SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

PRODUCT NAME: LUMINOVA: B-300M COMPANY:

NOT REGULATED FOR TRANSPORT

UNITED MINERAL & CHEMICAL CORPORATION

1050 Wall Street West, Ste. 660, Lyndhurst, NJ 07071

Tel: 201-507-3300 Fax: 201-507-1506

e-mail: inquiry@umccorp.com

RECOMMENDED USES: LONG AFTERGLOW DEEP 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 CATERGORY 3

LABEL CODES / PICTOGRAMS: NO PICTOGRAM FOR CATEGORY 3

HAZARD STATEMENTS: HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS

PRECAUTIONARY STATEMENTS:

US D.O.T. / UN NAME:

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 20 – 60 LUMINOVA V TSCA LVE GENERIC: COMPOUND METAL ALUMINATE 40 - 80

SYNONYMS: MIXTURE - GENERIC: STRONTIUM-DYSPROSIUM-EUROPIUM-ALUMINATE + COMPOUND METAL ALUMINATE

CHEMICAL FAMILY: LUMINESCENT MIXED METAL OXIDES

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

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)

LUMINOVÀ 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.

N/A = NOT APPLICABLE LOC

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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,

NONE ESTABLISHED FOR PRODUCT U.S. ACGIH TLV:

USE LOCAL / MECHANICAL EXHAUST TO MAINTAIN AIR CONCENTRATIONS BELOW APPROPRIATE ENGINEERING CONTROLS:

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-WHITE POWDER FLAMMABLE LIMITS: LEL: & UEL: (N/A)

ODOR: NO ODOR VAPOR PRESSURE (mm Hq): N/A **ODOR THRESHOLD:** N/A VAPOR DENSITY (AIR=1): N/A DENSITY(20°C)/SPECIFIC GRAVITY:

pH (10% IN WATER @ 20°C): ~10 3.0~3.3 MELTING POINT / FREEZING POINT (°C): >1000 (>1832°F) SURFACE TENSION (mN/m): NO DATA

BOILING POINT (°C): N/A SOLUBILITY IN WATER (@20°C): NO DATA FLASH POINT (°F): PARTITION COEFFICIENT(n-OCTANOL/WATER): NO DATA N/A **EVAPORATION RATE:** N/A **AUTO IGNITION TEMP. (°F):** N/A

SECTION 10 – STABILITY AND REACTIVITY

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

STORAGE CONDITIONS.

CAN REACT WITH ACIDS OR STRONG OXIDIZING AGENTS **POSSIBLITY OF HAZARDOUS REACTIONS:**

NOT FLAMMABLE

CONDITIONS TO AVOID: CONTACT WITH INCOMPATIBLES: GENERATION OF DUST: HEAT, SPARKS, STATIC CHARGE,

AND SOURCES OF IGNITION.

INCOMPATIBLE MATERIALS: ACIDS, STRONG OXIDIZING AGENTS: NOT FOR WATER-BASED APPLICATIONS

HAZARDOUS DECOMPOSITION PRODUCTS: NONE KNOWN WHEN USED AND STORED AS RECOMMENDED; MAY SLIGHTLY DISSOLVE IN

WATER CREATING AN ALKALINE SOLUTION

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.

DECOMPOSITION TEMP.:

N/A

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

CHRONIC: NO KNOWN EFFECTS

ACUTE TOXICITY: EXPECTED TO BE ORAL (RAT) LD50: >2000 mg/kg AND DERMAL LD50: >2000 mg/kg (RAT)

BASED ON TESTING OF SIMILAR SUBSTANCES

NOT EXPECTED TO BE IRRITATING BASED ON TESTING OF SIMILAR SUBSTANCES **SKIN CORROSION / IRRITATION:**

SERIOUS EYE DAMAGE / IRRITATION: NOT EXPECTED TO BE IRRITATING BASED ON TESTING OF SIMILAR SUBSTANCES OTHER

THAN THAT OF NUSANCE PARTICULATE

RESPIRATORY OR SKIN SENSITIZATION: NOT EXPECTED TO BE SENSITIZING BASED ON TESTING OF SIMILAR SUBSTANCES

GERM CELL MUTAGENICITY: NO DATA FOR MIXTURE; LUMINOVA BG COMPONENT-TEST IS NEGATIVE CARCINOGENICITY: U.S. LISTED CARCINOGEN: NONE (X) NTP () IARC () OTHER ()

OSHA ()

REPRODUCTIVE TOXICITY: NO DATA FOR MIXTURE; LUMINOVA BG COMPONENT-TEST IS NEGATIVE

SPECIFIC TARGET ORGAN TOXICITY: NONE KNOWN **ASPIRATION HAZARD:** NO DATA AVAILABLE

FLAMMABILITY:

INTERACTIVE EFFECTS: NONE KNOWN

N/A = NOT APPLICABLE LOC PRODUCT: LUMINOVA B-300M Page -3- Date: APRIL 8, 2015

SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICITY: AVOID RELEASE TO THE ENVIRONMENT

TOXICITY - AQUATIC: NO DATA FOR MIXTURE; LUMINOVA BG COMPONENT - AQUATIC CHRONIC, CATEGORY 3

TOXICITY TO DAPHNIA: NO DATA FOR MIXTURE TOXICITY - TERRESTIAL: NO TEST DATA AVAILABLE

PERSISTANCE & DEGRADABILITY: INORGANIC SUBSTANCE - NOT EXPECTED TO BE READILY BIODEGRADABLE

BIOACCUMULATIVE POTENTIAL: NO TEST DATA AVAILABLE NOTHER ADVERSE EFFECTS: NO DATA AVAILABLE 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: ()

LINE IDENTIFICATION NO. ()

LARGE REGULATED:

UN IDENTIFICATION NO.: () PACKING GROUP: () LABEL REQUIRED: ()
U.S. MARINE POLLUTANT: YES () NO (X)

PACKING GROUP: () LABEL REQUIRED: ()

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 BY EITHER PMN AND/OR LOW VOLUME EXEMPTION.

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: APRIL 8, 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; **LD**₅₀ OR **LC**₅₀=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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N/A = NOT APPLICABLE LOC