SAFETY DATA SHEET

Date Printed: 04/25/2024
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SECTION 1. IDENTIFICATION

Product Identifier: 95% Lithium Amide Powder

Product Code: LI-NH-015-P

CAS Number: 7782-89-0

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
Fax: +1 310-208-0351
Emergency telephone number:
+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)
GHS02 Flame
Water-react. 2 H261 In contact with water releases flammable gas.
GHS05 Corrosion
Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Eye Dam. 1
H318 Causes serious eye damage.
Hazards not otherwise classified
No information known
Label elements
GHS label elements
The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)
Hazard pictograms

Signal word
Danger
Hazard statements
H261 In contact with water releases flammable gas.

H314 Causes severe skin burns and eye damage.
Precautionary statements
P280
Wear protective gloves/protective
clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309
IF exposed or if you feel unwell:
P310
Immediately call a POISON CENTER/doctor/...
P370+P378
In case of fire: Use
for extinction: Limestone powder.
P402
Store in a dry place.
WHMIS classification
B6 - Reactive flammable material
D2B - Toxic material causing other toxic effects
E - Corrosive material
Classification system
HMIS ratings (scale 0-4)
(Hazardous Materials Identification System)
Health (acute effects) = 3
Flammability = 3
Physical Hazard = 2
Other hazards
Results of PBT and vPvB assessment
PBT:
Not applicable.
vPvB:
Not applicable.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Substances
CAS# Description:
7782-89-0 Lithium amide
Identification number(s):
EC number:
231-968-4

SECTION 4. FIRST AID MEASURES

Description of first aid measures
General information
Immediately remove any clothing soiled by the product.
After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm.
Seek immediate medical advice.
After skin contact

Immediately wash with water and soap and rinse thoroughly.
Seek immediate medical advice.
After eye contact
Rinse opened eye for several minutes under running water. Then consult a doctor.
After swallowing
Seek medical treatment.
Information for doctor
Most important symptoms and effects, both acute and delayed
Causes severe skin burns.
Causes serious eye damage.
Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media
Suitable extinguishing agents
In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.
For safety reasons unsuitable extinguishing agents
Water
Special hazards arising from the substance or mixture
Reacts violently with water
If this product is involved in a fire, the following can be released:
Nitrogen oxides (NOx)
Lithium oxide
Advice for firefighters
Protective equipment:
Wear self-contained respirator.
Wear fully protective impervious suit.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources
Environmental precautions:
Do not allow product to reach sewage system or any water course.
Methods and material for containment and cleaning up:
Use neutralizing agent.
Dispose of contaminated material as waste according to section 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
Prevention of secondary hazards:
Keep away from ignition sources.
Reference to other sections
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7. HANDLING AND STORAGE

Handling
Precautions for safe handling
Handle under dry protective gas.
Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation at the workplace.
Information about protection against explosions and fires:
Protect against electrostatic charges.
Conditions for safe storage, including any incompatibilities
Storage
Requirements to be met by storerooms and receptacles:
No special requirements.
Information about storage in one common storage facility:
Store away from air.
Store away from water/moisture.
Do not store together with acids.
Store away from oxidizing agents.
Further information about storage conditions:
Store under dry inert gas.
This product is moisture sensitive.
This product is air sensitive.
Protect from humidity and water.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Specific end use(s)
No further relevant information available

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems:
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.
Control parameters
Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Additional information:
No data
Exposure controls
Personal protective equipment
General protective and hygienic measures
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Remove all soiled and contaminated clothing immediately.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Maintain an ergonomically appropriate working environment.
Breathing equipment:
Use suitable respirator when high concentrations are present.

Protection of hands:
Impervious gloves
Check protective gloves prior to each use for their proper condition.
The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.
Penetration time of glove material (in minutes)
Not determined
Eye protection:
Tightly sealed goggles
Full face protection
Body protection:
Protective work clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties
General Information
Appearance:
Form:
Powder
Color:
White to grey
Odor:
Not determined
Odor threshold:
Not determined.
pH-value:
Not applicable.
Change in condition
Melting point/Melting range:
373 °C (703 °F)
Boiling point/Boiling range:
430 °C (806 °F)
Sublimation temperature / start:
Not determined
Flammability (solid, gaseous)
Contact with water liberates extremely flammable gases.
Ignition temperature:
>110 °C (>230 °F)
Decomposition temperature:
Not determined
Auto igniting:
Not determined.
Danger of explosion:
Not determined.
Explosion limits:
Lower:
Not determined
Upper:
Not determined
Vapor pressure:
Not applicable.
Density at 20 °C (68 °F):

