

SAFETY DATA SHEET
According to OSHA 29 CFR 1910.1200 – GHS

Revision date: January 20, 2015

Supersedes: September 29, 2011

NUBIFER SYNTHETIC YELLOW IRON OXIDES

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Nubifer Y-2022, Y-4011, Y-4021, Y-5010
Nubifer Y-5011, Y-5020, Y-5021, Y-5028
Y-700 Iron Oxide Yellow

Use: Coloring agents, Pigments

Company identification: NUBIOLA USA
6369 Peachtree Street
Norcross, GA 30071, USA
Tel +1 (770) 277-8819
nuproducts.safety@nubiola.com

Emergency telephone number: 800-424-9300 (CHEMTREC, 24 hours)
International call: 703-527-3887 (collect calls accepted)

2. HAZARDS IDENTIFICATION

Classification of the chemical in accordance with Standard 29 CFR 1910.1200 (US-GHS)
Not classified.

Label elements (Hazard Communication Standard 29 CFR 1910.1200 (US- GHS))
No labelling applicable.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical name | CAS No | Concentration (%) | RTECS No |
|--|------------|-------------------|----------|
| Iron hydroxide oxide yellow (Pigment Yellow 42, CI 77492) | 51274-00-1 | 100 | --- |

Substance / Mixture: Substance
Synonyms: Yellow Iron Oxide

4. FIRST-AID MEASURES

Description of first-aid measures

In case of inhalation: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical attention.

In case of skin contact: Rinse skin with water. If skin irritation occurs, get medical advice.

In case of eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation occurs, get medical advice.

In case of ingestion: Rinse mouth. Do not induce vomiting unless directed to do so by a physician. If you feel unwell, seek medical attention.

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Most important symptoms/effects, both acute and delayed

Not expected to present a significant hazard under anticipated conditions of normal use.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Foam, water spray, dry chemical powder, carbon dioxide or sand.

Unsuitable Extinguishing Media: Do not use a heavy water stream.

Specific hazards arising from the chemical

No specific fire or explosion hazard.

Special protective equipment and precautions for fire-fighters

Wear self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Provide adequate ventilation. Evacuate unnecessary personnel. Wear personal protection equipment (See section 8).

Environmental precautions

Do not allow to enter into surface water or drains. Ensure waste is collected and contained.

Methods for containment and clean up

On land, sweep or shovel into suitable containers for disposal or recovery. Minimize generation of dust.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling: Avoid breathing dust. Wash thoroughly after handling. Keep container tightly closed.

Wear appropriate personal protective equipment as specified in Section 8.

Technical protective measures:

Provide adequate ventilation to minimize dust and/or vapor concentrations.

Conditions for safe storage, including any incompatibilities

Storage: Keep only in the original container in cool, dry, well-ventilated places away from incompatible materials. Keep container closed when not in use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

OSHA, ACGIH and NIOSH have established the following limits for Iron Oxides:

| Exposure Limits: Iron Oxides | | |
|---|---|--|
| ACGIH TLV | OSHA PEL | NIOSH REL |
| Total dust: 10 mg/m ³ as Fe (8h) Respirable: 5 mg/m ³ as Fe (8h) | Fumes: 10 mg/m ³ (8h) Respirable dust: 5 mg/m ³ (8h) | 5 mg/m ³ as Fe (dust and fumes) |

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Appropriate engineering controls

If needed use local exhaust ventilation to keep dust concentration below limits cited in this Section.

Personal protective equipment

Respiratory protection: Dust mask required in dusty environments or exceeding total dust limits.

Eye/face protection: Wear appropriate chemical safety glasses/goggles.

Hand /Skin protection: Wear appropriate protective gloves and clothing.

