

MSDS - Material Safety Data Sheet

Product Name: Ninhydrin Spray

MSDS No.: 201C-202C

I. Basic Information:

Manufacturer: Sirchie Finger Print Laboratories

Address: 100 Hunter Place

City, ST Zip: Youngsville, NC 27596

Country: USA

Contact: Tech Support

Information Telephone Number: 919-554-2244

Emergency Contact: ChemTrec

Emergency Telephone Number: 800-424-9300

Emergency Restrictions:

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Issue Date: 10/17/2011

Supersedes Date: Not Available

II. Hazards Identification:

EMERGENCY OVERVIEW

CONTENTS EXTREMELY FLAMMABLE AND UNDER PRESSURE. AVOID CONTACT WITH SKIN AND EYES. VAPOR HARMFUL. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

POTENTIAL HEALTH EFFECTS:

SKIN: Frequent or prolonged contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

EYE: Liquid or vapors may cause redness, burning, tearing, swelling and/or pain.

INGESTION: Due to being an aerosol, product does not lend itself to ingestion. Should ingestion occur, it may cause irritation to membranes of the mouth, throat and gastrointestinal tract, resulting in vomiting and/or cramps.

INHALATION: Prolonged or repeated exposure is anesthetic. May cause irritation of the respiratory tract, or acute nervous system depression characterized by headache, dizziness, staggering gait, or confusion.

MEDICAL CONDITIONS AGGRAVATED: Skin contact may aggravate an existing dermatitis. Other conditions unknown.

CARCINOGEN DATA: None of the ingredients in this product are listed with OSHA, IARC or NTP as being carcinogenic.

"Empty" containers may contain product residue and may be dangerous. Empty containers should be completely drained and bunged and then disposed of according to local, state and federal regulations

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Health Effects

Route(s) of Entry:

INGESTION: Unlikely due to being in aerosol form. Should ingestion occur, do not induce vomiting! Drink a glass of water or milk to dilute. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

EYE: Immediately flush with plenty of clear water for at least 15 minutes. Make sure to flush eyelids. Consult a physician for definitive treatment.

SKIN: Remove with soap and water. Continue flushing with water for several minutes. Use skin cream to counter resulting dryness. Consult a physician if irritation continues or if large area of skin is affected.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist or if unconscious.

Health Hazards (Acute and Chronic):

See Emergency Overview above.

Signs and Symptoms:

Headache, dizziness, staggering gait, unconsciousness.

Medical Conditions Generally Aggravated by Exposure:

Dermatitis

Other Health Warnings:

None specified

Potential Environmental Effects

Prevent from entering sewers or waterways. May be harmful to some aquatic life.

MSDS - Material Safety Data Sheet

Product Name: Ninhydrin Spray

MSDS No.: 201C-202C

III. Composition/Information on Ingredients:

Chemical Name	CAS No.	% Range	Trade Secret
2,2-Dihydroxyindane-1,3-dione (Ninhydrin)	485472	Trace	
Ethanol	64175	10-15	
Ethyl acetate	141786	10-15	
Liquefied petroleum gas (LPG)	68476857	50-55	
Xylene	1330207	20-25	

IV. First Aid Measures:

Emergency and First Aid Procedures:

Inhalation: Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen (To be administered by qualified medical personnel only!) Keep victim warm and quiet. Get medical attention.

Ingestion: DO NOT induce vomiting. If victim is conscious and alert, give 2-4 cups of water. (Never give anything by mouth to an unconscious person!) Get medical attention immediately.

Skin: Flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing. Seek medical attention.

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Do not allow victim to rub or keep eyes closed. Get medical aid immediately.

Note to Physicians:

None specified

V. Fire Fighting Measures:

Suitable Extinguishing Media:

For warehouse and storage conditions, use NFPA Class B extinguishes (CO₂, dry chemical or universal aqueous film forming foam.)

Unsuitable Extinguishing Media:

Use water spray to cool containers for containers can rupture violently from heat-developed pressure.

Products of Combustion:

Contents under pressure. In addition, when liquid or vapor forms into contact with flames or red hot metal, products of combustion will be created. Firemen should wear self-contained breathing apparatus.

Protection of Firefighters:

Wear normal turnout gear.

VI. Accidental Release Measures:

Personal Precautions:

Safety goggles, gloves, vapor respirator, protective clothing

Environmental Precautions:

Prevent from entering sewers or waterways. May be harmful to some aquatic life.

Methods for Containment:

CONTAINMENT PROCEDURES: Product is an aerosol, therefore spills and leaks are unlikely. In case of rupture, released content should be contained as any other solvent spill.

Methods for Cleanup:

SPILL CLEANUP: Spills from aerosol cans are unlikely and are generally of small volume. Large spills are therefore not normally a problem. In case of actual rupture, avoid breathing vapors and ventilate area well. Remove all sources of ignition and use non-sparking equipment. Soak up material with inert absorbent and place in safety containers for proper disposal.

SPECIAL INSTRUCTIONS: Aerosol products represent a limited hazard and will not spill or leak unless ruptured. In case of rupture, contents are generally evacuated from the can rapidly. Area should be ventilated immediately and continuous ventilation provided until all fumes and vapors have been removed. Aerosol cans should never be incinerated or burned. See Section 13 for disposal considerations.

Other Information:

REPORTING REQUIREMENTS: Spills due to rupture of a single aerosol are generally below any regulatory reporting requirements. However, if larger spills somehow result, the reporting requirements of the EPA and other local, state and federal agencies should be observed.

