

**Section 1: Identification of the Substance/Mixture and of the Company/Undertaking****1.1 Product identifier****Product Name** • Diazo sensitizer**CAS Number** • 41432-19-3**Product Description** • Yellow-green powder**Molecular Formula** • (C<sub>13</sub>:H<sub>11</sub>:N<sub>3</sub>:O<sub>4</sub>:S)<sub>n</sub>**1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant identified use(s)** • Photochemical sensitizer**1.3 Details of the supplier of the safety data sheet****Manufacturer** • IKONICS Corporation  
4832 Grand Ave.  
Duluth, MN 55807  
United States  
www.ikonics.com  
sds@ikonics.com**Telephone (General)** • (218) 628-2217**Telephone (General)** • (800) 328-4261 - Toll free**1.4 Emergency telephone number****Chemtrec** • 1-800-424-9300 - Within USA and Canada  
• +1 703-527-3887 - Outside USA and Canada (collect calls accepted)**Section 2: Hazards Identification****EU/EEC**

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 2015/830]

**2.1 Classification of the substance or mixture****CLP** • Acute Toxicity Oral 4 - H302  
Skin Irritation 2 - H315  
Skin Sensitization 1 - H317  
Eye Irritation 2 - H319  
EUH208**2.2 Label Elements****CLP****WARNING**

- H302 - Harmful if swallowed.
- H315 - Causes skin irritation.
- H317 - May cause an allergic skin reaction.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.
- EUH208 - Contains sensitizing substance (4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer). May produce an allergic reaction.

## Precautionary statements

- Prevention**
- P235+P410 - Keep cool. Protect from sunlight.
  - P260 - Do not breathe dusts or mists.
  - P264 - Wash thoroughly after handling.
  - P280 - Wear protective gloves/protective clothing/eye protection/face protection.

- Response**
- P301+P312 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell.
  - P330 - Rinse mouth.
  - P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
  - P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
  - P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  - P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P337+P313 - If eye irritation persists: Get medical advice/attention.
  - P363 - Wash contaminated clothing before reuse.

- Storage/Disposal**
- P403+P235 - Store in a well-ventilated place. Keep cool.
  - P410 - Protect from sunlight.
  - P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## 2.3 Other Hazards

- CLP
- No data available

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## UN GHS

According to: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS): Sixth Revised Edition

## 2.1 Classification of the substance or mixture

- UN GHS
- Acute Toxicity Oral 4 - H302
  - Skin Irritation 2 - H315
  - Skin Sensitization 1 - H317
  - Eye Irritation 2 - H319

## 2.2 Label elements

UN GHS

### WARNING



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## 2.3 Other hazards

**UN GHS**

- No data available.

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## United States (US)

According to OSHA 29 CFR 1910.1200 HCS

### 2.1 Classification of the substance or mixture

**OSHA HCS 2012**

- Acute Toxicity Oral 4 - H302
- Skin Irritation 2 - H315
- Skin Sensitization 1 - H317
- Eye Irritation 2 - H319

### 2.2 Label elements

**OSHA HCS 2012**

#### WARNING



- H302 - Harmful if swallowed.
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- H317 - May cause an allergic skin reaction.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.

#### Precautionary statements

- Prevention**
- P235+P410 - Keep cool. Protect from sunlight.
  - P260 - Do not breathe dusts or mists.
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  - P410 - Protect from sunlight.
  - P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## 2.3 Other hazards

**OSHA HCS 2012**

- No data available.

## 2.1 Classification of the substance or mixture

- WHMIS 2015
- Acute Toxicity Oral 4 - H302
  - Skin Irritation 2 - H315
  - Skin Sensitization 1 - H317
  - Eye Irritation 2 - H319

## 2.2 Label elements

WHMIS 2015

### WARNING



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- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.

### Precautionary statements

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- Storage/Disposal**
- P403+P235 - Store in a well-ventilated place. Keep cool.
  - P410 - Protect from sunlight.
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## 2.3 Other hazards

- WHMIS 2015
- No data available.

## 2.4 Other information

NFPA



## Section 3 - Composition/Information on Ingredients

### 3.1 Substances

Hazardous Components					
Chemical Name	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments
4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	CAS:41432-19-3	100%	NDA	OSHA:Irrit. WHMIS:Other Toxic Effects - D2B UN GHS:Acute Tox. 4; Eye Irrit. 2A; Skin Irrit. 2; Skin Sens. 1; STOT SE 3: Resp. Irrit. EU DSD/DPD:Harmful(Xn); R22; R36/37/38; R43 EU CLP:Acute Tox. 4; Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1B; STOT SE 3: Resp. Irrit.	

