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SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 35641
NAME: Lithium iodate
SYNONYMS:
24 HOUR EMERGENCY (800) 535-5053(USA)
TELEPHONE: 352-323-3500 (INTERNATIONAL)
TO REQUEST AN MSDS: (800) 869-9290
CUSTOMER (630) 766-2112
SERVICE:

SECTION 2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS)
OXIDIZING SOLIDS (CATEGORY 3), H272
SKIN IRRITATION (CATEGORY 2), H315
EYE IRRITATION (CATEGORY 2A), H319
REPRODUCTIVE TOXICITY (CATEGORY 1B), H360

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (CATEGORY 3),
RESPIRATORY SYSTEM, H335

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE
SECTION 16.

**GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS
PICTOGRAM**



SIGNAL WORD DANGER

HAZARD STATEMENT(S)

H272 MAY INTENSIFY FIRE; OXIDIZER
H315 CAUSES SKIN IRRITATION
H319 CAUSES SERIOUS EYE IRRITATION
H335 MAY CAUSE RESPIRATORY IRRITATION
H360 MAY DAMAGE FERTILITY OR THE UNBORN CHILD.

PRECAUTIONARY STATEMENT(S)

P201 OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.
P202 DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE
BEEN READ AND UNDERSTOOD.
P210 KEEP AWAY FROM HEAT
P220 KEEP/STORE AWAY FROM CLOTHING/ COMBUSTIBLE
MATERIALS
P221 TAKE ANY PRECAUTION TO AVOID MIXING WITH
COMBUSTIBLES.
P261 AVOID BREATHING DUST/ FUME/ GAS/ MIST/ VAPOURS/
SPRAY.
P264 WASH SKIN THOROUGHLY AFTER HANDLING.
P271 USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.
P280 WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE
PROTECTION/ FACE PROTECTION.
P302 + P352 IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER.
P304 + P340 + P312 IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP
COMFORTABLE FOR BREATHING. CALL A POISON
CENTER/DOCTOR IF YOU FEEL UNWELL.
P305 + P351 + P338 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL
MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND
EASY TO DO. CONTINUE RINSING.
P308 + P313 IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE/
ATTENTION.
P332 + P313 IF SKIN IRRITATION OCCURS: GET MEDICAL ADVICE/
ATTENTION.
P337 + P313 IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/
ATTENTION.
P362 TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE
REUSE.
P370 + P378 IN CASE OF FIRE: USE DRY SAND, DRY CHEMICAL OR
ALCOHOL-RESISTANT FOAM FOR EXTINCTION.
P403 + P232 STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER
TIGHTLY CLOSED
P405 STORE LOCKED UP.

P501 DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT.

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC) OR NOT COVERED BY GHS NONE

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF: LiIO₃
MW: 181.84
CAS-NO. 13765-03-2
PURITY: ≥97% AT

HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
Lithium iodate		
	OX. SOL. 2; SKIN IRRIT. 2; EYE IRRIT. 2A; REPR. 1B; STOT SE 3; H272, H315, H319, H360, H335	<= 100 %

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

SECTION 4. FIRST-AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

GENERAL ADVICE CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE.MOVE OUT OF DANGEROUS AREA.

IF INHALED IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. CONSULT A PHYSICIAN.

IN CASE OF SKIN CONTACT WASH OFF WITH SOAP AND PLENTY OF WATER. CONSULT A PHYSICIAN.

IN CASE OF EYE CONTACT RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND CONSULT A PHYSICIAN.

IF SWALLOWED	NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN
MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED	THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE SECTION 2.2) AND/OR IN SECTION 11
INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED	NO DATA AVAILABLE

SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA	
SUITABLE EXTINGUISHING MEDIA	DRY POWDER DRY SAND
SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE	LITHIUM OXIDES
ADVICE FOR FIREFIGHTERS	WEAR SELF-CONTAINED BREATHING APPARATUS FOR FIREFIGHTING IF NECESSARY.
FURTHER INFORMATION	USE WATER SPRAY TO COOL UNOPENED CONTAINERS.

