



MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product name : Zeaxanthin

CAS No. : 144-68-3

EC Number : 205-636-4

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, manufacture of substances.

1.3 Details of the supplier of the safety data sheet

Company: Aurora Industry Co.,Ltd.

Tel: 0411-82288674

Address: Room 7033, No.9-1, Haifu Road, Dalian Free Trade Zone, China

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification under CLP according to (EC) 1272/2008 This product has no classification under CLP.

2.2 Label elements

Label elements under CLP according to (EC) 1272/2008 This product has no label elements.

2.3 Other hazards PBT

This substance is not identified as a PBT substance.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

| Name | Identifier | % | Classification |
|------------|---|-------|----------------|
| Zeaxanthin | CAS: 144-68-3 EC: 205-636-4 REACH: Not applicable | 35.0% | Not classified |

4. FIRST AID MEASURES

4.1 Description of first aid measures

Skin contact Wash immediately with plenty of soap and water.

Eye contact Bathe the eye with running water for 15 minutes.

Ingestion Wash out mouth with water.

Inhalation Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed



| | |
|-----------------------------|---|
| Skin contact | There may be mild irritation at the site of contact. |
| Eye contact | There may be irritation and redness. |
| Ingestion | There may be irritation of the throat. |
| Inhalation | There may be irritation of the throat with a feeling of tightness in the chest. |
| Delayed / immediate effects | Immediate effects can be expected after short-term exposure. |

4.3 Indication of any immediate medical attention and special treatment needed

Immediate / special treatment

No data available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media for the surrounding fire should be used.

5.2 Special hazards arising from the substance or mixture

Exposure hazards

In combustion emits toxic fumes.

5.3 Advice for fire-fighters

Wear protective clothing to prevent contact with skin and eyes. Wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

Refer to section 8 of SDS for personal protection details.

6.2 Environmental precautions

Do not discharge into drains or rivers.

6.3 Methods and material for containment and cleaning up

Clean-up procedures

Wash the spillage site with large amounts of water.

6.4 Reference to other sections

Refer to section 8 of SDS.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Handling requirements

Avoid the formation or spread of dust in the air.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions



Avoid contact with water or humidity. Keep container tightly closed. Store in cool, well ventilated area.

7.3 Specific end use(s)

No data available.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

8.1 Control parameters

Workplace exposure limits

No workplace exposure limit control parameters set

8.2 Exposure controls

| | |
|------------------------|---|
| Engineering measures | No data available. |
| Respiratory protection | Respiratory protective device with particle filter. |
| Hand protection | Protective gloves. |
| Eye protection | Ensure eye bath is to hand. Safety glasses. |
| Skin protection | Protective clothing. |

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| | |
|---|--------------------|
| Physical state | Solid. |
| Colour | Orange |
| Odour | No data available. |
| Melting point/Freezing point | 215.5 °C |
| Boiling point/initial boiling point/boiling range | No data available. |
| Flammability | No data available. |
| Lower/Upper explosion limit | No data available. |
| Flash Point | No data available. |
| Auto-ignition temperature | No data available. |
| Decomposition temperature | No data available. |
| pH | No data available. |
| Kinematic viscosity | No data available. |
| Solubility | No data available. |
| Partition coefficient n-octanol/water | No data available. |
| Vapour pressure | No data available. |
| Density/relative density | No data available. |
| Relative vapour pressure | No data available. |
| Particle characteristics | No data available. |

9.2 Other information

No data available.

10. STABILITY AND REACTIVITY



10.1 Reactivity

Stable under recommended transport or storage conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions

Decomposition may occur on exposure to conditions or materials listed below.

Hazardous reactions will not occur under normal transport or storage conditions.

10.4 Conditions to avoid

Heat.

10.5 Incompatible materials

Materials to avoid

Strong acids. Strong oxidising agents.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

- | | |
|--------------------------------------|--------------------|
| a) Acute toxicity | No data available. |
| b) Skin corrosion/irritation | No data available. |
| c) Serious eye damage/irritation | No data available. |
| d) Respiratory or skin sensitisation | No data available. |
| e) Germ cell mutagenicity | No data available. |
| f) Carcinogenicity | No data available. |
| g) Reproductive toxicity | No data available. |
| h) STOT-single exposure | No data available. |
| i) STOT-repeated exposure | No data available. |
| j) Aspiration hazard | No data available. |

Symptoms / routes of exposure

- | | |
|--------------|---|
| Skin contact | There may be mild irritation at the site of contact. |
| Eye contact | There may be irritation and redness. |
| Ingestion | There may be irritation of the throat. |
| Inhalation | There may be irritation of the throat with a feeling of tightness in the chest. |

Delayed / immediate effects Immediate effects can be expected after short-term exposure.

Other information No data available.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

This product does not contain known or suspected endocrine disruptors according to REACH or relevant EU Regulations.

11.2.2 Other information

No additional information



12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available.

12.2 Persistence and degradability

Biodegradable.

12.3 Bioaccumulative potential

No bioaccumulation potential.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

This substance is not identified as a PBT substance.

12.6 Endocrine disrupting properties

This substance is not identified as having endocrine disrupting properties

12.7 Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal operations

Transfer to a suitable container and arrange for collection by specialised disposal company.

NB

The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. TRANSPORT INFORMATION

This product does not require a classification for transport.

15. REGULATORY INFORMATION

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

This Safety Data Sheet is prepared in accordance with Commission Regulation (EC) 1907/2006, amended by Commission Regulation (EU) 2020/878.

Authorisations/Restrictions

Regulation (EC) 1907/2006, REACH, Annex XIV list of substances subject to authorisation:

No data available.



Regulation (EC) 1907/2006, REACH, Annex XVII restrictions on the manufacture, placing on the market and use of certain dangerous substances:

No data available.

Regulation (EC) 1005/2009 on substances that deplete the ozone layer:

No data available.

Regulation (EC) 850/2004 on persistent organic pollutants, amended by (EU) No 2019/1021:

No data available.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

16. OTHER INFORMATION

H-Statement Full Texts

Abbreviations Full Texts

ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

ALARP As low as is reasonably practicable

CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging Regulations

COSHH Control of Substances Hazardous to Health

EC Number European Community Number

EC50 Effective Concentration 50%

EILINCS European List of Notified Chemical Substances

EINECS European Inventory of Existing Commercial Chemical Substances

GHS Globally Harmonised System

HSE Health & Safety Executive UK

IATA International Air Transport Association

IM Intramuscular

IMDG The International Maritime Dangerous Goods Code

IP Intraperitoneal

IV Intravascular

LD50 Lethal Dose 50%

LOEC Lowest Observable Effective Concentration

LTEL Long Term Exposure Limit

NOEC No Observable Effective Concentration

OECD Organisation for Economic Cooperations and Development

PBT Persistent Bioaccumulative Toxic

PPE Personal Protective Equipment

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals



RID Regulations Concerning the International Carriage of Dangerous Goods by Rail

| | |
|------|--|
| SC | Subcutaneous |
| SDS | Safety Data Sheet |
| STEL | Short Term Exposure Limit |
| STOT | Specific Target Organ Toxicity |
| VOC | Volatile Organic Compounds |
| vPvB | Very Persistent and Very Bioaccumulative |
| WEL | Workplace Exposure Limits |

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