

# MATERIAL SAFETY DATA SHEET

MSDS DATE:07/12/07

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## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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PRODUCT NAME: LANTHANUM NITRATE, HEXAHYDRATE, REAGENT  
SYNONYMS: N/A  
PRODUCT CODES : 17300

MANUFACTURER: ELECTRON MICROSCOPY SCIENCES  
DIVISION: 1560 INDUSTRY ROAD/P.O. BOX 550  
ADDRESS: HATFIELD, PA 19440

EMERGENCY PHONE: 215-412-8400  
CHEMTREC PHONE: 800-424 -4300

FAX PHONE: 215-412-8450

CHEMICAL NAME: N/A  
CHEMICAL FAMILY: N/A

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## SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

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### INGREDIENT:

LANTHANUM NITRATE HEXAHYDRATE

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABLE</u>
10277-43-7	100		
	<u>ppm</u>	<u>mg/m3</u>	
OSHA PEL-TWA:			
OSHA PEL STEL :	N/A	N/A	
OSHA PEL CEILING:			
ACGIH TLV-TWA:			
ACGIH TLV STEL:	N/A	N/A	
ACGIH TLV CEILING:			

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## SECTION 3: HAZARDS IDENTIFICATION

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EMERGENCY OVERVIEW:

ROUTES OF ENTRY: EYE CONTACT, INHALATION, INGESTION.

POTENTIAL HEALTH EFFECTS : VERY HAZARDOUS IN CASE OF INGESTION. HAZARDOUS IN CASE OF SKIN CONTACT (IRRITANT), OF EYE CONTACT (IRRITANT), OF INHALATION. PROLONGED EXPOSURE MAY RESULT IN SKIN BURNS AND ULCERATIONS. OVER-EXPOSURE BY INHALATION MAY CAUSE RESPIRATORY IRRITATION.

EYES: IRRITANT

SKIN: IRRITANT, VERY HAZARDOUS

INGESTION: IRRITANT, VERY HAZARDOUS

INHALATION: IRRITANT, VERY HAZARDOUS

ACUTE HEALTH HAZARDS: THE SUBSTANCE IS TOXIC TO THE LUNGS

CHRONIC HEALTH HAZARDS: VERY HAZARDOUS IN CASE OF INGESTION. HAZARDOUS IN CASE OF SKIN CONTACT (IRRITANT), OF EYE CONTACT (IRRITANT), OF INHALATION.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: REPEATED OR PROLONGED EXPOSURE TO THE SUBSTANCE CAN PRODUCE TARGET ORGANS DAMAGE.

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## CARCINOGENICITY

OSHA:                    ACGIH:                    NTP:                    IARC:  
OTHER:

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## SECTION 4: FIRST AID MEASURES

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**EYES:** FLUSH WITH WATER FOR 15 MINUTES IF IRRITATION OCCURS. SEEK MEDICAL ATTENTION DO NOT USE AN EYE OINTMENT.

**SKIN:** WASH IMMEDIATELY WITH PLENTY OF WATER. GENTLY AND THOROUGHLY WASH THE CONTAMINATED SKIN WITH RUNNING WATER AND NON-ABRASIVE SOAP. BE PARTICULARLY CAREFUL TO CLEAN FOLDS, CREVICES, CREASES AND GROIN. COLD WATER MAY BE USED. COVER THE IRRITATED SKIN WITH AN EMOLLIENT. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION.

**INGESTION:** DO NOT INDUCE VOMITING. LOOSEN CLOTHING, IF VICTIM IS NOT BREATHING PERFORM MOUTH-TO-MOUTH RESUSCITATION. SEEK MEDICAL ATTENTION.

