



SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Ninhydrin		DATE: August 1, 2011	
PRODUCT NUMBER(S): 1-2715 (1004084), 1-2716 (1004085)			
TRADE NAME: Ninhydrin			
GENERAL USE: Finger print development.			
CHEMICAL FAMILY:			
PRODUCT DESCRIPTION: Pale yellow powder with slight odor.			
MANUFACTURED FOR: Safariland LLC	DATE PREPARED: August 1, 2011	SUPERSEDES: October 15, 2008	
ADDRESS (NUMBER, STREET, P.O. BOX) 13386 International Parkway	TELEPHONE NUMBER FOR INFORMATION / Customer Service 800-347-1200		
(CITY, STATE AND ZIP CODE) Jacksonville, FL 32218	COUNTRY USA	CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBER  1-800-255-3924 01-813-248-0585 North America Toll Free International	

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Warning! Harmful if swallowed. Causes eye, skin, and respiratory tract irritation.
Target Organs: Respiratory system, eyes, skin.

POTENTIAL HEALTH EFFECTS

INHALATION:
Causes respiratory tract irritation. May be harmful if inhaled.

SKIN:
Causes skin irritation. May be harmful if absorbed through the skin.

EYES:
Causes Eye Irritation, Redness.

INGESTION:
Harmful if swallowed. May cause irritation of the digestive tract.

CARCINOGENICITY:
 NTP? **No** IARC MONOGRAPHS? **No** OSHA REGULATED? **No**
 CALIFORNIA, Prop.65? **No**

SECTION 3 - HAZARDOUS INGREDIENTS

Hazardous Components	% (by Weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 15)
Ninhydrin	100	485-47-2	207-618-1	Xn, Xi	R22, R36/37/38

Notes: Hazard symbols and risk phrases based on maximum listed concentration of each hazardous ingredient.

SECTION 4 - FIRST AID MEASURES

INHALATION:
Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

EYES:
Flush eyes with plenty of water for at least 15 minutes. Get medical assistance.

SKIN:
Flush skin with water for at least 15 minutes, while removing contaminated clothing and shoes.

INGESTION:
Do not induce vomiting. Get medical aid immediately. Call a poison control center.

SECTION 5 - FIRE FIGHTING MEASURES

GENERAL HAZARDS:
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

EXTINGUISHING MEDIA:
Use water spray, dry chemical, Carbon Dioxide, or chemical foam. Do not use water jets to extinguish.

FIRE FIGHTING PROCEDURES:
Wear NIOSH/MSA or European EN-149 approved SCBA. Wear protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
None.

HAZARDOUS COMBUSTION PRODUCTS:
Carbon Monoxide, Carbon Dioxide.

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Ninhydrin
PRODUCT NUMBER(S): 1-2715 (1004084), 1-2716 (1004085) **DATE:** August 1, 2011

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
 Wear a NIOSH/MSA or European EN-149 approved vapor respirator, safety goggles, and rubber gloves. Remove all sources of ignition. Take up spill with inert material (vermiculite or clay).

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
 Avoid incompatibilities especially contact with strong oxidizers and store in a ventilated area.
 Storage Method: Store in tightly closed, inert containers away from sources of excessive heat.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

HAZARDOUS COMPONENTS	NIOSH				ACGIH		OSHA	
	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3	TLV/TWA ppm	TWA mg/m3	PEL ppm	PEL mg/m3
Ninhydrin	NE	NE	NE	NE	NE	NE	NE	NE

PERSONAL PROTECTION

RESPIRATORY PROTECTION:
 Use only in well-ventilated areas. Approved NIOSH/MSA or European EN-149 organic vapor respirator where conditions warrant respirator use.

PROTECTIVE GLOVES:
 Neoprene, nitrile, or other chemically resistant gloves.

EYE PROTECTION:
 Safety glasses with side shields, or chemical resistant goggles.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
 Impervious rubber apron or similar protective clothing.