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES	USE PERSONAL PROTECTIVE EQUIPMENT. AVOID DUST FORMATION. AVOID BREATHING VAPOURS, MIST OR GAS. ENSURE ADEQUATE VENTILATION. EVACUATE PERSONNEL TO SAFE AREAS. AVOID BREATHING DUST. FOR PERSONAL PROTECTION SEE SECTION 8.
ENVIRONMENTAL PRECAUTIONS	PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.
METHODS AND MATERIALS FOR	SWEEP UP AND SHOVEL. CONTAIN SPILLAGE, AND THEN COLLECT WITH AN ELECTRICALLY PROTECTED VACUUM CLEANER OR BY WET-BRUSHING AND PLACE

CONTAINMENT AND CLEANING UP	IN CONTAINER FOR DISPOSAL ACCORDING TO LOCAL REGULATIONS (SEE SECTION 13). KEEP IN SUITABLE, CLOSED CONTAINERS FOR DISPOSAL.
REFERENCE TO OTHER SECTIONS	FOR DISPOSAL SEE SECTION 13.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	AVOID CONTACT WITH SKIN AND EYES. AVOID FORMATION OF DUST AND AEROSOLS.FURTHER PROCESSING OF SOLID MATERIALS MAY RESULT IN THE FORMATION OF COMBUSTIBLE DUSTS. THE POTENTIAL FOR COMBUSTIBLE DUST FORMATION SHOULD BE TAKEN INTO CONSIDERATION BEFORE ADDITIONAL PROCESSING OCCURS. PROVIDE APPROPRIATE EXHAUST VENTILATION AT PLACES WHERE DUST IS FORMED.KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.KEEP AWAY FROM HEAT AND SOURCES OF IGNITION. FOR PRECAUTIONS SEE SECTION 2.2.
CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES	KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE.
SPECIFIC END USE(S)	APART FROM THE USES MENTIONED IN SECTION 1.2 NO OTHER SPECIFIC USES ARE STIPULATED

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

CONTAINS NO SUBSTANCES WITH OCCUPATIONAL EXPOSURE LIMIT VALUES.

EXPOSURE CONTROLS

APPROPRIATE ENGINEERING CONTROLS

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE. WASH HANDS BEFORE BREAKS AND AT THE END OF WORKDAY.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION	FACE SHIELD AND SAFETY GLASSES USE EQUIPMENT FOR EYE PROTECTION TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR EN 166(EU).
SKIN PROTECTION	HANDLE WITH GLOVES. GLOVES MUST BE INSPECTED PRIOR TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE (WITHOUT TOUCHING GLOVE'S OUTER SURFACE) TO AVOID SKIN CONTACT WITH THIS PRODUCT. DISPOSE OF CONTAMINATED GLOVES AFTER USE IN ACCORDANCE WITH APPLICABLE LAWS AND GOOD LABORATORY PRACTICES. WASH AND DRY HANDS.
BODY PROTECTION	IMPERVIOUS CLOTHING, THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.
RESPIRATORY PROTECTION	WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULLFACE PARTICLE RESPIRATOR TYPE N100 (US) OR TYPE P3 (EN 143) RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF PROTECTION, USE A FULL-FACE SUPPLIED AIR RESPIRATOR. USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU).
CONTROL OF ENVIRONMENTAL EXPOSURE	PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	White powder
ODOUR	NO DATA AVAILABLE
ODOUR THRESHOLD	NO DATA AVAILABLE
PH	NO DATA AVAILABLE
MELTING POINT/FREEZING POINT	420 - 450 °C
INITIAL BOILING POINT AND BOILING RANGE	
FLASH POINT	
EVAPORATION RATE	NO DATA AVAILABLE
FLAMMABILITY (SOLID, GAS)	NO DATA AVAILABLE
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	NO DATA AVAILABLE
VAPOUR PRESSURE	NO DATA AVAILABLE