### 3.2 Mixtures

## Section 4 - First Aid Measures

### 4.1 Description of first aid measures

- Inhalation**
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and call 911 or emergency medical service.
- Skin**
- IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention.
- Eye**
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- Ingestion**
- If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Rinse mouth. Never give anything by mouth to an unconscious person. If large quantities are swallowed, call a physician immediately.

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

- Refer to Section 11 - Toxicological Information.

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

**Notes to Physician**

- No data available.

**Antidotes**

- No data available.

### 4.4 Other information

- Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

## Section 5 - Firefighting Measures

### 5.1 Extinguishing media

**Suitable Extinguishing Media**

- SMALL FIRES: Dry chemical, CO<sub>2</sub>, water spray or regular foam.
- LARGE FIRE: Water spray, fog or regular foam.

**Unsuitable Extinguishing Media**

- No data available.

**Firefighting Procedures**

- Firefighters should wear complete protective clothing including self-contained breathing apparatus.
- Keep unauthorized personnel away.
- Ventilate closed spaces before entering.

LARGE FIRES: Use extinguishing agent suitable for type of surrounding fire.  
LARGE FIRES: Move containers from fire area if you can do it without risk.  
LARGE FIRES: Cool containers with flooding quantities of water until well after fire is out.

## 5.2 Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards**
- Some of these materials may burn, but none ignite readily.  
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.  
Some may decompose explosively when heated or involved in a fire.
- Hazardous Combustion Products**
- Substance may decompose when exposed to excessive heat or fire conditions, which may create pressurization in the container and produce corrosive and/or toxic fumes. Products of combustion include: carbon oxides (COx), nitrogen oxides (NOx), sulfur oxides (SOx).

## 5.3 Advice for firefighters

- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.  
Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.  
Wear positive pressure self-contained breathing apparatus (SCBA).

## Section 6 - Accidental Release Measures

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

- Personal Precautions**
- Ventilate enclosed areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material. Contact may irritate or burn skin and eyes.
- Emergency Procedures**
- Ventilate closed spaces before entering. Use normal clean up procedures.

### 6.2 Environmental precautions

- LARGE SPILLS: Prevent entry into waterways, sewers, basements or confined areas.

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

- Containment/Clean-up Measures**
- Use appropriate Personal Protective Equipment (PPE).  
Avoid generating dust.  
Carefully shovel or sweep up spilled material and place in suitable container.  
Residual material can be removed by wiping or rinsing with water.

### 6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

## Section 7 - Handling and Storage

### 7.1 Precautions for safe handling

- Handling**
- Use good safety and industrial hygiene practices. Use only with adequate ventilation. Minimize dust generation and accumulation. Handle and store under yellow lights to prevent exposure to UV radiation.

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

- Storage**
- Keep container/package tightly closed in a cool place. Store material in its original packaging to prevent UV exposure.
- Special Packaging Materials**
- Package in opaque containers and/or use additional light-blocking materials.

### 7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

## Section 8 - Exposure Controls/Personal Protection

### 8.1 Control parameters

**Exposure Limits/Guidelines** • No data available.

### 8.2 Exposure controls

**Engineering Measures/Controls** • Local exhaust is recommended but not required. Provide adequate ventilation as necessary.

**Personal Protective Equipment**

**Pictograms**



- **Respiratory** • In case of insufficient ventilation, wear suitable respiratory equipment.
- **Eye/Face** • Wear protective eyewear (goggles, face shield, or safety glasses).
- **Hands** • Wear protective gloves - rubber or neoprene.
- **Skin/Body** • Wear protective clothing - apron or other impervious body coverings.
- **General Industrial Hygiene Considerations** • Handle in accordance with good industrial hygiene and safety practice.
- **Environmental Exposure Controls** • No data available.

## Section 9 - Physical and Chemical Properties

### 9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Powder
Color	Yellow-green	Odor	Mild
Odor Threshold	No data available		
General Properties			
Boiling Point	Not relevant	Melting Point	No data available
Decomposition Temperature	No data available	pH	No data available
Density	No data available	Water Solubility	Soluble
Viscosity	Not relevant	Explosive Properties	Not relevant
Oxidizing Properties:	Not relevant		
Volatility			
Vapor Pressure	Not relevant	Vapor Density	Not relevant
Evaporation Rate	Not relevant	VOC (Wt.)	Not relevant
Volatiles (Wt.)	Not relevant		
Flammability			
Flash Point		UEL	Not relevant
LEL	Not relevant	Autoignition	Not relevant
Flammability (solid, gas)	Combustible solid.		
Environmental			
Half-Life	No data available	Octanol/Water Partition coefficient	No data available
Coefficient of water/oil distribution	No data available	Bioaccumulation Factor	No data available
Bioconcentration Factor	No data available	Biochemical Oxygen Demand BOD/BOD5	No data available
Chemical Oxygen Demand	No data available	Persistence	No data available

Degradation	No data available		
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## 9.2 Other Information

- UV reactive; decomposes at high temperature.

