 0.1 mg/m³ ACGIH TWA as Mn-INHALABLE; 0.02 mg/m³ ACGIH TWA as Mn - RESPIRABLE

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, PVC)

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

SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE :	YELLOWISH POWDER	FLAMMABLE LIMITS :	LEL:& UEL: (N/A)
ODOR :	NO ODOR	VAPOR PRESSURE (mm Hg) :	N/A
ODOR THRESHOLD :	N/A	VAPOR DENSITY (AIR=1) :	N/A
pH (IN WATER @ 20°C) :	NO DATA	DENSITY(g/cm³ @ 20°C) :	2
MELTING POINT / FREEZING POINT (°C) :	>401 (>754°F)	SOLUBILITY IN WATER (@20°C) :	NEGLIGIBLE (<1%)
BOILING POINT (°C) :	N/A	PARTITION COEFFICIENT(n-OCTANOL/WATER) :	N/A
FLASH POINT (°F) :	N/A	AUTO IGNITION TEMP. (°C) :	>400 (>752°F)
EVAPORATION RATE :	N/A	DECOMPOSITION TEMP. :	NOT KNOWN
FLAMMABILITY :	NOT FLAMMABLE	VISCOSITY :	N/A

SECTION 10 – STABILITY AND REACTIVITY

CHEMICAL STABILITY : STABLE WHEN STORED SEALED IN ORIGINAL PACKAGING UNDER RECOMMENDED STORAGE CONDITIONS.

POSSIBILITY OF HAZARDOUS REACTIONS : CAN REACT WITH ACIDS TO FORM TOXIC, FLAMMABLE HYDROGEN SULFIDE GAS

CONDITIONS TO AVOID : CONTACT WITH INCOMPATIBLES; GENERATION OF DUST; HEAT, SPARKS, STATIC CHARGE, AND SOURCES OF IGNITION.

INCOMPATIBLE MATERIALS : ACIDS

HAZARDOUS DECOMPOSITION PRODUCTS : TOXIC/FLAMMABLE GASES (HYDROGEN SULFIDE, SULFUR DIOXIDE) & ZINC OXIDE CAN BE PRODUCED WHEN HEATED, UNDER FIRE CONDITIONS OR WHEN REACTED WITH ACIDS.

SECTION 11 – TOXICOLOGICAL INFORMATION**POTENTIAL HEALTH EFFECTS:**

ROUTES OF EXPOSURE : SKIN, EYES, INHALATION, INGESTION

SKIN, EYES, INHALATION : AS AN INORGANIC POWDER, INHALATION OR CONTACT WITH DUST MAY CAUSE SLIGHT MECHANICAL IRRITATION TO RESPIRATORY TRACT, SKIN, OR EYES.

INGESTION : THIS ROUTE OF EXPOSURE IS NOT LIKELY. NO KNOWN EFFECTS.

CHRONIC : LONG TERM REPEATED EXPOSURE TO MANGANESE COMPOUNDS MAY HAVE EFFECTS ON THE CENTRAL NERVOUS SYSTEM WITH PARKINSON LIKE SYMPTOMS. THIS COMPOUND CONTAINS LESS THAN 1% MANGANESE –SEE SECTION 3 (BELOW CLASSIFICATION LEVEL).

ACUTE TOXICITY : ORAL(RAT) LD₅₀:>2000mg/kg; DERMAL(RAT) LD₅₀:>2000mg/kg; INHALATION(RAT) LC₅₀: 5.41mg/m³

SKIN CORROSION / IRRITATION : NO IRRITATING EFFECT

SERIOUS EYE DAMAGE / IRRITATION : NO IRRITATING EFFECT KNOWN

RESPIRATORY OR SKIN SENSITIZATION : NO SENSITIZING EFFECTS KNOWN

GERM CELL MUTAGENICITY : NEGATIVE

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

REPRODUCTIVE TOXICITY : NOT CLASSIFIABLE; ORAL RAT LOAEL=50mg/kg body weight/day (DEVELOPMENTAL TOXICITY); ORAL RAT NOAEL=20mg/kg body weight/day (FERTILITY)

SPECIFIC TARGET ORGAN TOXICITY : NONE KNOWN

ASPIRATION HAZARD : NO DATA AVAILABLE

INTERACTIVE EFFECTS: NONE KNOWN

SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICITY : AVOID RELEASE TO THE ENVIRONMENT
TOXICITY - AQUATIC : NO TEST DATA AVAILABLE
TOXICITY TO DAPHNIA : NO TEST DATA AVAILABLE
TOXICITY - TERRESTIAL : NO TEST DATA AVAILABLE
PERSISTANCE & DEGRADABILITY: NO DATA AVAILABLE
BIOACCUMULATIVE POTENTIAL : NO TEST DATA AVAILABLE
MOBILITY IN SOIL : NO TEST DATA AVAILABLE
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 FOR ZINC WASTES.
FOLLOW ALL LOCAL, STATE AND FEDERAL INFORMATION AND REGULATIONS

SECTION 14 – TRANSPORT INFORMATION

BY ROAD OR RAIL - U.S. D.O.T. REGULATED: YES () NO (X) **RQ:** (N/A)
 IF REGULATED, UN PROPER SHIPPING NAME: HAZARD CLASS: ()
 UN IDENTIFICATION NO.: () PACKING GROUP: () LABEL REQUIRED: ()
 U.S. MARINE POLLUTANT: YES () NO (X) SEVERE U.S. MARINE POLLUTANT: YES () NO (X)
 EMERGENCY RESPONSE GUIDE NO.: ()
 INLAND B/L:
BY SEA - IMDG REGULATED: YES () NO (X) STOWAGE CATEGORY: N/A
BY AIR - IATA REGULATED: YES () NO (X) PKG INSTRUCTION NO.: N/A
SPECIAL PRECAUTIONS: READ SDS 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*) NOT LISTED () *AS ZINC COMPOUND; AS MANGANESE COMPOUND
U.S. RCRA HAZARDOUS WASTE : NO (X) YES () **RCRA # :** ()
U.S. CERCLA : NO () YES (X) **RQ (**)** **NO REPORTABLE QUANTITY IS ASSIGNED TO THE GENERIC OR BROAD CLASS OF "ZINC AND COMPOUNDS, ALTHOUGH THE CLASS IS A CERCLA HAZARDOUS SUBSTANCE
U.S. DEPARTMENT OF HOMELAND SECURITY APPENDIX "A" : LISTED () NOT LISTED (X)
U.S. CALIFORNIA PROPOSITION 65 LISTED : YES () NO (X)
HMIS: HEALTH (0) FLAMMABILITY (0) REACTIVITY (0)

SECTION 16 – OTHER INFORMATION

REVISION DATE: APRIL 16, 2015 **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; LOAEL=LOWEST OBSERVED ADVERSE EFFECT LEVEL; NOAEL=NO OBSERVED ADVERSE EFFECT LEVEL

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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