

Thermoxide Yellow 20, 20M, 21

According to EC Directive 91/155/EEC

1. Identification

Product: Pigment Yellow 42

Product Name(s): Thermoxide Yellow 20, 20M, 21

C.I. No. 77492, CAS No. 51274-00-1, EINECS No. 215-168-2

Manufacturer/Supplier Identification

Manufacturer/Supplier: Formula Chemicals Co., Ltd.

Emergency telephone number: +886-922582639; +886-2-26685339

2. Hazards Identification

Health Hazard Data: No evidence of tumors and absorption or adverse effect. No negative results in rabbit test for primary skin and eye irritation.

Hazard Designation: No danger symbols.

Particular information pertaining to specific risk for humans and environment:

The product is not a substance subject to mandatory marking in according with EEC- 67/548 and 88/379 or amendments.

3. Composition / Information on Ingredients

Chemical characterization:

C.I. Pigment Yellow 42

This product is not considered to be hazardous substance under OSHA'S Hazard Communication Standard (29 CFR 1910.1200).

Chemical Name	CAS Number	Percentage (%)
Ferric Oxide Yellow	20344-44-49	90-95
Modified Zinc Ferrite	Trade secret	5-10
Water/Moisture	7732-18-5	0-3

4. Emergency and First Aid Procedure

General advice:

Remove contaminated clothing.

If inhaled:

If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.

If on skin:

Wash thoroughly with soap and water.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:

Rinse mouth and then drink plenty of water. Do not induce vomiting. Seek medical attention if necessary.

5. Firefighting Measures

Extinguishing media

Suitable extinguishing media: dry powder, foam

Unsuitable extinguishing media for safety reasons: carbon dioxide

Special hazards arising from the substance or mixture

Hazards during fire-fighting: harmful vapors

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Impact Sensitivity:

Product is not explosive when subjected to mechanical impact.

Further information:

Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Use personal protective clothing.

Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains / surface waters / groundwater.

Methods and material for containment and cleaning up

For small amounts: Pick up with suitable appliance and dispose of.

For large amounts: Contain with dust binding material and dispose of. Avoid raising dust.

7. Handling and Storage

Precautions for safe handling

Breathing must be protected when large quantities are decanted without local exhaust ventilation. Closed containers should only be opened in well-ventilated areas.

Protection against fire and explosion: Avoid dust formation. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

8. Exposure/ Protection method

Respiratory Protection: Dust Respirators recommended when handling pigment dusting.

Ventilation: Local exhaust ventilation recommended to controlling dust exposure, protective gloves are recommended.

Skin Contact: Protective gloves recommended.

Eye Protection: Safety glasses or goggles recommended.

9. Physical and Chemical Data

Form: Solid

Appearance: Powder

Color: Yellow

Odor: Odorless

Self-ignition temperature: Not applicable

Density: 4.1 g/ml

Solubility in water: Insoluble (20°C)

PH: 5.5~7.5

10. Stability and Reactivity

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated

Thermal decomposition: >200°C

Hazardous decomposition products: No hazardous decomposition products known.

11. Toxicological Data:

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Nontoxic after a single skin contact. Nontoxic by inhalation.

Nontoxic after a single ingestion.

Oral

Type of value: LD50

Species: rat

Value: > 5,000 mg/kg

Inhalation

Type of value: LC50

not determined

Dermal

Type of value: LD50

not determined

Irritation / corrosion

Assessment of irritating effects: Not irritating to eyes and skin.

Skin

Species: rabbit Result: non-irritant

Method: OECD Guideline 404

Eye

Species: rabbit Result: non-irritant

Method: OECD Guideline 405

Sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies. The product has not been tested. The statement has been derived from the properties of the individual components.

Species: guinea pig

Result: Non-sensitizing.

Method: OECD Guideline 406

Aspiration Hazard

Not applicable

Chronic Toxicity/EffectsGenetic toxicity

Assessment of mutagenicity: No mutagenic effects reported.

Carcinogenicity

Assessment of carcinogenicity: None of the components in this product at concentrations greater than 0.1% are listed by IARC; NTP, OSHA or ACGIH as a carcinogen.

Reproductive toxicity

Assessment of reproduction toxicity: No reproductive toxic effects reported.

Teratogenicity

Assessment of teratogenicity: No teratogenic effects reported.

12. Ecological Information

The product should not be allowed to enter drains or waterways.

Mobility: Non-volatile. Insoluble in water. Floats on water.

Persistence and degradability: Not biodegradable.

Bio-accumulative potential: No data available.

Environmental toxic data: No data available

13. Disposal Considerations

Product: In accordance with current regulations may be taken to waste disposal site or incineration plant, after consultation with site operator and/or with the responsible authority.

Unclean packing: Packing that cannot be cleaned should be disposed of as product waste.

Do not empty into waters or drains.

14. Transport Data

This preparation is not classified as dangerous according the international transport regulations (ADR/RID, IMDG, ICAO/IATA).

Land transport ADR/RID: Not Restricted

Maritime transport IMDG/GGVSea: Not Restricted

Air transport ICAO-TI and IATA-DGR: Not Restricted

15. Regulatory Information

Toxic Substance Control Act (TSCA):

All of the ingredients of this material have been reported to the U.S. EPA and are included in the TSCA Chemical inventory.

Classification According to EEC Directives: Not a substance subject to mandatory markings in accordance with EEC Directive 67/548/EEC or amendments.

Danger Symbol and Danger Designation: No Danger Symbols

R-Phrases: --

S-Phrases: --

Additional Information:

RCRA: Not regulated as a hazardous waste under RCRA

EINECS (European Economic Community): All components of this material are on the EINECS list.

CONEG: This product is certified to be in full compliance with CONEG legislation for packaging.

16. Other Information

This data sheet was prepared in accordance with Directive 91/155/EEC.

MSDS Prepared by: Formula Chemicals Documentation Department.

MSDS Version / Prepared or Revised on: Version 5.0 2019/01/09

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