**INHALATION:** ALLOW VICTIM TO REST IN A WELL VENTILATED AREA. SEEK MEDICAL ATTENTION.  
**SERIOUS INHALATION:** EVACUATE THE VICTIM TO A SAFE AREA AS SOON AS POSSIBLE. LOOSEN CLOTHING. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN. IF THE VICTIM IS NOT BREATHING, PERFORM MOUTH TO MOUTH RESUSCITATION. SEEK MEDICAL ATTENTION.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: N/A

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## SECTION 5: FIRE-FIGHTING MEASURES

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**FLAMMABLE LIMITS IN AIR, UPPER:** N/A  
(% BY VOLUME)                    **LOWER:**

**FLASH POINT:** N/A

F:

C:

**METHOD USED:**

**AUTOIGNITION TEMPERATURE:** N/A

F:

C:

### NFPA HAZARD CLASSIFICATION

**HEALTH:**        2                    **FLAMMABILITY:**    0                    **REACTIVITY:**    0  
**OTHER:**

### HMIS HAZARD CLASSIFICATION

**HEALTH:**        2                    **FLAMMABILITY:**    0                    **REACTIVITY:**    0  
**PROTECTION:**E

**EXTINGUISHING MEDIA:** N/A

**SPECIAL FIRE FIGHTING PROCEDURES:** N/A

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** N/A

**HAZARDOUS DECOMPOSITION PRODUCTS:** N/A

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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**ACCIDENTAL RELEASE MEASURES:** USE APPROPRIATE TOOLS TO PUT THE SPILLED SOLID IN A CONVENIENT WASTE DISPOSAL CONTAINER.

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## SECTION 7: HANDLING AND STORAGE

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HANDLING AND STORAGE: KEEP AWAY FROM HEAT. KEEP AWAY FROM SOURCES OF IGNITION. KEEP AWAY FROM COMBUSTIBLE MATERIAL. DO NOT INGEST. DO NOT BREATHE DUST. WEAR SUITABLE PROTECTIVE CLOTHING IN CASE OF INSUFFICIENT VENTILATION. WEAR SUITABLE RESPIRATORY EQUIPMENT IF INGESTED. SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THE CONTAINER OR THE LABEL. AVOID CONTACT WITH SKIN AND EYES.

OTHER PRECAUTIONS:

N/A

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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ENGINEERING CONTROLS: USE PROCESS ENCLOSURES, LOCAL EXHAUST VENTILATION, OR OTHER ENGINEERING CONTROLS TO KEEP AIRBORNE LEVELS BELOW RECOMMENDED EXPOSURE LIMITS. IF USER OPERATIONS GENERATE DUST, FUME OR MIST, USE VENTILATION TO KEEP EXPOSURE TO AIRBORNE CONTAMINANTS BELOW THE EXPOSURE LIMIT.

VENTILATION: DUST RESPIRATOR.

RESPIRATORY PROTECTION: BE SURE TO USE AN APPROVED/CERTIFIED RESPIRATOR OR EQUIVALENT.

EYE PROTECTION: SPLASH GOGGLES

SKIN PROTECTION: LAB COAT. GLOVES.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: FULL SUIT. BOOTS. GLOVES. CONSULT A SPECIALIST BEFORE HANDLING THIS PRODUCT.

WORK HYGIENIC PRACTICES: WASH THOROUGHLY AFTER HANDLING. WASH CLOTHING BEFORE REUSE.

EXPOSURE GUIDELINES: N/A

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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APPEARANCE: SOLID. (DELIQUESCENT CYRSTALS SOLID)

ODOR: ODORLESS

PHYSICAL STATE: N/A

pH AS SUPPLIED: N/A

pH (Other):

BOILING POINT: DECOMPOSES

F:

C:

MELTING POINT: 40° C

F:

C:

FREEZING POINT: N/A

F:

C:

VAPOR PRESSURE (mmHg): N/A

@

F:

C:

VAPOR DENSITY (AIR = 1): N/A

@

F:

C:

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F:

C:

EVAPORATION RATE: N/A

BASIS (=1):

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (con't)

