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## SECTION 1: Identification of the substance/mixture and of the company/ undertaking · 1.1 Product identifier Trade name: Lightning Ninhydrin · Product code: 1-2701 (1004082) · 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available. · Application of the substance / the mixture: Forensic examination. · Uses advised against: Contact manufacturer. • 1.3 Details of the supplier of the Safety Data Sheet · Manufacturer/Supplier: Safariland, LLC LIGHTNING 13386 International Parkway Jacksonville, FL 32218 OWDER Customer Care (800) 347-1200 · 1.4 Emergency telephone number: ChemTel Inc. +1 (800)255-3924, +1 (813)248-0585 **SECTION 2: Hazards identification** · 2.1 Classification of the substance or mixture · Classification according to Regulation (EC) No 1272/2008 The product is not classified as hazardous according to the Globally Harmonized System (GHS). The product is not classified as hazardous according to the CLP regulation. · 2.2 Label elements · Labelling according to Regulation (EC) No 1272/2008 This product does not have a classification according to the CLP regulation. The product is not classified as hazardous according to OSHA GHS regulations within the United States. Hazard pictograms Not Regulated · Signal word Not Regulated · Hazard-determining components of labelling: None. · Hazard statements Not Regulated • Precautionary statements Not Regulated. · 2.3 Other hazards There are no other hazards not otherwise classified that have been identified. · Results of PBT and vPvB assessment • **PBT:** Not applicable. · vPvB: Not applicable. **SECTION 3: Composition/information on ingredients**

· 3.2 Mixtures

· Components: None in reportable quantities.

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· Additional information:

For the listed ingredient(s), the identity and exact percentages are being withheld as a trade secret. For the wording of the listed Hazard Statements refer to section 16.

## **SECTION 4: First aid measures**

#### · 4.1 Description of first aid measures

- · General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After eye contact: Remove contact lenses if worn.
- After swallowing: Do not induce vomiting; call for medical help immediately.
- $\cdot$  4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Hazards: No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## **SECTION 5: Firefighting measures**

- · 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- · For safety reasons unsuitable extinguishing agents: None.
- **5.2 Special hazards arising from the substance or mixture** During heating or in case of fire poisonous gases are produced.
- · 5.3 Advice for firefighters
- **Protective equipment:** Wear self-contained respiratory protective device. Wear fully protective suit.
- · Additional information: No further relevant information available.

## **SECTION 6: Accidental release measures**

• 6.1 Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation

For large spills, wear protective clothing.

- 6.2 Environmental precautions
   Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- 6.3 Methods and material for containment and cleaning up Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of the material collected according to regulations.
- 6.4 Reference to other sections
   See Section 7 for information on safe handling.
   See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

## **SECTION 7: Handling and storage**

• 7.1 Precautions for safe handling No special measures required.

- · Information about fire and explosion protection: No special measures required.
- 7.2 Conditions for safe storage, including any incompatibilities • Storage:
- Requirements to be met by storerooms and receptacles:
- Avoid storage near extreme heat, ignition sources or open flame.
- Information about storage in one common storage facility: Store away from foodstuffs.
- $\cdot$  Further information about storage conditions: Keep container tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

## **SECTION 8: Exposure controls/personal protection**

#### · 8.1 Control parameters

- Ingredients 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.
- DNELs: No further relevant information available.
- · PNECs: No further relevant information available.
- · 8.2 Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs, beverages and feed. Avoid contact with the eyes.
- · Respiratory protection: Not required under normal conditions of use.
- · Protection of hands:



Protective gloves

· Eye protection:

Follow relevant national guidelines concerning the use of protective eyewear.



Safety glasses

· Body protection: Not required under normal conditions of use.

· Limitation and supervision of exposure into the environment: No special requirements.

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· Risk management measures: No special requirements.

