

LTS RESEARCH LABORATORIES, INC.
MATERIAL SAFETY DATA SHEET
LANTHANUM COPPER OXIDE

GENERAL

MANUFACTURER/SUPPLIER: LTS RESEARCH LABORATORIES, INC.

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DATE MSDS PREPARED: 12/02/09
DATE MSDS REVISED: 11/05/12

1. PRODUCT IDENTIFICATION

PRODUCT NAME: LANTHANUM COPPER OXIDE
FORMULA: La₂O₃/CuO
CAS #: 1312-81-8/1317-38-0

2. PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING POINT: N/A
MELTING POINT: N/A
SPECIFIC GRAVITY (H₂O=1): N/A
VAPOR DENSITY: N/A
VAPOR PRESSURE: N/A
EVAPORATION RATE: N/A
% VOLATILES: N/A
SOLUBILITY IN H₂O: INSOLUBLE
APPEARANCE AND ODOR: DARK GRAY TARGET, ODORLESS



3. HAZARD IDENTIFICATION

HAZARD DESCRIPTION:
LANTHANUM OXIDE: Xi IRRITANT
COPPER OXIDE: Xn HARMFUL
N DANGEROUS FOR THE ENVIRONMENT

RISK PHRASES:
LANTHANUM OXIDE: R 36/37/38 IRRITATING TO EYES, RESPIRATORY SYSTEM,
AND SKIN
COPPER OXIDE: R 22 HARMFUL IF SWALLOWED
R 50/53 VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE
LONG-TERM ADVERSE EFFECTS IN THE AQUATIC
ENVIRONMENT

HMIS RATINGS:
LANTHANUM OXIDE:
HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 0
COPPER OXIDE:
HEALTH: 2
FLAMMABILITY: 0
REACTIVITY: 0

4. FIRE FIGHTING MEASURES

FLASH POINT: N/A
AUTOIGNITION TEMPERATURE: N/A

FLAMMABLE LIMITS:
UPPER: N/A
LOWER: N/A
EXTINGUISHING MEDIA: PRODUCT IS NOT FLAMMABLE. USE SUITABLE
EXTINGUISHING MEDIA FOR SURROUNDING FIRE
SPECIAL HAZARDS: IN CASE OF FIRE METAL OXIDE FUMES MAY BE
RELEASED

5. HEALTH HAZARD INFORMATION

ACUTE EFFECTS:
SKIN: IRRITANT TO SKIN AND MUCOUS MEMBRANES
EYE: IRRITATING EFFECT
CHRONIC EFFECTS:
LANTHANUM OXIDE: LANTHANONS CAN CAUSE DELAYED BLOOD CLOTTING
LEADING TO HEMORRHAGE. EXPOSURE MAY ALSO LEAD
TO SENSITIVITY TO HEAT, ITCHING, INCREASED
AWARENESS OF ODOR AND TASTE, AND LIVER DAMAGE
COPPER OXIDE: COPPER COMPOUNDS MAY BE IRRITATING TO THE SKIN,
EYES, AND RESPIRATORY TRACT. THEY MAY CAUSE
METAL FUME FEVER, HEMOLYSIS OF THE RED BLOOD
CELLS, AND INJURY TO THE LIVER, LUNGS, KIDNEYS, AND
PANCREAS. INGESTION MAY ALSO CAUSE VOMITING,
GASTRIC PAIN, DIZZINESS, ANEMIA, CRAMPS,
CONVULSIONS, SHOCK, COMA, AND DEATH.

6. STABILITY

STABILITY: STABLE
CONDITIONS TO AVOID: NONE
MATERIAL TO AVOID: WATER/MOISTURE, ACIDS, OXIDIZING AGENTS,
REDUCING AGENTS, CARBON DIOXIDE
DANGEROUS REACTIONS: NONE KNOWN
HAZARDOUS
DECOMPOSITION PRODUCTS: METAL OXIDE FUMES

7. EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: REMOVE TO FRESH AIR AND PROVIDE ARTIFICIAL
RESPIRATION IF NECESSARY. SEEK IMMEDIATE MEDICAL
ADVICE.
INGESTION: SEEK IMMEDIATE MEDICAL ATTENTION.
SKIN: WASH SKIN THOROUGHLY WITH MILD SOAP AND WATER.
RINSE THOROUGHLY. SEEK IMMEDIATE MEDICAL
ADVICE.
EYE: FLUSH EYES WITH PLENTY OF WATER. SEEK IMMEDIATE
MEDICAL ADVICE.