VAPOUR DENSITY	NO DATA AVAILABLE
RELATIVE DENSITY	4.49
WATER SOLUBILITY	NO DATA AVAILABLE
PARTITION COEFFICIENT: N- OCTANOL/WATER	NO DATA AVAILABLE
AUTO-IGNITION TEMPERATURE	NO DATA AVAILABLE
DECOMPOSITION TEMPERATURE	NO DATA AVAILABLE
VISCOSITY	NO DATA AVAILABLE
EXPLOSIVE PROPERTIES	NO DATA AVAILABLE
OXIDIZING PROPERTIES	THE SUBSTANCE OR MIXTURE IS CLASSIFIED AS OXIDIZING WITH THE CATEGORY 2.
OTHER SAFETY INFORMATION	NO DATA AVAILABLE

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY	NO DATA AVAILABLE
CHEMICAL STABILITY	STABLE UNDER RECOMMENDED STORAGE CONDITIONS.
POSSIBILITY OF HAZARDOUS REACTIONS	NO DATA AVAILABLE
CONDITIONS TO AVOID	NO DATA AVAILABLE
INCOMPATIBLE MATERIALS	STRONG ACIDS, STRONG REDUCING AGENTS, ORGANIC MATERIALS, POWDERED METALS
HAZARDOUS DECOMPOSITION PRODUCTS	HAZARDOUS DECOMPOSITION PRODUCTS FORMED UNDER FIRE CONDITIONS. - LITHIUM OXIDES OTHER DECOMPOSITION PRODUCTS - NO DATA AVAILABLE IN THE EVENT OF FIRE: SEE SECTION 5

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY	NO DATA AVAILABLE
	INHALATION: NO DATA AVAILABLE
	DERMAL: NO DATA AVAILABLE
	NO DATA AVAILABLE
SKIN CORROSION/IRRITATION	NO DATA AVAILABLE
SERIOUS EYE DAMAGE/EYE IRRITATION	NO DATA AVAILABLE
RESPIRATORY OR SKIN SENSITISATION	NO DATA AVAILABLE
GERM CELL MUTAGENICITY	NO DATA AVAILABLE
CARCINOGENICITY	
IARC:	NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS PROBABLE, POSSIBLE OR CONFIRMED HUMAN CARCINOGEN BY IARC.
NTP:	NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A KNOWN OR ANTICIPATED CARCINOGEN BY NTP.
OSHA:	NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS ON OSHA S LIST OF REGULATED CARCINOGENS.
REPRODUCTIVE TOXICITY	PRESUMED HUMAN REPRODUCTIVE TOXICANT
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	INHALATION - MAY CAUSE RESPIRATORY IRRITATION.
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	NO DATA AVAILABLE
ASPIRATION HAZARD	NO DATA AVAILABLE

**ADDITIONAL
INFORMATION**

RTECS: NOT AVAILABLE

LARGE DOSES OF LITHIUM ION HAVE CAUSED DIZZINESS AND PROSTRATION, AND CAN CAUSE KIDNEY DAMAGE IF SODIUM INTAKE IS LIMITED. DEHYDRATION, WEIGHT LOSS, DERMATOLOGICAL EFFECTS, AND THYROID DISTURBANCES HAVE BEEN REPORTED. CENTRAL NERVOUS SYSTEM EFFECTS THAT INCLUDE SLURRED SPEECH, BLURRED VISION, SENSORY LOSS, ATAXIA, AND CONVULSIONS MAY OCCUR. DIARRHEA, VOMITING, AND NEUROMUSCULAR EFFECTS SUCH AS TREMOR, CLONUS, AND HYPERACTIVE REFLEXES MAY OCCUR AS A RESULT OF REPEATED EXPOSURE TO LITHIUM ION., PROLONGED EXPOSURE TO IODIDES MAY PRODUCE IODISM IN SENSITIVE INDIVIDUALS. SYMPTOMS OF EXPOSURE INCLUDE: SKIN RASH, RUNNING NOSE, HEADACHE AND IRRITATION OF THE MUCOUS MEMBRANE. FOR SEVERE CASES THE SKIN MAY SHOW PIMPLES, BOILS, HIVES, BLISTERS AND BLACK AND BLUE SPOTS. IODIDES ARE READILY DIFFUSED ACROSS THE PLACENTA. NEONATAL DEATHS FROM RESPIRATORY DISTRESS SECONDARY TO GOITER HAVE BEEN REPORTED. IODIDES HAVE BEEN KNOWN TO CAUSE DRUG-INDUCED FEVERS, WHICH ARE USUALLY OF SHORT DURATION.

