

Reviewed on 10/19/2016

## **1** Identification

- · Product identifier
- · Trade name: Indocyanine Green
- Article number: 155020
- · CAS Number:
- 3599-32-4
- EC number:
- 222-751-5
- · Molecular Formula C43 H47 N2 O6 S2 Na
- Molecular Weight 774.98 g/mol
- · Application of the substance / the mixture For Research Use Only

# Details of the supplier of the safety data sheet Manufacturer/Supplier: MP Biomedicals, LLC 29525 Fountain Parkway Solon, OH 44139 United States www.mpbio.com

• Information department: Quality Control Department • Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

## 2 Hazard(s) identification

· Classification of the substance or mixture

GHS07

Skin Irrit. 2H315Causes skin irritation.Eye Irrit. 2AH319Causes serious eye irritation.STOT SE 3H335May cause respiratory irritation.

· Label elements

• *GHS label elements* The substance is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms* 



Signal word Warning
Hazard statements

Causes skin irritation.
Causes serious eye irritation.

May cause respiratory irritation.
Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray
Wear protective gloves.
Wear eye protection / face protection.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

(Contd. on page 2)

<sup>-</sup> US

Printing date 10/19/2016

Reviewed on 10/19/2016

Trade name: Indocyanine Green

	(Contd. of page 1)
Specific treatment (see on this label).	
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.	
If skin irritation occurs: Get medical advice/attention.	
If eye irritation persists: Get medical advice/attention.	
IF ON SKIN: Wash with plenty of water.	
Take off contaminated clothing and wash it before reuse.	
Store locked up.	
Store in a well-ventilated place. Keep container tightly closed.	
Dispose of contents/container in accordance with local/regional/national/international regula	ations.
· Classification system:	
· NFPÅ ratings (scale 0 - 4)	
Health = 2	
$\begin{array}{c} Healin = 2 \\ Fire = 0 \end{array}$	
$\frac{2}{Reactivity} = 0$	
$\bigvee  \text{Keacuvity} = 0$	
· HMIS-ratings (scale 0 - 4)	
HEALTH 2 $Health = 2$	
FIRE 0 $Fire = 0$	
<b>REACTIVITY</b> Reactivity = $0$	
· Other hazards	
• Results of PBT and vPvB assessment	
• <b>PBT</b> : Not applicable.	
• <b>vPvB:</b> Not applicable.	
3 Composition/information on ingredients	
· Chemical characterization: Substances	
· CAS No. Description	
3599-32-4 Indocyanine Green	
· Identification number(s)	
• EC number: 222-751-5	

## 4 First-aid measures

- · Description of first aid measures
- General information:
- Consult your Doctor. Show the safety data sheet to the Doctor. Away from the dangerous area.
- After inhalation: If breathed in, supply fresh air. If not breathing, give artificial respiration. Consult a Doctor.
- After skin contact: Wash off with soap and plenty of water. Consult a Doctor.
- After eye contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- *Indication of any immediate medical attention and special treatment needed No further relevant information available.*

(Contd. on page 3)

Printing date 10/19/2016

Reviewed on 10/19/2016

#### Trade name: Indocyanine Green

(Contd. of page 2)

#### **5** Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

#### **6** Accidental release measures

• Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

- · Environmental precautions: Do not allow to enter sewers/surface or ground water.
- Methods and material for containment and cleaning up: Pick up mechanically, dispose contaminated material as waste according to Section 13. Ensure adequate ventilation.
- · Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

#### 7 Handling and storage

#### · Handling:

- · Precautions for safe handling
- Ensure good ventilation/exhaustion at the workplace. Avoid direct contact with skin and eyes.
- Information about protection against explosions and fires: No special requirements.
- · Conditions for safe storage, including any incompatibilities
- · Storage: 15-30 °C
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Further information about storage conditions: Desiccate.
- · Specific end use(s) No further relevant information available.

