

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name           Ninhydrin  
CAS number            458-37-7  
Synonyms               No information available.

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses           Laboratory chemicals.

#### 1.3 Details of the supplier of the safety data sheet

Company                    Lab Alley, LLC  
                                  12501 Pauls Valley Road  
                                  Austin, Texas 78737  
                                  U.S.A.  
  
Telephone                 512-668-9918  
Fax                         512-886-4008

#### 1.4 Emergency telephone

**Emergency Phone #**           US & Canada: 1-800-535-5053           INFOTRAC  
  International 1-352-323-3500           INFOTRAC

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin Irritant	Category 2
Eye Irritant	Category 2A
Specific target organ toxicity - (single exposure)	Category 3
Acute toxicity (oral, dermal, inhalation)	Category 4

#### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Warning

Hazard statements

Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Precautionary statements

If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Do not eat, drink or smoke when using this product. Wash skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fumes/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. If eye irritation persists, get medical advice/attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Wash with soap and water. Specific treatment (see supplemental first aid instructions on this label). If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents and container to an approved waste disposal plant.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No information available.

## SECTION 3: Composition/information on ingredients

### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Ninhydrin	-	458-37-7	>98%

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

#### If inhaled

Loosen clothing as necessary and position individual in a comfortable position. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Get medical assistance if cough or other symptoms appear.

<b>In case of skin contact</b>	Rinse/flush exposed skin gently using soap and water for 15-20 minutes. Seek medical advice if discomfort or irritation persists.
<b>In case of eye contact</b>	Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.
<b>If swallowed</b>	Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

#### 4.2 Most important symptoms and effects, both acute and delayed

Irritation, nausea, headache, shortness of breath.

#### 4.3 Indication of any immediate medical attention and special treatment needed

If seeking medical attention, provide SDS document to physician. Physician should treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition. Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.
<b>Unsuitable extinguishing media</b>	No information available.

#### 5.2 Specific hazards arising from the substance or mixture

Combustion products may include carbon oxides or other toxic vapors. Thermal decomposition can lead to release of irritating gases and vapors.

#### 5.3 Special protective equipment and precautions for firefighters

Use NIOSH-approved respiratory protection/breathing apparatus. Move product containers away from fire or keep cool with water spray as a protective measure, where feasible. Use spark-proof tools and explosion-proof equipment. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Avoid inhaling gases, fumes, dust, mist, vapors, aerosols. Avoid contact with skin, eyes, and clothing.

#### 5.4 Further information

<b>Flash Point</b>	No information available
<b>Autoignition Temperature</b>	No information available
<b>Explosion limits</b>	
Upper	No data available

**Lower Sensitivity to Mechanical Impact** No data available  
**Sensitivity to Static Discharge** No data available

**NFPA**

Health	Flammability	Instability	Physical hazards
2	0	0	N/A

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Ensure that air-handling systems are operational. Ensure adequate ventilation.

### 6.2 Environmental precautions

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13. Should not be release into environment.

### 6.3 Methods and materials for containment and cleaning up

Keep in suitable closed containers for disposal. Wear protective eyeware, gloves, and clothing. Refer to Section 8. Always obey local regulations. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect solids in powder form using vacuum with (HEPA filter). Evacuate personnel to safe areas.

### 6.4 Reference to other sections

See section 2 for full list of hazard and precaution statements.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Precautions on safe handling

Minimize dust generation and accumulation. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with eyes, skin, and clothing.

#### Hygiene measures

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Store away from incompatible materials. Protect from freezing and physical damage. Keep away from food and beverages. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store in cool, dry conditions in well sealed containers. Store with like hazards.

## Incompatibilities

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Ninhydrin	TWA	15 mg/m <sup>3</sup>

#### US. ACGIH Threshold Limit Values

Component	Type	Value
Ninhydrin	TWA	10 mg/m <sup>3</sup>

#### US. NIOSH: Pocket Guide to Chemical Hazards

No information available.

#### Biological occupational exposure limits

No information available

### 8.2 Exposure controls

#### Appropriate engineering controls

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts (total/respirable) below the applicable workplace exposure limits (Occupational Exposure Limits - OELs) indicated above. It is recommended that all dust control equipment such as a local exhaust ventilation and material transport systems involved in handling of the product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use under a fume hood.

#### Personal protective equipment

##### Eye/face protection

Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Safety glasses or goggles are appropriate eye protection.

##### Skin and body protection

Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper gloves removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.

### **Respiratory protection**

Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

### **Control of environmental exposure**

No information available

## **SECTION 9: Physical and chemical properties**

### **9.1 Information on basic physical and chemical properties**

Physical State	Solid
Appearance	Slightly yellow
Odor	No information available
Odor Threshold	No information available
pH	4.6 - 5.6 (1% aq.solution)
Melting Point/Range	250 °C
Boiling Point/Range	No information available
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	No information available
Density	No information available
Solubility	Soluble
Partition coefficient; n-octanol/water	No information available
Autoignition Temp	No information available
Decomposition Temp	241.1 °C
Viscosity	No information available
Molecular Formula	C9H4O3-H2O
Molecular Weight	178.14
VOC Content(%)	No information available
Oxidizing properties	No information available

### **9.2 Other safety information**

No information available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Nonreactive under normal conditions

### 10.2 Chemical stability

Stable under normal conditions

### 10.3 Possibility of hazardous reactions

None under normal processing

### 10.4 Conditions to avoid

Incompatible materials.

### 10.5 Incompatible materials

Strong acids, strong bases, oxidizing agents.

### 10.6 Hazardous decomposition products

No information available.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

#### Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ninhydrin	600 mg/kg	-	-

#### Skin corrosion/irritation

No information available

#### Serious eye damage/eye irritation

No information available

#### Respiratory or skin sensitization

No information available

#### Germ cell mutagenicity

No information available

#### Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Ninhydrin	485-47-2	Not listed	Not listed	Not listed	Not listed	Not listed

#### Specific target organ toxicity - single exposure

None known

**Specific target organ toxicity - repeated exposure**

None known

**Reproductive toxicity**

No information available

**Chronic effects**

No information available

**11.2 Additional Information**

No information available

**SECTION 12: Ecological information****12.1 Toxicity**

No information available

**12.2 Persistence and degradability**

No information available

**12.3 Bio accumulative potential**

No information available

**12.4 Mobility in soil**

No information available

**12.5 Results of PBT and vPvB assessment**

No information available

**12.6 Endocrine disrupting properties**

No information available

**12.7 Other adverse effects**

No information available

**SECTION 13: Disposal considerations****13.1 Waste Disposal Methods**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

**SECTION 14: Transport information****DOT (US)**



Not regulated

**IMDG**

Not regulated

**IATA**

Not regulated

**SECTION 15: Regulatory information**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**SARA 304 Emergency release notification**

Not listed.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous**

Listed, Acute Health Hazard, Chronic Health Hazard.

**SARA 313 (TRI reporting)**

Not listed.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act**

Not regulated

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Not listed

**US state regulations**

**US. Massachusetts RTK - Substance List**

Not listed

**US. New Jersey Worker and Community Right-to-Know Act**

Not listed

**US. Pennsylvania Worker and Community Right-to-Know Law**

Not listed

**California Proposition 65**

Not listed

**SECTION 16: Other information**

Issue date: 08/21/2024

Revision: 0

**SECTION 17: Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.