8. HANDLING AND STORAGE

HANDLING & STORAGE: STORE IN A COOL, DRY PLACE IN TIGHTLY SEALED
CONTAINERS. ENSURE GOOD VENTILATION. NO SPECIAL
REQUIREMENTS ARE NECESSARY IF USED CORRECTLY.

9. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN
CASE MATERIAL IS
RELEASED OR SPILLED:
RESPIRATION: WEAR NIOSH APPROVED DUST-MIST VAPOR RESPIRATOR.
VENTILATION: LOCAL EXHAUST TO MAINTAIN CONCENTRATION AT OR
BELOW THE PEL, TLV.
PROTECTIVE GLOVES: RUBBER GLOVES.

EYE PROTECTION:	SAFETY GLASSES
PROTECTIVE CLOTHING:	PROTECTIVE GEAR SUITABLE TO PREVENT CONTAMINATION.
WASTE DISPOSAL METHOD:	DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

10. TOXICITY DATA

THE REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES REPORTS THE FOLLOWING EFFECTS OF COPPER OXIDE ON LABORATORY ANIMALS:

BEHAVIORAL – EXCITEMENT
SENSE ORGANS AND SPECIAL SENSES (EYE) – CONJUNCTIVE IRRITATION
LUNG, THORAX, OR RESPIRATION – COUGH
GASTROINTESTINAL – HYPERMOTILITY, DIARRHEA
GASTROINTESTINAL – NAUSEA OR VOMITING
GASTROINTESTINAL – OTHER CHANGES

CARCINOGENICITY: NO CLASSIFICATION DATA ON CARCINOGENIC PROPERTIES OF THIS MATERIAL IS AVAILABLE FROM THE EPA, IARC, NTP, OSHA, OR ACGIH.

ADDITIONAL INFORMATION: TO THE BEST OF OUR KNOWLEDGE THE ACUTE AND CHRONIC TOXICITY OF THIS SUBSTANCE IS NOT FULLY KNOWN.

11. TRANSPORTATION DATA

UN NUMBER:	3077
HAZARD CLASS:	9
PACKING GROUP:	III
PROPER SHIPPING NAME:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COPPER (II) OXIDE)
ADR/RID CLASS:	9 (M7) MISCELLANEOUS DANGEROUS SUBSTANCES AND ARTICLES
IMDG CLASS:	9
ICAO/IATA CLASS:	9

12. OTHER INFORMATION

THIS SAFETY DATA SHEET SHOULD BE USED IN CONJUNCTION WITH TECHNICAL SHEETS. IT DOES NOT REPLACE THEM. THE INFORMATION GIVEN IS BASED ON OUR KNOWLEDGE OF THIS PRODUCT, AT THE TIME OF PUBLICATION. IT IS GIVEN IN GOOD FAITH. THE ATTENTION OF THE USER IS DRAWN TO THE POSSIBLE RISKS INCURRED BY USING THE PRODUCT FOR ANY OTHER PURPOSE OTHER THAN THAT FOR WHICH IT WAS INTENDED. THIS DOES NOT IN ANY WAY EXCUSE THE USER FROM KNOWING AND APPLYING ALL THE REGULATIONS GOVERNING HIS ACTIVITY. IT IS THE SOLE RESPONSIBILITY OF THE USER TO TAKE ALL PRECAUTIONS REQUIRED IN HANDLING THE PRODUCT. THE AIM OF THE MANDATORY REGULATIONS MENTIONED IS TO HELP THE USER TO FULFILL HIS OBLIGATIONS REGARDING THE USE OF HAZARDOUS PRODUCTS.