

SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

PRODUCT NAME: LUMINOVA: BG-300M, BG-300F,
BG-300L, BG-300L160, BG-300L700

COMPANY: UNITED MINERAL & CHEMICAL CORPORATION
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US D.O.T. / UN NAME: NOT REGULATED FOR TRANSPORT

RECOMMENDED USES: LONG AFTERGLOW BLUE-GREEN GLOW-IN-
THE-DARK PIGMENT FOR USE IN INKS,
PAINTS, COATINGS, PLASTICS, ETC.

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

SECTION 2 – HAZARD IDENTIFICATION

GHS HAZARD CLASSIFICATION:
HAZARDOUS TO THE AQUATIC ENVIRONMENT – LONG-TERM HAZARD, CATEGORY 3

GHS LABEL ELEMENTS:
SIGNAL WORD: NO SIGNAL WORD FOR CATEGORY 3
LABEL CODES / PICTOGRAMS: NO PICTOGRAM FOR CATEGORY 3
HAZARD STATEMENTS: HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS

PRECAUTIONARY STATEMENTS :

PREVENTION : P273 AVOID RELEASE TO THE ENVIRONMENT
RESPONSE : NONE ASSIGNED UNDER GHS
STORAGE : NONE ASSIGNED UNDER GHS
DISPOSAL : P501 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:
TREAT AS NUISANCE DUST - AVOID INHALATION OF DUSTS

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL COMPOSITION:	COMPONENTS:	CAS NO.	%
	LUMINOVA BG	US TSCA ACCESSION #153271	99-100
SYNONYMS:	GENERIC: STRONTIUM-DYSPROSIUM-EUROPIUM-ALUMINATE		
CHEMICAL FAMILY:	LUMINESCENT MIXED METAL OXIDES		

SECTION 4 – FIRST AID MEASURES

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

SKIN : IF ON SKIN: PROMPTLY 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. CALL A POISON CENTER / DOCTOR / PHYSICIAN IF YOU FEEL UNWELL.

INGESTION : IF SWALLOWED: RINSE MOUTH WITH WATER. CALL A POISON CENTER/DOCTOR/PHYSICIAN IF YOU FEEL UNWELL. 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 :** (X) **CO₂ :** (X) **DRY CHEMICAL :** (X)
LUMINOVA IS NOT COMBUSTIBLE. USE EXTINGUISHING MEDIA SUITABLE FOR SURROUNDING FIRE.

SPECIFIC HAZARDS IN CASE OF FIRE : AVOID RELEASE TO THE ENVIRONMENT. DO NOT ALLOW CONTAMINATED RUNOFF TO ENTER SEWER SYSTEM OR BODIES OF WATER.

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. DO NOT RELEASE TO DRAINS, SEWERS, OR BODIES OF WATER.
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 CLOSED IN A COOL, DRY AREA AWAY FROM OXIDIZING AGENTS.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS:

EXPOSURE LIMITS: U.S. OSHA PEL : NONE ESTABLISHED FOR PRODUCT – TREAT AS NUSANCE PARTICULATE: 15 mg/m³ TWA TOTAL DUST, 5 mg/m³ TWA RESPIRABLE,
U.S. ACGIH TLV : NONE ESTABLISHED FOR PRODUCT
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 :	LIGHT YELLOWISH-GREEN 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) :	8.5 - 9.5	DENSITY(20°C)/SPECIFIC GRAVITY :	3.6~3.9
MELTING POINT / FREEZING POINT (°C) :	>1000 (>1832°F)	SURFACE TENSION (mN/m) :	72
BOILING POINT (°C) :	N/A	SOLUBILITY IN WATER (@20°C) :	0.1g/100ml (10mg/100ml)
FLASH POINT (°F) :	N/A	PARTITION COEFFICIENT(n-OCTANOL/WATER) :	EXPECTED TO BE<0 (20°C)
EVAPORATION RATE :	N/A	AUTO IGNITION TEMP. (° F) :	N/A
FLAMMABILITY :	NOT FLAMMABLE	DECOMPOSITION TEMP. :	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 OR STRONG OXIDIZING AGENTS
CONDITIONS TO AVOID : CONTACT WITH INCOMPATIBLES; GENERATION OF DUST; HEAT, SPARKS, STATIC CHARGE, AND SOURCES OF IGNITION.
INCOMPATIBLE MATERIALS : ACIDS, STRONG OXIDIZING AGENTS
HAZARDOUS DECOMPOSITION PRODUCTS : NONE KNOWN WHEN USED AND STORED AS RECOMMENDED

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: NO KNOWN EFFECTS
ACUTE TOXICITY : ORAL (RAT) LD₅₀: >2000 mg/kg; DERMAL LD₅₀: >2000 mg/kg (RAT)
SKIN CORROSION / IRRITATION : EPISKIN SKIN IRRITATION (TG-439): NEGATIVE
SERIOUS EYE DAMAGE / IRRITATION : BOVINE CORNEAL OPACITY & PERMEABILITY ASSAY(BCOP) (TG-437): NEGATIVE
RESPIRATORY OR SKIN SENSITIZATION : GUINEA PIG: NOT SENSITIZING
GERM CELL MUTAGENICITY : E COLI REVERSE MUTATION TEST (TG471): NEGATIVE
CARCINOGENICITY : U.S. LISTED CARCINOGEN: NONE (X) OSHA () NTP () IARC () OTHER ()
REPRODUCTIVE TOXICITY : CHROMOSOMAL ABBERRATION TEST (TG473): NEGATIVE
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 : RAINBOW TROUT:NOT TESTED FISH EARLY LIFE STAGE TOXICITY: NOEC=0.322mg/L;
TOXICITY TO DAPHNIA : EC₅₀ (48h): 13 mg/L DAPHNIA MAGNA [OECD TG 202 PART 1]
TOXICITY - TERRESTIAL : NO TEST DATA AVAILABLE
PERSISTANCE & DEGRADABILITY: INORGANIC SUBSTANCE - NOT EXPECTED TO BE READILY BIODEGRADABLE
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:

[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 () NO (X*) **RQ:** (N/A)
IF REGULATED, UN PROPER SHIPPING NAME: HAZARD CLASS: ()
UN IDENTIFICATION NO.: () PACKING GROUP: ()
U.S. MARINE POLLUTANT: YES () NO (X) SEVERE U.S. MARINE POLLUTANT: YES () NO (X)
EMERGENCY RESPONSE GUIDE NO.: ()
INLAND B/L:

*DOES NOT MEET THE UN REQUIREMENTS FOR SHIPPING AS AN INTERNATIONAL CLASS 9 MARINE POLLUTANT

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 () NOT LISTED (X)

U.S. RCRA HAZARDOUS WASTE : NO (X) YES () **RCRA # :** ()

U.S. CERCLA : NO (X) YES () **RQ (N/A)**

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: NOVEMBER 11, 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

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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