## Section 10: Stability and Reactivity

### 10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

- UV reactive.

### 10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

### 10.4 Conditions to avoid

- Direct sunlight. Excess heat.

### 10.5 Incompatible materials

- Oxidizers.

### 10.6 Hazardous decomposition products

- Hazardous decomposition products formed under fire conditions - carbon oxides, nitrogen oxides, sulfur oxides.

## Section 11 - Toxicological Information

### 11.1 Information on toxicological effects

GHS Properties	Classification
Acute toxicity	<b>EU/CLP</b> •Acute Toxicity 4 (Ingestion/Oral) <b>UN GHS</b> •Acute Toxicity 4 (Ingestion/Oral)
Skin corrosion/Irritation	<b>EU/CLP</b> •Skin Irritation 2 <b>UN GHS</b> •Skin Irritation 2
Serious eye damage/Irritation	<b>EU/CLP</b> •Eye Irritation 2 <b>UN GHS</b> •Eye Irritation 2A
Skin sensitization	<b>EU/CLP</b> •Skin Sensitizer 1 <b>UN GHS</b> •Skin Sensitizer 1
STOT-SE	<b>EU/CLP</b> •Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation <b>UN GHS</b> •Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation

### Potential Health Effects

#### Inhalation

##### Acute (Immediate)

- May cause irritation.

##### Chronic (Delayed)

- No data available.

#### Skin

##### Acute (Immediate)

- May cause irritation. May cause an allergic skin reaction.

##### Chronic (Delayed)

- Repeated and prolonged exposure may cause sensitization.

#### Eye

##### Acute (Immediate)

- Causes serious eye irritation.

##### Chronic (Delayed)

- No data available.

#### Ingestion



Acute (Immediate)

- May be harmful.

Chronic (Delayed)

- No data available.

## Section 12 - Ecological Information

### 12.1 Toxicity

- No data available.

### 12.2 Persistence and degradability

- No data available.

### 12.3 Bioaccumulative potential

- No data available.

### 12.4 Mobility in Soil

- No data available.

### 12.5 Results of PBT and vPvB assessment

- No data available.

### 12.6 Other adverse effects

Ecological Fate

- No data available.

Potential Environmental Effects

- No data available.

## Section 13 - Disposal Considerations

### 13.1 Waste treatment methods

Product waste

- Dispose of content in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of container in accordance with local, regional, national, and/or international regulations.

### 13.2 Other Information

- Dispose of wastes in an approved waste disposal facility.

## Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	NDA	NDA	NDA	NDA
IMO/IMDG	NDA	NDA	NDA	NDA	NDA
IATA/ICAO	NDA	NDA	NDA	NDA	NDA

14.6 Special precautions for user

- None specified.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- This product is provided only in non-bulk containers.

14.8 Other information

- Do not store and transport with oxidizers etc.

DOT • Not regulated

IMO/IMDG • Not regulated

IATA/ICAO • Not regulated

## Section 15 - Regulatory Information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Acute

Inventory						
Component	CAS	Australia AICS	Canada NDSL	Japan ENCS	Korea KECL	New Zealand
4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Yes	Yes	Yes	Yes	Yes

  

Inventory (Con't.)			
Component	CAS	Philippines PICCS	TSCA
4-Diazodiphenylamine hydrogen sulfate, formaldehyde polymer	41432-19-3	Yes	Yes

### 15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## Section 16 - Other Information

### Relevant Phrases (code & full text)

- EUH208 - Contains sensitizing substance. May produce an allergic reaction.
- H302 - Harmful if swallowed.
- H315 - Causes skin irritation.
- H317 - May cause an allergic skin reaction.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.
- P235+P410 - Keep cool. Protect from sunlight.
- P260 - Do not breathe dusts or mists.
- P264 - Wash thoroughly after handling.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
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- P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
- P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P330 - Rinse mouth.
- P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 - If eye irritation persists: Get medical advice/attention.
- P363 - Wash contaminated clothing before reuse.
- P403+P235 - Store in a well-ventilated place. Keep cool.
- P410 - Protect from sunlight.
- P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

### Last Revision Date

- 10 November 2014

### Preparation Date

- 08 March 2018

### Other Information

- Approved by: Troy Bergstedt, Director of Chemical Research, (218) 628-2217 ext.142.

### Disclaimer/Statement of Liability

- The information contained herein is based on data available to us and is believed to be correct. Since this information may have been obtained in part from independent laboratories or other sources not under direct supervision, no representation is made that

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