

SAFETY DATA SHEET

Creation Date 10-Feb-2011

Revision Date 24-Dec-2021

Revision Number 5

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 Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
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

| | |
|--|---|
| General Advice | If symptoms persist, call a physician. |
| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. |
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. |
| Inhalation | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur. |
| Most important symptoms and effects | None reasonably foreseeable. |
| Notes to Physician | Treat symptomatically |

5. Fire-fighting measures

| | |
|---------------------------------------|---|
| Suitable Extinguishing Media | Water spray, carbon dioxide (CO ₂), dry chemical, alcohol-resistant foam. |
| Unsuitable Extinguishing Media | No information available |
| Flash Point | No information available |
| Method - | No information available |
| Autoignition Temperature | Not applicable |
| 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_x). Carbon monoxide (CO). Carbon dioxide (CO₂).

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 | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 0 | 1 | 0 | N/A |

6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

Environmental Precautions Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Up Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

7. Handling and storage

Handling Wear personal protective equipment/face protection. 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. Protect from direct sunlight. Incompatible Materials. Strong oxidizing agents.

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 Wear appropriate protective gloves and clothing to prevent skin exposure.

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 | Not applicable |
| 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 ₂) |
| 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, 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 Products No information available

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, 2-(1,3-dihydro-3-oxo-2H- H- | 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, 2-(1,3-dihydro-3-oxo-2H- | 6.3 mg/L EC50 = 96 h 5.3 mg/L EC50 = 72 h | LC50: > 1000 mg/L, 96h static (Oryzias latipes) | Not listed | EC50: > 500 mg/L, 48h (Daphnia magna Straus) |

| | |
|--------------------------------------|---|
| Persistence and Degradability | 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

| | |
|-----------------|---------------|
| DOT | Not regulated |
| TDG | Not regulated |
| IATA | Not regulated |
| IMDG/IMO | Not regulated |

15. Regulatory information

United States of America Inventory

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|---|----------|------|--|--------------------------------|
| 3H-Indol-3-one, 2-(1,3-dihydro-3-oxo-2H- | 482-89-3 | X | ACTIVE | - |

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|---|----------|-----|------|-----------|-------|------|------|------|-------|----------|
| 3H-Indol-3-one, 2-(1,3-dihydro-3-oxo-2H- | 482-89-3 | X | - | 207-586-9 | X | X | X | X | X | KE-08786 |

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and Health Administration Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

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

| Component | CAS No | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|---|----------|----------|------------------------------|---------------------------|--|
| 3H-Indol-3-one, 2-(1,3-dihydro-3-oxo-2H- | 482-89-3 | Listed | Not applicable | Not applicable | Not applicable |

| Component | CAS No | Seveso III Directive (2012/18/EC) - | Seveso III Directive (2012/18/EC) - | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|-----------|--------|-------------------------------------|-------------------------------------|----------------------------|------------------------------------|
| | | | | | |

| | | Qualifying Quantities for Major Accident Notification | Qualifying Quantities for Safety Report Requirements | | |
|---|----------|---|--|----------------|----------------|
| 3H-Indol-3-one, 2-(1,3-dihydro-3-oxo-2H- | 482-89-3 | Not applicable | Not applicable | Not applicable | Not applicable |

16. Other information

| | |
|-------------------------|---|
| Prepared By | Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com |
| Creation Date | 10-Feb-2011 |
| Revision Date | 24-Dec-2021 |
| Print Date | 24-Dec-2021 |
| Revision Summary | 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