

## SAFETY DATA SHEET

Creation Date 10-Feb-2011

Revision Date 19-Jan-2018

Revision Number 4

### 1. Identification

**Product Name** Indigo

**Cat No. :** AC212130000; AC212130250; AC212131000

**CAS-No** 482-89-3  
**Synonyms** C.I. 73000; Vat Blue 1

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Not for food, drug, pesticide or biocidal product use

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

##### Company

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

##### **Emergency Telephone Number**

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11

Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99

**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) identification

#### **Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Specific target organ toxicity - (repeated exposure) Category 2  
Target Organs - Blood, Hematopoietic System.

#### Label Elements

##### **Signal Word**

Warning

##### **Hazard Statements**

May cause damage to organs through prolonged or repeated exposure



##### **Precautionary Statements**

Prevention

Do not breathe dust/fume/gas/mist/vapors/spray

**Response**

Get medical attention/advice if you feel unwell

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

None identified

### 3. Composition/Information on Ingredients

| Component                                | CAS-No   | Weight % |
|------------------------------------------|----------|----------|
| 3H-Indol-3-one, 2-(1,3-dihydro-3-oxo-2H- | 482-89-3 | >95      |

### 4. First-aid measures

|                                            |                                                                                                                 |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>General Advice</b>                      | If symptoms persist, call a physician.                                                                          |
| <b>Eye Contact</b>                         | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. |
| <b>Skin Contact</b>                        | Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.                    |
| <b>Inhalation</b>                          | Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.                            |
| <b>Ingestion</b>                           | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.           |
| <b>Most important symptoms and effects</b> | None reasonably foreseeable.                                                                                    |
| <b>Notes to Physician</b>                  | Treat symptomatically                                                                                           |

### 5. Fire-fighting measures

**Suitable Extinguishing Media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available  
**Method -** No information available

**Autoignition Temperature**

**Explosion Limits**

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

**Specific Hazards Arising from the Chemical**

Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**

Nitrogen oxides (NO<sub>x</sub>) Carbon monoxide (CO) Carbon dioxide (CO<sub>2</sub>)

**Protective Equipment and Precautions for Firefighters**

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

**NFPA**

Health  
0Flammability  
1Instability  
0Physical hazards  
N/A

## 6. Accidental release measures

### Personal Precautions

### Environmental Precautions

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. Should not be released into the environment. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

### Methods for Containment and Clean Up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Keep in suitable, closed containers for disposal.

## 7. Handling and storage

### Handling

Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

### Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight.

## 8. Exposure controls / personal protection

### Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Engineering Measures

Ensure adequate ventilation, especially in confined areas.

### Personal Protective Equipment

#### Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

#### Skin and body protection

Long sleeved clothing.

#### Respiratory Protection

Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

#### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

### Physical State

Powder Solid

### Appearance

Dark blue

### Odor

No information available

### Odor Threshold

No information available

### pH

No information available

### Melting Point/Range

> 300 °C / > 572 °F

### Boiling Point/Range

No information available

### Flash Point

No information available

### Evaporation Rate

Not applicable

### Flammability (solid,gas)

No information available

### Flammability or explosive limits

#### Upper

No data available

#### Lower

No data available

### Vapor Pressure

47 mmHg @ 430 °C

### Vapor Density

Not applicable

### Specific Gravity

No information available

### Solubility

practically insoluble

|                                        |                   |
|----------------------------------------|-------------------|
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature               |                   |
| Decomposition Temperature              | 390 °C            |
| Viscosity                              | Not applicable    |
| Molecular Formula                      | C16 H10 N2 O2     |
| Molecular Weight                       | 262.26            |

## 10. Stability and reactivity

|                                  |                                                                                |
|----------------------------------|--------------------------------------------------------------------------------|
| Reactive Hazard                  | None known, based on information available                                     |
| Stability                        | Sensitivity to light.                                                          |
| Conditions to Avoid              | Incompatible products. Excess heat. Avoid dust formation.                      |
| Incompatible Materials           | Strong oxidizing agents                                                        |
| Hazardous Decomposition Products | Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ) |
| Hazardous Polymerization         | Hazardous polymerization does not occur.                                       |
| Hazardous Reactions              | None under normal processing.                                                  |

## 11. Toxicological information

### Acute Toxicity

#### Product Information Component Information

| Component                                   | LD50 Oral                 | LD50 Dermal                  | LC50 Inhalation             |
|---------------------------------------------|---------------------------|------------------------------|-----------------------------|
| 3H-Indol-3-one,<br>2-(1,3-dihydro-3-oxo-2H- | LD50 > 5000 mg/kg ( Rat ) | LD50 > 2000 mg/kg ( Rabbit ) | LC50 > 5.3 mg/L ( Rat ) 4 h |