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.
STOMACH - IRREGULARITIES - BASED ON HUMAN EVIDENCE

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY	NO DATA AVAILABLE
PERSISTENCE AND DEGRADABILITY	NO DATA AVAILABLE
BIOACCUMULATIVE POTENTIAL	NO DATA AVAILABLE
MOBILITY IN SOIL	NO DATA AVAILABLE
RESULTS OF PBT AND VPVB ASSESSMENT	PBT/VPVB ASSESSMENT NOT AVAILABLE AS CHEMICAL SAFETY ASSESSMENT NOT REQUIRED/NOT CONDUCTED

OTHER ADVERSE EFFECTS NO DATA AVAILABLE

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

PRODUCT OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS TO A LICENSED DISPOSAL COMPANY. BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER BUT EXERT EXTRA CARE IN IGNITING AS THIS MATERIAL IS HIGHLY FLAMMABLE. CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL.

CONTAMINATED PACKAGING DISPOSE OF AS UNUSED PRODUCT.

SECTION 14. TRANSPORT INFORMATION

DOT (US)

PROPER SHIPPING NAME: OXIDIZING SOLID, N.O.S. (Lithium iodate)
UN NUMBER: 1479
CLASS: 5.1
PACKING GROUP: II
REPORTABLE QUANTITY (RQ):
POISON INHALATION HAZARD: NO

IMDG

PROPER SHIPPING NAME: OXIDIZING SOLID, N.O.S. (Lithium iodate)
UN NUMBER: 1479
CLASS: 5.1
PACKING GROUP: II
EMS-NO: F-A, S-Q
MARINE POLLUTANT : YES

IATA

PROPER SHIPPING NAME: OXIDIZING SOLID, N.O.S. (Lithium iodate)
UN NUMBER: 1479
CLASS: 5.1
PACKING GROUP: II

SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS	THIS MATERIAL DOES NOT CONTAIN ANY COMPONENTS WITH A SECTION 302 EHS TPQ.
SARA 313 COMPONENTS	THIS MATERIAL DOES NOT CONTAIN ANY CHEMICAL COMPONENTS WITH KNOWN CAS NUMBERS THAT EXCEED THE THRESHOLD (DE MINIMIS) REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313.
SARA 311/312 HAZARDS	REACTIVITY HAZARD, ACUTE HEALTH HAZARD, CHRONIC HEALTH HAZARD

MASSACHUSETTS RIGHT TO KNOW COMPONENTS
NO COMPONENTS ARE SUBJECT TO THE MASSACHUSETTS RIGHT TO KNOW ACT.

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

	CAS-NO.	REVISION DATE
Lithium iodate	13765-03-2	

NEW JERSEY RIGHT TO KNOW COMPONENTS

	CAS-NO.	REVISION DATE
Lithium iodate	13765-03-2	

SECTION 16. OTHER INFORMATION

FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.

H272	MAY INTENSIFY FIRE; OXIDIZER.
H315	CAUSES SKIN IRRITATION.
H319	CAUSES SERIOUS EYE IRRITATION.
H335	MAY CAUSE RESPIRATORY IRRITATION.
H360	MAY DAMAGE FERTILITY OR THE UNBORN CHILD.

MSDS LEGEND

MW:	MOLECULAR WEIGHT
MF:	MOLECULAR FORMULA
VOC:	VOLATILE ORGANIC COMPOUNDS
ACGIH:	AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGINISTS
CAS:	CHEMICAL ABSTRACTS SERIVE REGISTRY NUMBER
OSHA:	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PEL:	PERMISSIBLE EXPOSURE LIMIT (OSHA)
TLV:	THRESHOLD LIMIT VALUE (ACGIH)

IMPORTANT:

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