General Hygiene Considerations

Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | |
|--|---|
| Appearance: | Solid, fine powder |
| Color: | Yellow |
| Odor: | Odorless |
| pH: | 4 – 7 [ASTM D-1208-78] |
| Melting point: | > 1000 °C |
| Boiling point: | Not applicable |
| Flash point: | Not applicable |
| Flammability (solid, gas): | Not flammable |
| Explosive properties: | Not explosive |
| Vapor pressure at 20°C: | Not applicable |
| Vapor density: | Not applicable |
| Density: | 3.5 – 4.5 g/cm ³ [ASTM D-153-84] (water=1) |
| Solubility in water: | Insoluble |
| Partition coefficient, n-octanol/water: | Not applicable |
| Auto-ignition temperature: | Not applicable |
| Decomposition temperature: | > 180 °C |
| Viscosity: | Not applicable |

10. STABILITY AND REACTIVITY

Reactivity

No hazardous reaction known under normal conditions of use

Chemical stability

Stable under normal conditions

Possibility of hazardous reactions

Stable under normal conditions

Conditions to avoid

At temperatures above 180 °C conversion into Fe₂O₃

Incompatible materials

Strong acids and bases

Hazardous decomposition products

None under normal conditions

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11. TOXICOLOGICAL INFORMATION

| | |
|-------------------------------|--|
| Acute oral Toxicity: | LD50 oral, rat: > 10000 mg/kg |
| Acute Toxicity: | Based on available data, the classification criteria are not met |
| Chronic Toxicity: | Based on available data, the classification criteria are not met |
| Irritation: | Non-irritant |
| Sensitization: | Non-sensitizing |
| Mutagenicity: | Non-mutagenic |
| Carcinogenicity: | No human carcinogen |
| Reproductive toxicity: | No toxic for reproduction |
| Aspiration hazard: | Not applicable |

12. ECOLOGICAL INFORMATION

Ecotoxicity

Based on available data, the classification criteria are not met

LC50 (Fish 96 h) : > 100000 mg/L (*Danio rerio*)

Persistence and degradability

Not applicable (Inorganic substance)

Bioaccumulative potential

Not applicable

Mobility in soil

Not applicable

Results of PBT and vPvB assessment

The substance does not meet the criteria to be identified as PBT or vPvB

13. DISPOSAL CONSIDERATIONS

Dispose in a safe manner in accordance with local / state / Federal regulations. Avoid release to the environment.

It is responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal method in compliance with applicable regulations.

14. TRANSPORT INFORMATION

DOT

Not regulated. Not dangerous good.

Transport by sea (IMO / IMDG)

Not regulated. Not dangerous good

Air transport (ICAO/ IATA)

Not regulated. Not dangerous good

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15. REGULATORY INFORMATION

US Federal Regulations

TSCA: CAS # 51274-00-1 is listed on TSCA Inventory

SARA Title III Rules

Section 302 – Extremely Hazardous Substances: None

Section 304 – CERCLA Hazardous Substances: None

Sections 311/312 – EPCRA (Hazard Classes)

Immediate (Acute): None

Delayed (Chronic): None

Fire: None

Release of pressure: None

Reactivity: None

Section 313 – Toxic Chemical Release Inventory (TRI): None

US State Regulations

Yellow Iron Oxides do not appear on the following state Right-To-Know Lists:

California Proposition 65

Florida Hazardous Substances List

Massachusetts Substance List

Michigan Critical Materials Register

Minnesota Hazardous Substances List

New Jersey Hazardous Substance List

Pennsylvania Hazardous Substance List

FDA

Yellow Iron Oxide is cleared in 21 CFR:

Part 178 under §178.3297 (Colorants for polymers)

Part 177 under §177.2600 (Colorants in Rubber Articles intended for repeated Use)

Part 177 under §177.1210 (Closures with sealing gaskets for food containers)

Part 175 under §175.300 (Resinous and polymeric coatings)

Note: For food contact applications, users are asked to contact our technical service for further information.

Canada

DSL (*Canadian Environmental Protection Act, Domestic Substances List*): included

European Union

REACH (*Regulation (EC) No 1907/2006*): Nubiola registered substance, REACH no: 01-2119457554-33

EINECS (*European Inventory of Existing Commercial Chemical Substances*): 257-098-5

CLP (*Regulation (EC) No 1272/2008*): Yellow Iron Oxide is not classified as hazardous substance

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16. OTHER INFORMATION

Modification(s) to the previous version: compliance with 29CFR part 1910 subpart Z (2012)-GHS adaptation

This Safety Data Sheet complies with OSHA Hazard Communication Standard 29 CFR 1910.1200 (HCS-2012) and its adaptation of United Nations 'Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

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