



1,2 Indandione Powder SDS

Effective Date: May 28, 2015

24 Hour Emergency Contact

ChemTel: (800) 255-3924

www.pioneerforensics.com

1. PRODUCT AND COMPANY IDENTIFICATION

Product: 1,2-Indandione Powder

Product Number(s): PF30095

CAS#: 16214-27-0

Synonyms: Indan 1,2 dione, 1H-Indene-1,2(3H)-dione

Manufacturer: Pioneer Forensics, LLC
804 E. Eisenhower Blvd.
Loveland, CO 80537
Ph: (970) 292-8487

Emergency Number: (800) 255-3924 (CHEM-TEL)

Customer Service: (970) 292-8487

2. HAZARDS IDENTIFICATION

Emergency Overview: MAY BE HARMFUL IF INHALED, SWALLOWED, OR ABSORBED THROUGH SKIN. CAUSES IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

Safety Ratings: Health: 1, Slight Reactivity: 0, None
Flammability: 0, None
Contact: 1, Slight

OSHA Regulatory Status: This product is not considered a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential Acute Health Effects:

Routes of Exposure: Inhalation, ingestion, skin contact, eye contact

Inhalation: May be harmful if thermal decomposition occurs. May cause dizziness and respiratory tract irritation.

Ingestion: May be harmful if swallowed.

Skin Contact: May cause skin irritation.

Eye Contact: May cause serious eye damage.

Target Organs: Skin, central nervous system, urinary system, blood, liver, reproductive system, eyes, cardiovascular system, and respiratory system

Chronic Health Effects: Ingestion or absorption of this product into the body can cause permanent nervous system or brain damage.

Potential Environmental Effects: This product may undergo partial biodegradation in the environment. It will likely diffuse rapidly into the atmosphere if exposed to the environment. However, product may cause long term adverse environmental effects. Take measures to prevent environmental exposure.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS#	Chemical Formula	Formula Weight	Hazardous	% by Weight
1H-Indene-1,2(3H)-dione	16214-27-0	$C_9H_6O_2$	146,14 g/mol	NO	99%

4. FIRST AID MEASURES

First Aid Procedures:

Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. If the victim is not breathing, provide artificial respiration. Get medical attention if symptoms persist.

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep head low so that vomit does not enter lungs. Never give anything by mouth to an unconscious person.

Skin Contact: Wash affected area with soap and plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if symptoms occur.

Eye Contact: Check for and remove contact lenses. Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention if symptoms persist.

General Advice: In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

Notes to Physician: Treat symptomatically. Symptoms may be delayed.

5. FIREFIGHTING MEASURES

NFPA Ratings: Health: 3 Flammability: 0 Reactivity: 0

Flammable Properties: May be combustible at high temperatures.

Flash Point: No information found

Auto-ignition Temp: No information found

Flammable Limits in Air (% by volume):	Lower Explosion Limit: No information found Upper Explosion Limit: No information found
Suitable Extinguishing Media:	Water spray, dry powder, alcohol resistant foam, carbon dioxide
Unsuitable Extinguishing Media:	Do not use a solid (straight) water stream as it may scatter and spread fire.
Hazardous Combustion Products:	Carbon oxides
Specific Hazards:	May be flammable or explosive in the presence of flames, heat, or sparks. High powder concentrations in the air may cause an explosion hazard.
Special Protective Equipment For Firefighters:	As in any fire, wear MSHA/NIOSH approved (or equivalent) self-contained positive pressure or pressure-demand breathing apparatus and full protective gear.
Specific Methods:	Use water spray to cool unopened containers. Move containers from fire area if you can do so without risk. In the event of a fire, do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Ventilate area of leak or spill. Isolate hazard area and keep unnecessary and unprotected personnel away from the area of the leak or spill. Keep upwind. Keep out of low areas. Wear appropriate personal protective equipment as specified in the Exposure Control and Personal Protection Section 8. Avoid contact with eyes, skin, and clothing.
Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground. In case of large spill, dike if needed.
Methods for Containment:	Prevent entry into waterways, sewer, basements or confined areas. Dike the spilled material, where this is possible.
Methods for Cleaning Up:	Absorb spill with an inert material (e.g. vermiculite, dry sand, earth, cloth, fleece), and place in a suitable container for reclamation or disposal. Clean contaminated surface thoroughly. Never return spills in original containers for re-use. Clean up in accordance with all applicable regulations.