#### 8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see Section 7.

- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

(Contd. on page 4)

US

Printing date 10/19/2016

Reviewed on 10/19/2016

(Contd. of page 3)

#### Trade name: Indocyanine Green

• Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

• Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation • Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

• **Penetration time of glove material** The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• **Eye protection:** Safety glasses



Tightly sealed goggles

9 Physical and chemical properties				
· Information on basic physical and	chemical properties			
· General Information				
· Appearance:				
Form:	Powder			
Color:	Green			
· Odor:	Indeterminate			
· Odor threshold:	Not determined.			
· pH-value:	Not applicable.			
· Change in condition				
Boiling point/Boiling range:	Undetermined.			
· Flash point:	Not applicable.			
· Flammability (solid, gaseous):	Product is not flammable.			
· Ignition temperature:				
Decomposition temperature:	Not determined.			
· Auto igniting:	Not determined.			
· Danger of explosion:	See section 10			
· Explosion limits:				
Lower:	Not Applicable			
Upper:	Not Applicable			
		(Contd. on page 5		

Printing date 10/19/2016

Reviewed on 10/19/2016

#### Trade name: Indocyanine Green

		(Contd. of page
· Vapor pressure:	Not applicable.	
· Density:	Not Applicable	
· Relative density	Not determined.	
· Vapor density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with	Not Determined	
· Water:	Not determined.	
· Partition coefficient (n-octanol/wa	t <b>ter):</b> Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
• Other information	No further relevant information available.	

## **10 Stability and reactivity**

· Reactivity No further relevant information available.

- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

## **11** Toxicological information

- · Information on toxicological effects
- Acute toxicity:
- · Primary irritant effect:
- on the skin: Irritant to skin and mucous membranes.
- on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) Substance is not listed.
- · NTP (National Toxicology Program) Substance is not listed.
- · OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

## **12 Ecological information**

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- *Mobility in soil* No further relevant information available.

(Contd. on page 6)

US –

Printing date 10/19/2016

Reviewed on 10/19/2016

(Contd. of page 5)

Trade name: Indocyanine Green

· Additional ecological information:

- · General notes:
- Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. • Results of PBT and vPvB assessment

· **PBT:** Not applicable.

- · **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

## **13 Disposal considerations**

· Waste treatment methods

• *Recommendation:* Can not be disposed together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packagings:

• *Recommendation:* Discard must be made according to official regulations.

Transport information	
· UN-Number · DOT, ADR, IMDG, IATA	Not regulated
· UN proper shipping name · DOT, ADR, IMDG, IATA	Not regulated
· Transport hazard class(es)	
· DOT, ADR, IMDG, IATA · Class	Not regulated
· Packing group · DOT, ADR, IMDG, IATA	Not regulated
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
• Transport in bulk according to Annex II o MARPOL73/78 and the IBC Code	of Not applicable.
· UN "Model Regulation":	Not regulated

## **15 Regulatory information**

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

· Sara

- Section 355 (extremely hazardous substances): Substance is not listed.
- Section 313 (Specific toxic chemical listings): Substance is not listed.
- TSCA (Toxic Substances Control Act): Substance is not listed.
- · Proposition 65
- · Chemicals known to cause cancer: Substance is not listed.
- Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is not listed.

(Contd. on page 7)

US

Printing date 10/19/2016

Reviewed on 10/19/2016

Trade name: Indocyanine Green

(Contd. of page 6) · Carcinogenic categories · EPA (Environmental Protection Agency) Substance is not listed. • TLV (Threshold Limit Value established by ACGIH) Substance is not listed. · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed. • GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS). · Hazard pictograms GHS07 · Signal word Warning · Hazard statements Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. · Precautionary statements Avoid breathing dust/fume/gas/mist/vapors/spray Wear protective gloves. Wear eye protection / face protection. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Specific treatment (see on this label). IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/container in accordance with local/regional/national/international regulations. · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## **16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Quality Control Dept.
- · Date of preparation / last revision 10/19/2016 / -

Abbreviations and acronyms:
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 IACGIH: American Conference of Governmental Industrial Hygienists
 EINECS: European Inventory of Existing Commercial Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 PBT: Persistent, Bioaccumulative and Toxic

(Contd. on page 8)

US

Printing date 10/19/2016

Reviewed on 10/19/2016

#### Trade name: Indocyanine Green

(Contd. of page 7)

vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Skin Irrit. 2: Skin corrosion/irritation – Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A STOT SE 3: Specific target organ toxicity (single exposure) – Category 3