**Toxicologically Synergistic** No information available

#### Products

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Irritation** No information available

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component                                   | CAS-No   | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|---------------------------------------------|----------|------------|------------|------------|------------|------------|
| 3H-Indol-3-one,<br>2-(1,3-dihydro-3-oxo-2H- | 482-89-3 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known  
**STOT - repeated exposure** Blood Hematopoietic System

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

Contains a substance which is: Toxic to aquatic organisms. The product contains following substances which are hazardous for the environment.

| Component                                   | Freshwater Algae                             | Freshwater Fish                                             | Microtox   | Water Flea                                              |
|---------------------------------------------|----------------------------------------------|-------------------------------------------------------------|------------|---------------------------------------------------------|
| 3H-Indol-3-one,<br>2-(1,3-dihydro-3-oxo-2H- | 6.3 mg/L EC50 = 96 h<br>5.3 mg/L EC50 = 72 h | LC50: > 1000 mg/L, 96h<br>static ( <i>Oryzias latipes</i> ) | Not listed | EC50: > 500 mg/L, 48h<br>( <i>Daphnia magna</i> Straus) |

**Persistence and Degradability** Insoluble in water Persistence is unlikely

**Bioaccumulation/ Accumulation** No information available.

**Mobility** . Is not likely mobile in the environment due its low water solubility.

| Component                                | log Pow |
|------------------------------------------|---------|
| 3H-Indol-3-one, 2-(1,3-dihydro-3-oxo-2H- | >1.4    |

## 13. Disposal considerations

**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.

## 14. Transport information

|                 |               |
|-----------------|---------------|
| <b>DOT</b>      | Not regulated |
| <b>TDG</b>      | Not regulated |
| <b>IATA</b>     | Not regulated |
| <b>IMDG/IMO</b> | Not regulated |

## 15. Regulatory information

All of the components in the product are on the following Inventory lists: X = listed

### International Inventories

| Component                                   | TSCA | DSL | NDSL | EINECS    | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|---------------------------------------------|------|-----|------|-----------|--------|-----|-------|------|------|-------|------|
| 3H-Indol-3-one,<br>2-(1,3-dihydro-3-oxo-2H- | X    | X   | -    | 207-586-9 | -      |     | X     | X    | X    | X     | X    |

#### Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

### U.S. Federal Regulations

|                                                           |                                                            |
|-----------------------------------------------------------|------------------------------------------------------------|
| <b>TSCA 12(b)</b>                                         | Not applicable                                             |
| <b>SARA 313</b>                                           | Not applicable                                             |
| <b>SARA 311/312 Hazard Categories</b>                     | See section 2 for more information                         |
| <b>CWA (Clean Water Act)</b>                              | Not applicable                                             |
| <b>Clean Air Act</b>                                      | Not applicable                                             |
| <b>OSHA Occupational Safety and Health Administration</b> | Not applicable                                             |
| <b>CERCLA</b>                                             | Not applicable                                             |
| <b>California Proposition 65</b>                          | This product does not contain any Proposition 65 chemicals |
| <b>U.S. State Right-to-Know Regulations</b>               | Not applicable                                             |
| <b>U.S. Department of Transportation</b>                  |                                                            |
| Reportable Quantity (RQ):                                 | N                                                          |
| DOT Marine Pollutant                                      | N                                                          |
| DOT Severe Marine Pollutant                               | N                                                          |
| <b>U.S. Department of Homeland Security</b>               |                                                            |
| This product does not contain any DHS chemicals.          |                                                            |

**Other International Regulations**

|                       |                          |
|-----------------------|--------------------------|
| <b>Mexico - Grade</b> | No information available |
|-----------------------|--------------------------|

**16. Other information**

|                         |                                                                                                                                                                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Prepared By</b>      | Regulatory Affairs<br>Thermo Fisher Scientific<br>Email: EMSDS.RA@thermofisher.com                                                                                                                                                      |
| <b>Creation Date</b>    | 10-Feb-2011                                                                                                                                                                                                                             |
| <b>Revision Date</b>    | 19-Jan-2018                                                                                                                                                                                                                             |
| <b>Print Date</b>       | 19-Jan-2018                                                                                                                                                                                                                             |
| <b>Revision Summary</b> | This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). |

**Disclaimer**

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

**End of SDS**