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SOLUBILITY IN WATER: EASILY SOLUBLE IN COLD WATER

PERCENT SOLIDS BY WEIGHT: N/A

PERCENT VOLATILE: N/A  
BY WT/ BY VOL @

F:

C:

VOLATILE ORGANIC COMPOUNDS (VOC): N/A

WITH WATER: LBS/GAL  
WITHOUT WATER: LBS/GAL

MOLECULAR WEIGHT: N/A

VISCOSITY:

@

F:

C:

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## SECTION 10: STABILITY AND REACTIVITY

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STABILITY: THIS PRODUCT IS STABLE

CONDITIONS TO AVOID (STABILITY): N/A

INCOMPATIBILITY (MATERIAL TO AVOID): N/A

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: N/A

HAZARDOUS POLYMERIZATION: N/A

CONDITIONS TO AVOID (POLYMERIZATION): NONE

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## SECTION 11: TOXICOLOGICAL INFORMATION

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TOXICOLOGICAL INFORMATION: N/A

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## SECTION 12: ECOLOGICAL INFORMATION

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ECOLOGICAL INFORMATION: N/A

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## SECTION 13: DISPOSAL CONSIDERATIONS

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WASTE DISPOSAL METHOD: COMPLY WITH FEDERAL, STATE, LOCAL REGULATIONS.

RCRA HAZARD CLASS:

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## SECTION 13: DISPOSAL CONSIDERATIONS (con't)

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N/A

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## SECTION 14: TRANSPORT INFORMATION

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### U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME: NITRATE, INORGANIC, N.O.S.(LANTHANUM NITRATE HEXAHYDRATE  
HAZARD CLASS: 5.1  
ID NUMBER: UN1477  
PACKING GROUP: II  
LABEL STATEMENT: OXIDIZING MATERIAL

### WATER TRANSPORTATION

PROPER SHIPPING NAME: SAME  
HAZARD CLASS:  
ID NUMBER:  
PACKING GROUP:  
LABEL STATEMENTS:

### AIR TRANSPORTATION

PROPER SHIPPING NAME: SAME  
HAZARD CLASS:  
ID NUMBER:  
PACKING GROUP:  
LABEL STATEMENTS:

OTHER AGENCIES: NA/

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## SECTION 15: REGULATORY INFORMATION

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U.S. FEDERAL REGULATIONS TSCA 8(b) INVENTORY: LANTHANUM NITRATE HEXAHYDRATE  
TSCA (TOXIC SUBSTANCE CONTROL ACT):

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): N/A

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): N/A

311/312 HAZARD CATEGORIES: N/A

313 REPORTABLE INGREDIENTS: N/A

STATE REGULATIONS: N/A

INTERNATIONAL REGULATIONS: N/A

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## SECTION 16: OTHER INFORMATION

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OTHER INFORMATION: N/A

PREPARATION INFORMATION: N/A

DISCLAIMER: IN COMPLIANCE WITH THE OSHA HAZARD COMMUNICATION STANDARD, 2.9 C.F.R 1910. 1200, WE ARE PROVIDING YOU WITH A MSDS FOR THE HAZARDOUS MATERIAL YOU ARE PURCHASING.

IT IS YOUR RESPONSIBILITY TO EDUCATE YOUR EMPLOYEES ON THE SAFE USE OF THE HAZARDOUS MATERIAL.

ELECTRON MICROSCOPY SCIENCES MAKES NO PRESENTATION AS TO THE ACCURACY OF THE INFORMATION IN THE MSDS. THE INFORMATION IS BELIEVED TO BE CORRECT; HOWEVER, YOU (THE CUSTOMER), SHOULD PERFORM YOUR OWN INVESTIGATION AND INDEPENDENT

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**VERIFICATION. IF YOU RESELL THE PRODUCT, YOU ARE RESPONSIBLE TO FORWARD THE INFORMATION IN THE MSDS TO YOUR CUSTOMER.**