WORK / HYGIENIC PRACTICES:
 Wash with soap and water before eating, smoking, or using the restroom.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR Pale yellow powder with slight odor.	VAPOR PRESSURE NA
VOC NE Volatility NE	SPECIFIC GRAVITY (WATER = 1) NE
BOILING POINT / BOILING RANGE NR Decomposition Temperature = 241°C	SOLUBILITY IN WATER Soluble in cold water.
FLASH POINT NA	VISCOSITY NA
FLAMMABLE LIMITS LEL: NR UEL: NR	VAPOR DENSITY (AIR = 1) NA
AUTO-IGNITION TEMPERATURE NR	EVAPORATION RATE BUTYL ACETATE = 1) NA

SECTION 10 - STABILITY AND REACTIVITY

STABILITY STABLE **X** **CONDITIONS TO AVOID:**
 Incompatible materials, light, dust generation, excess heat.

INCOMPATIBILITY (MATERIALS TO AVOID):
 Oxidizers, certain organo metallic compounds.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:
 Carbon Monoxide, Carbon Dioxide.

HAZARDOUS POLYMERIZATION:
 Will not occur. **CONDITIONS TO AVOID:**
 None related to polymerization.

SECTION 11 - TOXICOLOGICAL INFORMATION

Hazardous Components	CAS # EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
Ninhydrin	485-47-2	Oral, rat: LDLo = 250 mg/kg	NE
	207-618-1		

SECTION 12 - ECOLOGICAL INFORMATION

Slightly hazardous for water; do not allow to enter drinking water supplies, other watercourses, sewers systems, groundwater, or soil.

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Ninhydrin
PRODUCT NUMBER(S): 1-2715 (1004084), 1-2716 (1004085) **DATE:** August 1, 2011

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:
 Treat as hazardous waste to be disposed of by a licensed waste disposal facility in compliance with all local, state, and federal regulations.
DO NOT INCINERATE THIS PRODUCT! DO NOT ALLOW THE CONTAMINATION OF DRINKING WATER, FOOD, OR FEEDSTUFFS.

SECTION 14 - TRANSPORT INFORMATION


PROPER SHIPPING NAME: Not regulated	
DOT HAZARD CLASS / Pack Group: NA	IATA HAZARD CLASS / Pack Group: NA
REFERENCE: 49CFR	IMDG HAZARD CLASS: NA
UN / NA IDENTIFICATION NUMBER: NA	RID/ADR Dangerous Goods Code: NA
LABEL: None Applicable	UN TDG Class / Pack Group: NA
HAZARD SYMBOLS: None	Hazard Identification Number (HIN): NA

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

SECTION 15 - REGULATORY INFORMATION

TSCA (USA - Toxic Substance Control Act): Ingredients listed.
SARA TITLE III (USA - Superfund Amendments and Reauthorization Act):
 Acute Health: No Chronic Health: No
 Fire: No Sudden Release of Pressure: No
 Reactive: No

313 REPORTABLE INGREDIENTS: None reportable.
CERCLA (USA - Comprehensive Response Compensation and Liability Act): NO RQ's listed.
California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: None listed.
 State Right to Know: Indan-1,2,3-trione CAS#485-47-2: NJ, PA.
CCPR (Canadian Controlled Products Regulations): Not Listed.
CIDL (Canadian Ingredient Disclosure List): Listed.
CDSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List): Listed on CDSL.
EINECS (European Inventory of Existing Commercial Chemical Substances): Referenced.
WGK Water Quality Index: CAS# 485-47-2: 2

RISK PHRASES:	SYMBOL(S) REQUIRED FOR EU LABEL	SAFETY PHRASES:
R22: Harmful if swallowed. R36/37/38: Irritating to eyes, respiratory system and skin.	 Xn/Xi: Harmful/Irritant	S2: Keep out of the reach of children. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S37/39: Wear suitable gloves and eye and face protection. S28A: After contact with skin, wash immediately with plenty of water and seek medical advice.

SECTION 16 - OTHER INFORMATION

Legend:
 N/A = Not Applicable N/D = Not Determined N/E = Not Established N/R = Not Reported

HMIS HAZARD RATINGS	HEALTH: FLAMMABILITY: PHYSICAL HAZARD: PERSONAL PROTECTIVE EQUIPMENT:	2 1 1 E	0 = INSIGNIFICANT 1 = SLIGHT 2 = MODERATE 3 = HIGH 4 = EXTREME

REVISION SUMMARY:
 Revised to EU protocols 8/1/2011 supersedes 10/15/2008 issue. JTV

MSDS 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



The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.