7. HANDLING AND STORAGE

Handling:	Wear personal protective equipment (see section 8). Use only in well-ventilated areas. Provide sufficient air exchange and/or exhaust in work rooms. Avoid contact with skin, eyes and clothing. Do not breathe dust. Do not ingest. When using, do not smoke. Keep away from heat, flame, and incompatible materials. Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquids). Observe all warnings and precautions listed for the product.
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Storage: Store in a cool, dry, ventilated area. Keep out of light. Store in a segregated and approved area away from flame, heat, and incompatible materials. Store in original container and out of excessive light. Keep containers tightly closed and upright. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

Exposure Limits: No information found

Engineering Controls: Ensure adequate ventilation. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment:

Eye/Face Protection: Wear goggles or safety glasses with side shields and a face shield.

Skin Protection: Wear appropriate chemical resistant clothing (with long sleeves) and appropriate chemical resistant gloves.

Respiratory Protection: Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

General Hygiene Considerations: Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid

Appearance: Crystalline powder

Color: Light yellow

Odor: Characteristic

Molecular Formula: $C_9H_6O_2$

Molecular Weight: 146.14 g/mol

pH: 4.6 – 5.0 (1% w/v aqueous solution at 20 °C)

Freezing/Melting Point: 117 - 124 °C (243 - 255 °F)

Boiling Point: No information found

Flash Point: No information found

Auto Ignition Temperature: No information found

Flammable Limits in Air (% by Volume):

Upper: No information found

Lower: No information found

Solubility: Soluble in water

Vapor Pressure: No information found

Vapor Density: No information found

Percent Volatile: 0% at 21 °C (70 °F)

Odor threshold (ppm): No information found

Evaporation Rate: No information found
Partition Coefficient
(n-octanol/water): log Pow: 0.869

10. STABILITY AND REACTIVITY

Conditions to Avoid: Heat, flames, excessive light, dust generation, incompatible materials
Incompatible Materials: Strong oxidizers, strong bases, amines
Hazardous Decomposition Products: Carbon oxides
Possibility of Hazardous Reactions: Can react vigorously, violently or explosively with the incompatible materials listed above. High concentrations of dust in the air may cause an explosion hazard.
Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicological Data: Oral Rat LD50: 600 mg/kg
Oral Rat LDL: 250 mg/kg

Acute Effects: May cause irritation if inhaled, ingested, or exposed to the eyes or skin.
Local Effects: May affect the central nervous system, the cardiovascular system, and the respiratory system if ingested.

Sensitization: May cause skin sensitization.
Chronic Effects: Repeated or prolonged skin exposure may cause allergic reactions. Repeated or prolonged inhalation may cause occupational asthma.
Carcinogenic Effects: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Skin Corrosion/Irritation: Causes irritation. May cause discoloration.
Epidemiology: No epidemiological data is available for this product.
Mutagenicity: No information found
Neurological Effects: May affect behavior or central nervous system if ingested.
Reproductive Effects: No information found
Teratogenic Effects: No information found
Target Organs and Symptoms: Skin, eyes, lungs, gastrointestinal tract, central nervous system, cardiovascular system. Irritation, dermatitis, coughing, shortness of breath, nausea, vomiting, diarrhea, behavioral effects, dyspnea.

12. ECOLOGICAL INFORMATION

Ecotoxicological Data: No information found

Ecotoxicity:	No information found
Environmental Effects:	This product is not expected to be harmful to the environment.
Persistence and Degradability:	Long term biodegradation may occur. Products of biodegradation are less toxic than the product itself.
Partition Coefficient (n-octanol/water):	No information found

13. DISPOSAL INFORMATION

Disposal Instructions:	All wastes must be handled in accordance with local, state and federal regulations.
Contaminated Packaging:	Since emptied containers retain product residue, follow label warnings even after container is emptied. Offer rinsed packaging material to local recycling facilities.
Waste Codes:	No information found

14. TRANSPORT INFORMATION

DOT: Not regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations:

OSHA: This product is considered a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Inventory: **Not Listed**

U.S. EPCRA (SARA Title III):

Sections 311/312:	<u>Hazard Categories List (Yes/No)</u>	Section 311 – Hazardous Chemical
	Immediate Hazard	Yes
	Delayed Hazard	No
	Fire Hazard	No
	Pressure Hazard	No
	Reactivity Hazard	No

Section 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

CERCLA: No information found

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components Indan-1,2-dione CAS-No.16214-27-0

New Jersey Right To Know Components Indan-1,2-dione CAS-No.16214-27-0

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Product Use: Laboratory and/or field reagent

Disclaimer: Pioneer Forensics LLC provides the information in this Material Safety Data Sheet in the belief that it is reliable but assumes no responsibility for its completeness or accuracy. The physical properties reported in this MSDS are obtained from the literature and do not constitute product specifications. Pioneer Forensics LLC makes and gives no representations or warranties with respect to the information contained herein or the product to which it refers, whether express, implied, or statutory, including without limitation, Product: