

MATERIAL SAFETY DATA SHEET

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SECTION A - PRODUCT INFORMATION

TRADE NAME : *LumiNova@* : G-300C, G-300M, G-300F, G-300FF
CAS NUMBER : NOT ASSIGNED
SYNONYMS : LONG AFTERGLOW PHOSPHORESCENT PIGMENT
CHEMICAL FAMILY : ALUMINATES
FORMULA : PROPRIETARY

REVISION DATE : APRIL 16, 2001

SECTION B - HAZARDOUS COMPONENTS

| COMPONENT | CAS NO. | % | PEL/TLV |
|---------------------------|---------|-------------|---|
| AS INERT OR NUISANCE DUST | | 99% MINIMUM | 15 mg/m ³ OSHA, TOTAL DUST; 5 mg/m ³ OSHA, RESPIRABLE FRACTION 10 mg/m ³ ACGIH INHALABLE, 3 mg/m ³ RESPIRABLE |

SECTION C - PHYSICAL PROPERTIES

| | | | |
|---------------------------------|--------------------------------|------------------------------------|------------|
| BOILING POINT (°) : | N/A | SPECIFIC GRAVITY : | 3.65 |
| MELTING POINT (°C) : | >1000° | FREEZING POINT (°) : | N/A |
| VAPOR PRESSURE (mm Hg) : | N/A | PERCENT VOLATILE (BY WT.) : | N/A |
| VAPOR DENSITY (AIR=1) : | N/A | EVAPORATION RATE : | N/A |
| SOLUBILITY IN WATER : | 0.3 g/l at 20°C | pH (10% IN WATER) : | 10 at 25°C |
| ODOR THRESHOLD : | N/A | | |
| APPEARANCE & ODOR : | GREENISH WHITE POWDER, NO ODOR | | |

SECTION D - FIRE & EXPLOSION DATA

| | | | |
|------------------------------|--------------------|--------------------|--|
| FLASH POINT (°) : | N/A | | |
| FLAMMABLE LIMITS : | LEL : (N/A) | UEL : (N/A) | AUTO IGNITION TEMP (° F) : (N/A) |
| EXTINGUISHING MEDIA : | WATER : (X) | FOAM : (X) | CO₂ : (X) DRY CHEMICAL : (X) |

SPECIAL FIRE FIGHTING PROCEDURES : *LumiNova@* IS NOT COMBUSTIBLE. DO NOT ALLOW RUNOFF TO SEWER SYSTEM OR BODIES OF WATER. FIREFIGHTERS SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING IN FIGHTING FIRES INVOLVING CHEMICALS.

UNUSUAL FIRE & EXPLOSION HAZARDS : NONE KNOWN

SECTION E - REACTIVITY DATA

STABILITY : STABLE UNDER DRY CONDITIONS
INCOMPATIBILITY : ACIDS
HAZARDOUS DECOMPOSITION PRODUCTS : THERMALLY STABLE UP TO 1500°C
HAZARDOUS POLYMERIZATION : WILL NOT OCCUR
CONDITIONS TO AVOID : ACIDS

SECTION F - PERSONAL PROTECTIVE EQUIPMENT INFO

RESPIRATORY EQUIPMENT : USE A RESPIRATOR IF NECESSARY WITH SUITABLE DUST FILTER RECOMMENDED OR APPROVED BY NIOSH/OSHA
PROTECTIVE GLOVES : PLASTIC OR RUBBER GLOVES
EYE PROTECTION : GLASSES WITH SIDESHIELDS OR CHEMICAL GOGGLES
VENTILATION : LOCAL EXHAUST VENTILATION RECOMMENDED TO MAINTAIN LEVELS BELOW THE NUISANCE DUST PERMISSIBLE EXPOSURE LIMIT (PEL) LISTED IN SECTION B.
OTHER PROTECTIVE EQUIPMENT : LAB COAT

SECTION G - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE : TREAT AS NUISANCE DUST: 10 mg/m³ TWA, ACGIH INHALABLE; 3 mg/m³ RESPIRABLE
PRIMARY ROUTES OF EXPOSURE : EYES, SKIN, INHALATION
ORAL LD₅₀ : GREATER THAN 2000 mg/kg (RAT)
DERMAL IRRITATION-RABBIT : NON-IRRITATING
EYE IRRITATION-RABBIT : NON-IRRITATING
EFFECTS OF OVEREXPOSURE : AS AN INORGANIC POWDER, INHALATION OR CONTACT WITH DUST MAY CAUSE SLIGHT MECHANICAL IRRITATION TO RESPIRATORY TRACT, SKIN, OR EYES.
KNOWN EFFECTS ON OTHER ILLNESSES : NONE KNOWN
LISTED CARCINOGEN : NONE (X) OSHA () NTP () IARC () OTHER ()

SECTION H - EMERGENCY & FIRST AID DATA

SKIN : WASH OFF WITH SOAP AND WATER. IF IRRITATION OCCURS AND PERSISTS, CONTACT PHYSICIAN.
EYES : FLUSH WITH PLENTY OF WATER. IF IRRITATION OCCURS AND PERSISTS, CONTACT PHYSICIAN.
INHALATION : REMOVE TO FRESH AIR, SEEK MEDICAL ATTENTION IF NECESSARY.
INGESTION : SEEK IMMEDIATE MEDICAL ATTENTION.

SECTION I - SPILL & DISPOSAL INFORMATION

STEPS TO BE TAKEN IN CASE OF SPILL OR LEAK:
 VACUUM OR SWEEP INTO A PROPERLY LABELED CONTAINER. DO NOT DISCHARGE INTO SEWAGE SYSTEM.
WASTE DISPOSAL INFORMATION:
 DISPOSE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS
RCRA HAZARDOUS WASTE : NO (X) YES () **RCRA # :** ()
CERCLA : NO (X) YES () **RQ :** ()

FOLLOW ALL LOCAL, STATE AND FEDERAL INFORMATION AND REGULATIONS

SECTION J - OTHER REGULATORY INFORMATION

TSCA: WE CERTIFY THAT ALL COMPONENTS OF THIS PRODUCT ARE REGISTERED UNDER THE REGULATIONS OF THE TOXIC SUBSTANCES CONTROL ACT.
SARA TITLE III, SECT. 313: LISTED () NOT LISTED (X)
HMIS: HEALTH (0) FLAMMABILITY (0) REACTIVITY (0)
DOT REGULATED: YES: () NO: (X) **RQ:** (N/A)
IF REGULATED, PROPER SHIPPING NAME: N/A **HAZARD CLASS:** (N/A)
IDENTIFICATION NO: (N/A) **PACKING GROUP:** (N/A) **LABEL REQUIRED:** (N/A)
INLAND B/L: N/A
EMERGENCY RESPONSE GUIDE NO.: (N/A)

SECTION K - SPECIAL PRECAUTIONS

FOR INDUSTRIAL USE ONLY

HANDLING & STORAGE INFORMATION:
 STORE CLOSED IN COOL DRY AREA. WHEN HANDLING OR POURING, WEAR PROTECTIVE CLOTHING. AVOID SCATTERING INTO THE AIR. DO NOT ALLOW RUNOFF INTO SEWERS OR ANY BODY OF WATER.
OTHER PRECAUTIONS :
 MAINTAIN A SCHEDULE OF REGULAR HOUSEKEEPING TO ENSURE CLEANLINESS OF WORK AREA.

IN ACCORDANCE WITH GOOD PRACTICES OF PERSONAL HYGIENE, HANDLE WITH DUE CARE AND AVOID ANY UNNECESSARY CONTACT WITH THIS PRODUCT.

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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