LUMINOL

Material Safety Data Sheet

Emergency Telephone Number: CHEMTREC 1-800-424-9300 For Information call: DUDLEY 732-886-3100

DUDLEY CORPORATION

125 Kenyon Drive Lakewood, New Jersey 08701

Effective Date: February 10, 2010

1. PRODUCT IDENTIFICATION

CAS No.: 521-31-3

Synonyms: 3-Aminophtalhydrazide

Formula Weight: 177.16 **Chemical Formula:** C8H7N3O2

2. COMPOSITION, INFORMATION ON INGREDIENTS:

Chemical NameCAS No.PercentHazardous3-Aminophthalhydrazide521-31-398%No

3.HAZARDS IDENTIFICATION:

Emergency Overview

Appearance: Beige to yellowish powder. **CAUTION! Irritant!** May cause eye and skin irritation. May cause respiratory and digestive tract irritation.

Potential Health Effects

Eyes: May cause eye irritation. **Skin:** May cause skin irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.

Inhalation: May cause respiratory tract irritation. The toxicological properties of this material have not been fully investigated.

4 FIRST AID MEASURES:

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin: In case of contact, flush skin with plenty of water for at least 15 minutes while removing contaminated clothes and shoes. Get medical attention if irritation develops or persists.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls water or milk to drink. Do **NOT** induce vomiting. **NEVER** give anything by mouth to an unconscious person. Get medical attention if irritation or symptoms appear. **Inhalation:** Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

5. FIRE FIGHTING MEASURES:

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand

MSHA/NIOSH approved or equivalent, and full protective gear. During a fire, irritating and highly toxic gases may

be generated by thermal decomposition or combustion.

Extinguishing Media: Water spray, carbon dioxide, dry chemical powder, or appropriate foam.

Flash Point: Not available.

Auto-ignition Temperature: Not available. **Explosion Limits, Lower / Upper:** Not available.

6 ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions.

Provide ventilation.

7.HANDLING AND STORAGE

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and

accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible

substance.

8.EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical NameACIGHNIOSHOSHA – Final PEL's3-AminophthalhydrazideNot listedNot listed

OSHA Vacated PELs: 3-Aminophthalhydrazide: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149.

Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical State: Powder

Appearance: Beige to yellowish. **Odor:** No information found.

Freezing/Melting Point: Not available.

pH: Not available.

Vapor Pressure (mm Hg): Not available. Vapor Density (Air = 1): Not available. Evaporation Rate: Not available.

Viscosity: Not available. **Boiling Point:** >300 deg. C. **Flash Point:** Not applicable.

Decomposition Temperature: Not available.

Solubility: Not available.

Specific Gravity/Density: Not available.

10. PRODUCT STABILITY AND REACTIVITY:

Stability: Stable under ordinary conditions of use and storage.

Conditions to Avoid: Incompatible material.

Incompatibilities with Other Materials: Strong Oxidizing agents, strong reducing agents, strong bases, strong

acid.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, nitrogen oxides.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION:

RTECS: CAS# 521-31-3: TH8890060

LD50/LC50: CAS#521-31-3 LD50 Mouse, Oral 8000 mg/kg

LD50 Subcutaneous mouse 960 mg/kg

Carcinogencity: CAS# 521-31-3: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: No information available. **Teratogenicity:** No information available. **Reproductive Effects:** No information available.

Neurotoxicity: No information available. **Mutagenicity:** No information available.

Other Studies: See actual entry in RTECS for complete information.

12. ECOLOGICAL INFORMATION:

Environmental Fate: No information available. **Environmental Toxicity:** No information available.

13. WASTE DISPOSAL INFORMATION:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure completer and accurate classification.

RCRA P-Series: None listed. RCRA U-Series: None listed.

14. TRANSPORT INFORMATION:

Not regulated.

15. REGULATORY INFORMATION:

US FEDERAL

TSCA

CAS#521-31-3 is listed on the TSCA inventory. For Research & Developmental use only.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have TPQ.

Section 12

No chemicals are reportable under Section 313.

Clean Air Act

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

Clean Water Act

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS#521-31-3 is not present on state lists from CA, PA, MA, MN, FL, or NJ.

California No Significant Risk Level: None of the chemicals in this product are listed.

EUROPEN/INTERNATIONAL REGULATIONS

European Labeling in Accordance with EC Directives

Hazardous Symbols: XI

Risk Phrases; R 36/37/38 Irritating to eyes, respiratory system and skin.

 $\textbf{Safety Phrases:} \ \ \text{S} \ \ 26-36/37 \ \ \text{In case of contact with eyes, rinse immediately with plenty of water and seek medical}$

advice. Wear suitable protective clothing and gloves. **WGK (Water Danger/Protection)** CAS#521-31-3: 1

Canada – DSL/NDSL

CAS#521-31-3 is listed on Canada's DSL List.

CAS#521-31-3 is not listed on Canada's NDSL List.

Canada - WHMIS

WHMIS not available.

CAS#521-31-3 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

16. DISCLAIMER INFORMATION:

DISCLAIMER

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