

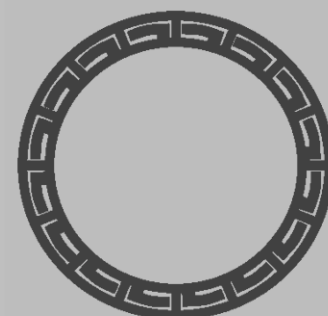
Safety Data Sheet

Transparent oxide yellow

Product Code: PS-IN0058

Department: inorganic dry pigments

C.A.S.: 12259-21-1



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Section: 1 Identification

Chemical name	Hydrated iron oxide Yellow
Color Index	C.I, Pigment red 42
Recommended uses	Colorant, Artists' pigment
Restrictions	None known

Section: 2 Hazard Identification

Classification of the product:	No need for classification according to GHS criteria for this product.
Label elements:	The product does not require a hazard warning label in accordance with GHS criteria.
Hazards not otherwise classified:	No specific dangers known, if the regulations/notes for storage and handling are considered.

HGS Label Elements

Signal Word

GHS Classification

Not regulated under SGH

Hazard Statements

No known significant effects or critical hazards.

Precautionary Statements

P260 Do not breathe dust.

Section: 3 Composition / Information on Ingredients

According to Hazardous Products Regulations (HPR) (SOR/2015-17)

This product does not contain any components classified as hazardous under the referenced regulation.

Section: 4 First-Aid Measures

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.
Most important symptoms and effects, both acute and delayed	
Symptoms:	No significant reaction of the human body to the product known.
Indication of any immediate medical attention and special treatment needed	
Note to physician	
Treatment:	Treat according to symptoms (decontamination, vital functions), no known specific antidote.

Section: 5 Fire-Fighting 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 vapours. 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:	Wear a self-contained breathing apparatus.
Further information:	The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

Section: 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.	

Section: 7 Handling And Storage

Precautions for safe handling	
Breathing must be protected when large quantities are decanted without local exhaust ventilation.	
Conditions for safe storage, including any incompatibilities	
Further information on storage conditions: Keep container tightly closed.	

Section: 8 Exposure Control/Personal Protection

No occupational exposure limits known.

Advice on system design:

Provide local exhaust ventilation to control dust.

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH approved (or equivalent) particulate respirator if ventilation is inadequate to control dust. Observe OSHA regulations for respirator use (29 CFR 1910.134).

Hand protection:

Chemical resistant protective gloves

Eye protection:

Safety glasses with side-shields.

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Due to the colouring properties of the product closed work clothes should be used, to avoid stains during manipulation. Hands and/or face should be washed before breaks and at the end of the shift.

Section: 9 Physical and Chemical Properties

Form:	powder
Odour:	odourless
Odour threshold:	not applicable, odour not perceivable
Colour:	yellow
pH value:	6.5 - 7
Melting point:	> 1,000 °C
Boiling point:	The product is a non-volatile solid.
Flash point:	Study does not need to be conducted.
Flammability:	not flammable
Lower explosion limit:	For solids not relevant for classification and labelling.
Upper explosion limit:	For solids not relevant for classification and labelling.
Autoignition:	not applicable
Vapour pressure:	not applicable
Density:	approx. 4 g/cm ³ (20 °C) (DIN EN ISO 787-10)
Relative density:	approx. 4 (20 °C)
Bulk density:	approx. 770 kg/m ³
Vapour density:	The product is a non-volatile solid.
Partitioning coefficient n-octanol/water (log Pow):	Study does not need to be conducted.
Self-ignition temperature:	not self-igniting
Thermal decomposition:	> 180 °C Iron oxide A transformation into the mentioned substance takes place above the indicated temperature.
Viscosity, dynamic:	Study does not need to be conducted.
Viscosity, kinematic:	Study does not need to be conducted.
Particle size:	No data available.
Solubility in water:	insoluble
Solubility (quantitative):	insoluble
Evaporation rate:	The product is a non-volatile solid.