MSDS - Material Safety Data Sheet**Product Name: Ninhydrin Spray**

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VII. Handling and Storage:**Handling Precautions:**

Avoid prolonged or repeated skin contact. Avoid breathing vapors. Store in area below 120 degrees F. Do Not incinerate (burn) containers. Assure can is in a secure place to prevent knocking over and accidental rupture. Always replace overcap when not in use. For storage of pallet quantities, compliance with ANSI/NFPA 30B is recommended.

Storage Precautions:

Store with flammable materials

VIII. Exposure Controls/Personal Protection:

Chemical Name	OSHA PEL	ACGIH TLV	Other Limits
2,2-Dihydroxyindane-1,3-dione (Ninhydrin)	NE	NE	255 C
Liquefied petroleum gas (LPG)	1,000 ppm	1,000 ppm	Not Available
Xylene	100 ppm	100 ppm	81 F
Ethyl acetate	400 ppm	400 ppm	24 F
Ethanol	1,000 ppm	1,000 ppm	57 F

Engineering Controls:

ENGINEERING CONTROLS: General ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Local exhaust ventilation or an enclosed handling system may be needed to control air contamination below that of the lowest TLV/PEL rated ingredient from Section 2.

EXPOSURE GUIDELINE: Since this product is a mixture, an OSHA or ACGIH exposure value is not available. In determination of any exposure procedures, protection or testing, use the lowest rated ingredient in Section 2.

Personal Protective Equipment:

EYE PROTECTION: Safety glasses with side shields are recommended as a minimum for any type of industrial chemical handling. Where eye contact could occur, chemical splash proof goggles are recommended.

SKIN PROTECTION: For brief contact, no precautions other than clean body-covering clothing should be needed. When prolonged or repeated contact could occur, use protective clothing such as Sol-Vex gloves or other clothing impervious to the ingredients listed in Section 2.

Respiratory Protection: Atmospheric levels should be maintained below the exposure guideline. Where respiratory protection is required an appropriate NIOSH approved respirator for organic vapor should be worn. If respirators are needed, assure compliance with OSHA standard 29 CFR 1910.134

IX. Physical and Chemical Properties:

Boiling Point: < 0 F.

Boiling Range: Not Available

Solubility In Water: Negligible

Flash Point: <0 F

Odor Threshold: Not Available

Vapor Density (AIR = 1): Above 1.0

pH Range: Not Available

Decomposition Temp: Not Available

Lower Explosive Limit: No Data

Specific Gravity (H2O = 1): Not Available

Other Information: Not Available

Melting Point: Unkn

Freezing Point: Not Available

Evaporation Rate (Butyl Acetate = 1): Unkn

Flash Point Method: Not Available

Appearance and Odor: Clear Liquid, Solvent odor

Vapor Pressure (mm Hg.): No Data

Partition Coefficient: Not Available

Auto-Ignition Temp: Not Available

Upper Explosive Limit: No Data

X. Stability and Reactivity:**Stability:**

Stable

Conditions to Avoid:

None specified

MSDS - Material Safety Data Sheet

Product Name: Ninhydrin Spray

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Incompatible Materials:

Heat, sparks, flame, red hot metal, strong oxidizing materials.

Hazardous Decomposition Products:

Oxides of Carbon

Possibility of Hazardous Reactions:

Will not occur

XI. Toxicological Information:

ACUTE ORAL LD50: Xylene >4 g/kg (rat), Ethyl Acetate >5 g/kg (rat)

ACUTE DERMAL LD50: Xylene >3 ml/kg (rabbit), Ethyl Acetate >20 ml/kg (rabbit)

ACUTE INHALATION LC50: Liquefied Petroleum Gas 57.42% v/v (mice), Xylene 7600 ppm/4H (rat), Ethyl Acetate .8000 ppm/4H (rat)

XII. Ecological Information:

Prevent from entering sewers or waterways. May be harmful to some aquatic life.

XIII. Disposal Considerations:

An aerosol container that does not contain a significant amount of liquid would meet the definition of scrap metal (40CFR 261.1 (c)(6)), and would be exempt from RCRA regulation under 40 CFR 261.6(a)(3)(iv) if it is to be recycled. If containers are not recycled they must be managed under all applicable RCRA and state regulations.

"Empty" containers may contain product residue and may be dangerous. Empty containers should be completely drained and bunged and then disposed of according to local, state and federal regulations.

XIV. Transport Information:

Shipping Name: Consumer commodity

DOT Hazard Class: ORM-D

UN/NA#: Not Available

DOT Subsidiary Hazard Class: Not Available

Packing Group: Not Available

Transportation Information:

IATA:

Shipping name: Aerosols, flammable, toxic, containing substances in Div. 6.1, Packing Group III

Hazard class: 2.1

Sub-Class: 6.1

UN no.: 1950

Packing group:

Flammable gas

XV. Regulatory Information:

TOXIC SUBSTANCES CONTROL ACT: All of the ingredients in this product are on the TSCA inventory.

SARA TITLE III, SECTION 313: The following ingredients are subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40CFR Part 372: Xylene (20.0%)

CLEAN AIR ACT (caa): The following ingredients appear on the CWA List of Hazardous Substances (40 CFR 116.4): Xylene

CALIFORNIA PROPOSITION 65: The following ingredients appear on the Proposition 65 list: None.

CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEMS (WHMIS): The following ingredients are listed: LPG, Xylene, Ethyl Acetate, Ethanol.

MSDS - Material Safety Data Sheet

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MSDS No.: 201C-202C

XVI. Other Information:

- Chemical State:** Liquid Gas Solid
Chemical Type: Pure Mixture
Hazard Category: Acute Chronic Fire Pressure Reactive



Additional Manufacturer Warnings:

Using this product under normal, properly instructed procedures should not be hazardous.

1	Health
4	Flammability
0	Physical Hazard
G	Pers. Protection

Additional Product Information:

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, expressed or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.