



SAFETY DATA SHEET

Revision date 01-Jan-2021
Version 1.0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name Indigo
Product Code S10098

Recommended use of the chemical and restrictions on use

For research use only. Not intended for diagnostic or therapeutic use.

Details of the supplier of the safety data sheet

DAWN SCIENTIFIC
121 Liberty Street, Metuchen, NJ
1-800-DAWN-SCI | 732-902-6300

Emergency telephone number

Chemtrec
1.800.424.9300 (Within USA)
+1.703.527.3887 (Outside USA)

2. HAZARDS IDENTIFICATION

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

Classification

Acute toxicity - Dermal
Acute toxicity - Inhalation (Vapors)
Serious eye damage/eye irritation
Specific target organ toxicity (single exposure)
Specific target organ toxicity (repeated exposure)

Category 4
Category 3
Category 2A
Category 3
Category 2

Label elements

Signal word
Hazard statements

Danger
May be harmful if swallowed
Harmful in contact with skin
Toxic if inhaled
Causes serious eye irritation
May cause respiratory irritation. May cause drowsiness or dizziness
May cause damage to organs through prolonged or repeated exposure

Symbols/Pictograms



Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection/face protection
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

Get medical advice/attention if you feel unwell
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
IF ON SKIN: Wash with plenty of soap and water
Call a POISON CENTER or doctor/physician if you feel unwell
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician
Store in a well-ventilated place. Keep container tightly closed
Store locked up
Dispose of contents/container to an approved waste disposal plant

Precautionary Statements - Storage

Precautionary Statements - Disposal

Hazards not otherwise classified (HNOC)

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Other hazards

Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

NFPA

Health hazards 0
Flammability 1
Stability 0
Physical and chemical properties -



HMIS

Health hazards 0
Flammability 1
Physical hazards 0
Personal protection -

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No 482-89-3
Molecular Weight 262.27
Formula C₁₆H₁₀N₂O₂

Chemical name	CAS No.	Weight-%	Oral LD50	Dermal LD50	Inhalation LC50
Indigo	482-89-3	>98	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.3 mg/L (Rat) 4 h

4. FIRST AID MEASURES

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. If symptoms persist, call a physician. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.

Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Inhalation

Remove to fresh air If symptoms persist, call a physician Artificial respiration and/or oxygen may be necessary Call a physician Immediate medical attention is not required Move to fresh air in case of accidental inhalation of vapors

Ingestion

Immediate medical attention is not required. Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider

Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the chemical No information available.

Hazardous combustion products Carbon oxides. Nitrogen oxides (NOx).

Explosion data

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

Protective equipment and precautions for firefighters

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Avoid contact with eyes and skin. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Use personal protective equipment as required. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Avoid creating dust. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Use with local exhaust ventilation. Do not breathe dust/fume/gas/mist/vapors/spray. Handle in accordance with good industrial hygiene and

safety practice. Corrosive hazard. Wear protective gloves/clothing and eye/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Store at room temperature.

Incompatible materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

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

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles. Face protection shield.
Skin and Body Protection Wear protective gloves and protective clothing.
Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Solid
Appearance No information available
Odor Odorless

Property

<u>Property</u>	<u>Values</u>
pH	No information available
Melting point/freezing point	300 °C
Boiling point	400.4 °C
Flash point	220 °C
Liquid Density	1.35 g/cm ³
Evaporation rate	No information available
Upper flammability limits	No information available
Lower flammability limit	No information available
Vapor pressure	47 mmHg
Vapor density	No information available
Specific gravity	1.3
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	2.7
Autoignition temperature	300 °C
Decomposition temperature	No information available
Kinematic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

10. STABILITY AND REACTIVITY

Reactivity	Not applicable
Chemical stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing.
Hazardous polymerization	No information available.
Conditions to avoid	Extremes of temperature and direct sunlight.
Incompatible materials	Strong oxidizing agents.
Hazardous Decomposition Products	Carbon oxides. Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	No data available.
Eye contact	No data available.
Skin Contact	No data available.
Ingestion	No data available.

Information on toxicological effects

Symptoms	No information available.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity	Avoid repeated exposure.
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Numerical measures of toxicity - Product Information

Unknown acute toxicity	No information available
The following values are calculated based on chapter 3.1 of the GHS document	
ATEmix (oral)	5000 mg/kg
ATEmix (dermal)	2000 mg/kg
ATEmix (inhalation-vapor)	5.3 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity Toxic to aquatic life with long lasting effects

Chemical name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Indigo 482-89-3	6.3: 96 h Desmodesmus subspicatus mg/L EC50 5.3: 72 h Desmodesmus subspicatus mg/L EC50	1000: 96 h Oryzias latipes mg/L LC50 static	-	500: 48 h Daphnia magna Straus mg/L EC50

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Persistence and degradability	No information available.
Bioaccumulation	No information available.
Mobility	No information available.

Chemical name	Partition coefficient
Indigo 482-89-3	1.4

13. DISPOSAL CONSIDERATIONS

Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Do not reuse container.
Other Information	Waste codes should be assigned by the user based on the application for which the product was used.

14. TRANSPORT INFORMATION

DOT	Not regulated
IMDG	Not regulated
IATA	Not regulated

15. REGULATORY INFORMATION

International Inventories

All of the components in the product are on the following Inventory lists

TSCA (United States): Canada (DSL/NDSL) Europe (EINECS/ELINCS/NLP) Australia (AICS) South Korea (KECL): China (IECSC)
ENCS (Japan): Philippines (PICCS)

Chemical name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Indigo	X	X	-	X	-	X	X	X	X	X

X - Listed

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

16. OTHER INFORMATION

Revision note

No information available

Disclaimer

The information provided in this Material 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.