SECTION 9: Physical and chemical properties • 9.1 Information on basic physical and chemical properties • Appearance				
			Form:	Liquid
			Colour:	Colourless
· Odour:	Pungent			
<ul> <li>Odour threshold:</li> </ul>	Not determined.			
· pH-value:	Not determined.			
<ul> <li>Melting point/Melting range:</li> </ul>	Not determined.			
<ul> <li>Boiling point/Boiling range:</li> </ul>	Not determined.			
· Flash point:	Not applicable.			
· Flammability (solid, gaseous):	Not applicable.			
· Auto/Self-ignition temperature:	Not determined.			
· Decomposition temperature:	Not determined.			
· Self-igniting:	Product is not self-igniting.			
<ul> <li>Danger of explosion:</li> </ul>	Product does not present an explosion hazard.			
<ul> <li>Explosion limits</li> </ul>				
Lower:	Not determined.			
Upper:	Not determined.			
· Oxidising properties	Not determined.			
· Vapour pressure:	Not determined.			
· Density:	Not determined.			
· Relative density:	Not determined.			
· Vapour density:	Not determined.			
<ul> <li>Evaporation rate:</li> </ul>	Not determined.			
· Solubility in / Miscibility with				
water at 20 °C (68 °F):	2-8 g/l			
· Partition coefficient (n-octanol/water): Not determined.				
· Viscosity				
Dynamic:	Not determined.			
Kinematic:	Not determined.			
• 9.2 Other information	No further relevant information available.			

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## **SECTION 10: Stability and reactivity**

• **10.1 Reactivity** No further relevant information available.

- 10.2 Chemical stability Stable under normal temperatures and pressures.
- Thermal decomposition / conditions to be avoided:
- No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions** Reacts with strong oxidising agents.

Reacts with strong acids and alkali.

Toxic fumes may be released if heated above the decomposition point.

- 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials No further relevant information available.

#### · 10.6 Hazardous decomposition products

Carbon monoxide and carbon dioxide

Danger of toxic fluorine based pyrolysis products.

## **SECTION 11: Toxicological information**

#### · 11.1 Information on toxicological effects

- Acute toxicity: Based on available data, the classification criteria are not met.
- · LD/LC50 values relevant for classification: None.
- · Primary irritant effect
- Skin corrosion/irritation: Based on available data, the classification criteria are not met.
- Serious eye damage/irritation: Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

### • NTP (National Toxicology Program):

None of the ingredients are listed.

### · OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

- · Probable routes of exposure:
- Ingestion.
- Inhalation.

Eye contact.

Skin contact.

- · Repeated dose toxicity: No further relevant information available.
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- · Carcinogenicity: Based on available data, the classification criteria are not met.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT-single exposure: Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.

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· Aspiration hazard: Based on available data, the classification criteria are not met.

## **SECTION 12: Ecological information**

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:

#### · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Harmful to aquatic organisms

- 12.5 Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

### **SECTION 13: Disposal considerations**

· 13.1 Waste treatment methods

· Recommendation Smaller quantities can be disposed of with household waste.

- · Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information		
· 14.1 UN-Number		
· DOT, ADR, IMDG, IATA	Not Regulated	-
<ul> <li>14.2 UN proper shipping name</li> </ul>		
· DOT, ADR, IMDG, IATA	Not Regulated	
<ul> <li>14.3 Transport hazard class(es)</li> </ul>		
· DOT, ADR, IMDG, IATA		
· Class	Not Regulated	
· 14.4 Packing group		
· DOT, ADR, IMDG, IATA	Not Regulated	
		(Cont'd. on page 7)

Not applicable.

Not applicable.

Not applicable.

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· 14.5 Environmental hazards:

14.6 Special precautions for user

 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

**SECTION 15: Regulatory information** 

 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
 United States (USA)

· SARA

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

• TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65 (California):

· Chemicals known to cause cancer:

Ethanol - listing refers specifically to alcoholic beverage consumption and is not applicable for product.

64-17-5 ethanol

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

 Chemicals known to cause developmental toxicity: Ethanol - listing refers specifically to alcoholic beverage consumption and is not applicable for product. 64-17-5 ethanol

Carcinogenic Categories

· EPA (Environmental Protection Agency)

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer)

64-17-5 ethanol

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

· Canada

· Canadian Domestic Substances List (DSL)

All ingredients are listed.

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#### · Canadian Ingredient Disclosure list (limit 0,1%)

64-17-5 ethanol

#### · Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients are listed.

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients are listed.

· Other regulations, limitations and prohibitive regulations

· Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients are listed.

#### · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### · Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (REACH) PNEC: Predicted No-Effect Concentration (REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety **OSHA: Occupational Safety & Health** · Sources Website, European Chemicals Agency (echa.europa.eu) Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/ overview/home.do) Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org) Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6 Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5. Safety Data Sheets, Individual Manufacturers SDS Prepared by: ChemTel Inc. 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573 Website: www.chemtelinc.com