1.178 g/cm³ (9.83 lbs/gal)
Relative density
Not determined.
Vapor density
Not applicable.
Evaporation rate
Not applicable.
Solubility in / Miscibility with Water:
Reacts violently
Contact with water releases flammable gases
Partition coefficient (n-octanol/water):
Not determined.
Viscosity:
dynamic:
Not applicable.
kinematic:
Not applicable.
Other information
No further relevant information available

SECTION 10. STABILITY AND REACTIVITY

Reactivity
Reacts violently with water.
In contact with water releases flammable gases which may ignite spontaneously.
Chemical stability
Stable under recommended storage conditions.
Thermal decomposition / conditions to be avoided:
Decomposition will not occur if used and stored according to specifications.
Possibility of hazardous reactions
Reacts with strong oxidizing agents
Contact with water releases flammable gases
Reacts violently with water
Conditions to avoid
No further relevant information available.
Incompatible materials:
Acids
Air
Oxidizing agents
Water/moisture
Hazardous decomposition products:
Nitrogen oxides
Lithium oxide

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute toxicity:
Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.
LD/LC50 values that are relevant for classification:

No data
Skin irritation or corrosion:
Causes severe skin burns.
Eye irritation or corrosion:
Causes serious eye damage.
Sensitization:
No sensitizing effects known.
Germ cell mutagenicity:
No effects known.
Carcinogenicity:
No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.
Reproductive toxicity:
No effects known.
Specific target organ system toxicity - repeated exposure:
No effects known.
Specific target organ system toxicity - single exposure:
No effects known.
Aspiration hazard:
No effects known.
Subacute to chronic toxicity:
No effects known.
Additional toxicological information:
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known

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SECTION 12. ECOLOGICAL INFORMATION

Toxicity
Aquatic toxicity:
No further relevant information available.
Persistence and degradability
No further relevant information available.
Bioaccumulative potential
No further relevant information available.
Mobility in soil
No further relevant information available
Additional ecological information:
General notes:
Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.
Avoid transfer into the environment.
Results of PBT and vPvB assessment
PBT:
Not applicable.
vPvB:
Not applicable.
Other adverse effects
No further relevant information available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Recommendation
Consult state, local or national regulations to ensure proper disposal.
Uncleaned packagings:
Recommendation:
Disposal must be made according to official regulations.

SECTION 14. TRANSPORT INFORMATION

UN-Number
DOT, IMDG, IATA
UN1390
UN proper shipping name
DOT
Alkali metal amides
IMDG, IATA
ALKALI METAL AMIDES
Transport hazard class(es)
DOT
Class
4.3 Substances which, in contact with water, emit flammable gases.
Label
4.3
Class
4.3 (W2) Substances which, in cont
act with water, emit flammable gases
Label
4.3
IMDG, IATA
Class
4.3 Substances which, in contact with water, emit flammable gases.
Label
4.3
Packing group
DOT, IMDG, IATA
II
Environmental hazards:
Not applicable.
Special precautions for user
Warning: Substances which, in contact with water, emit flammable gases
EMS Number:
F-G,S-O
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.
Transport/Additional information:
DOT
Marine Pollutant (DOT):
No
UN "Model Regulation":
UN1390, Alkali metal amides (Lithium amide), 4.3, II

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture
GHS label elements
The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)
Hazard pictograms
GHS02
GHS05
Signal word
Danger
Hazard statements
H261 In contact with water releases flammable gas.
H314 Causes severe skin burns and eye damage.
Precautionary statements
P280
Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309
IF exposed or if you feel unwell:
P310
Immediately call a POISON CENTER/doctor/...
P370+P378
In case of fire: Use
for extinction: Limestone powder.
P402
Store in a dry place.
National regulations
All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.
All components of this product are listed on the Canadian Domestic Substances List (DSL).
SARA Section 313 (specific toxic chemical listings)
Substance is not listed.
California Proposition 65
Prop 65 - Chemicals known to cause cancer
Substance is not listed.
Prop 65 - Developmental toxicity
Substance is not listed.
Prop 65 - Developmental toxicity, female
Substance is not listed.
Prop 65 - Developmental toxicity, male
Substance is not listed.
Information about limitation of use:
For use only by technically qualified individuals.
Other regulations, limitations and prohibitive regulations
Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006.
Substance is not listed.
The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.
Substance is not listed.
Annex XIV of the REACH Regulations (requiring Authorisation for use)
Substance is not listed.
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.