Section: 10 Stability And Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

No corrosive effect on metal.

Oxidizing properties:

not fire-propagating

Chemical stability

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

Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

Conditions to avoid

Avoid dust formation. Avoid deposition of dust. Avoid extreme temperatures. See MSDS section 7 - Handling and storage.

Incompatible materials

No substances known that should be avoided.

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

> 180 °C

Possible thermal decomposition products:

Iron oxide

A transformation into the mentioned substance takes place above the indicated temperature.

Section: 11 Toxicological Information

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: Virtually nontoxic after a single ingestion.

Oral

Type of value: LD50

Species: rat (male)

Value: > 10,000 mg/kg (OECD Guideline 401)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Inhalation

Study scientifically not justified.

Dermal

Study scientifically not justified.

Assessment other acute effects

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Irritation / corrosion

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

Skin

Species: rabbit

Result: non-irritant

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Eye

Species: rabbit

Result: non-irritant

Method: similar to OECD guideline 405

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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 substances/products of a similar structure or composition.

Maurer optimisation test

Species: guinea pig

Result: Non-sensitizing.

Method: other

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aspiration Hazard

not applicable

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: The substance may cause increase in lung mass and lung tissue changes after repeated inhalation. Observed effects were reversible. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Genetic toxicity

Assessment of mutagenicity: No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Carcinogenicity

Assessment of carcinogenicity: The whole of the information assessable provides no indication of a carcinogenic effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Reproductive toxicity

Assessment of reproduction toxicity: Study scientifically not justified.

Teratogenicity

Assessment of teratogenicity: Study scientifically not justified.

Symptoms of Exposure

No significant reaction of the human body to the product known.

Section: 12 Ecological Information

Toxicity

Toxicity to fish

LC0 (48 h) > 1,000 mg/l, *Leuciscus idus*

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aquatic invertebrates

LC50 (48 h) > 100 mg/l, *Daphnia magna* (OECD Guideline 202, part 1, static)

The details of the toxic effect relate to the nominal concentration. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aquatic plants

Study scientifically not justified.

Chronic toxicity to fish

Study scientifically not justified.

Chronic toxicity to aquatic invertebrates

Study scientifically not justified.

Assessment of terrestrial toxicity

Study scientifically not justified.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

DIN EN ISO 8192 aquatic

activated sludge of a predominantly domestic sewage/EC50 (3 h): 10,000 mg/l

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Persistence and degradability

Assessment biodegradation and elimination (H₂O)

The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants. Inorganic product which cannot be eliminated from water by biological purification processes.

Elimination information

Study scientifically not justified.

Bioaccumulative potential

Assessment bioaccumulation potential

The product will not be readily bioavailable due to its consistency and insolubility in water.

Mobility in soil

Assessment transport between environmental compartments

Adsorption to solid soil phase is not expected.

In case of emission into water, the high density will lead to stratification processes or sedimentation of the product.

Additional information
The product contains: Carbonyl iron powder

Section: 13 Disposal Considerations

Waste disposal of substance:
Must be disposed of or incinerated in accordance with local regulations. Check for possible recycling.
Container disposal:
Uncontaminated packaging can be re-used. Packs that cannot be cleaned should be disposed of in the same manner as the contents..

Section: 14 Transport Information

Land transport TDG	Not classified as a dangerous good under transport regulations
Sea transport IMDG	Not classified as a dangerous good under transport regulations
Air transport IATA/ICAO	Not classified as a dangerous good under transport regulations

Section: 15 Regulatory Information

Federal Regulations Registration status:	Chemical DSL, CA released / listed
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Section: 16 Other Information

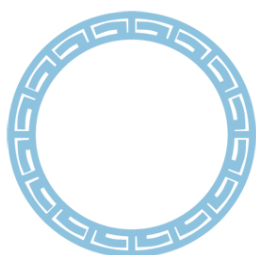
Reference Prepared by	Manufacturer's material safety data sheet. Kama pigment.s
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Last revision: 2019-06-28