

# Material Safety Data Sheet

According to 91/155/EEC and ISO 11014- 1

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Replaced issue dd.:2017/01/01

## 1. Identification of substance and of the company

Product Name: Iron Oxide Yellow Pigment

Type: Powder

Chemical class: Synthetic iron oxide alpha-FeOOH

Application: Colorants (pigments and dyestuffs), inorganic

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## 2. Composition/Data on components

### Chemical characterization:

Synthetic iron oxide  $\text{Fe}_2\text{O}_3 \cdot \text{H}_2\text{O}$  ( $\alpha$ -FeOOH), C. I. Pigment YELLOW 42, **CAS. No. 51274-00-1**

### Dangerous components:

None

### Registration Number in REACH:

01-2119457554-33-0012

### EINECS Number:

257-098-5

### Ingredient:

FeOOH:

Moisture:

Water Soluble Salts:

$\text{Al}_2\text{O}_3 + \text{SiO}_2$ :

### Content:

96.0% min

1.0% max

0.50% max

2.50% max

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100.00%

## 3. Hazards identification

### \*\*\*\*\*Emergency Overview\*\*\*\*\*

May cause mechanical irritation to the eyes, skin and respiratory tract, Irritating gases/fumes may be given off during burning or thermal decomposition.

\*\*\*\*\*

HMIS Codes: H=0,F=0,R=0,P=0 (0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe)

**Eyes:** Non-irritating to the eyes. Excessive exposure to airborne dust may reduce visibility and /or cause unpleasant deposits.

**Skin:** will not irritate skin and is not likely to cause allergic skin reaction. Injury to the skin or mucus membranes can occur by direct mechanical action or by rigorous skin cleaning necessary for removal of dust.

**Other effects:** none known.

Not a hazard in normal industrial use. No harmful effects observed.

The product is not a substance subject to mandatory marking in accordance with the EEC Directive 67/584/EEC

Or amendments.

## 4. First Aid measures

**First aid for skin:** In case of skin contact, immediately flush skin with water. Wash clothing before reuse. Call a physician if irritation occurs.

**First aid for ingestion:** Immediately contact a physician.

**First aid for eyes:** Flush eyes with plenty of water, lifting lids periodically for at least 15 minutes. Consult a physician if irritation persists.

**First aid for inhalation:** Remove from dusty area to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

#### 5. Fire fighting measures

**Product is non-combustible.**

**Upper Explosive Limit (UEL):** Will not explode.

**Lower Explosive Limit (LEL):** Will not explode.

**Fire Fighting Instructions:** Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes and smoke inhalation.

**Suitable extinguishing media:** Material is not combustible. Use extinguishing media suitable for other combustible materials in the area.

**Special hazards caused by the material, its combustion products or resultant gases:** none

**Flash point:** Not applicable.

**Auto-ignition temperature:** Not applicable.

#### 6. Accidental release measures

**Small spill:** if dust is generated, use appropriate respiratory protection. Vacuum or scoop material into an appropriately marked container for re-use or disposal. Avoid excessive generation of dust.

**Large spill:** Use recommend protective clothing and respiratory protection. Use shovel to reclaim material. Vacuum or scoop material into an appropriately marked container for re-use or disposal. Avoid excessive generation of dust. Spill area can be washed with water. Collect wash water for approved disposal. Prevent runoff from entering storm sewers and ditches, which lead to natural waterways.

**Environmental protection conduct:** Do not sweep or wash into public stretches of water, sewers or sites of unknown discharge paths.

**After spillage/leakage/gas leakage:**

Clean up immediately with wetting or absorbent material avoiding dusting

#### 7. Handling and storage

**Handling:**

Put on appropriate personal protection equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Storage:**

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

**Protection against fire and explosion:**

The product is non-flammable

**Flammability Class:** not applicable

#### 8. Exposure controls/personal protection

**Additional notes for design of plant equipment:**

No further details, see sec. 7

**Components with workplace-related limits to be monitored:**

Designation	%	Type of data	Unit
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Nuisance dust

100

MAK  
TLV/TWA(USA)

6 mg/m<sup>3</sup>  
10 mg/m<sup>3</sup>

**Additional protective measures:** Eye wash stations and washing facilities should be available. Employees should wash their hands and face before eating, drinking or using tobacco products.

**Respiratory protection:** An appropriate dust filter has to be used if a breathable dust is liberated.

**Eye protection requirements:** Safety glasses are recommended.

**Skin protection requirements:** Rubber, cloth, or plastic gloves are recommended to reduce skin contact where appropriate for job conditions.

### 9. Physical and chemical properties

Form: powder  
Color: yellow  
Odor: odorless

Content Fe<sub>2</sub>O<sub>3</sub> % 86.0  
Content SiO<sub>2</sub>+Al<sub>2</sub>O<sub>3</sub> % 1.0  
Tamped Density g/ml 0.3-0.5

	<u>Value/Area</u>	<u>Unit</u>	<u>Method</u>
<b>Change in physical state</b>			
<b>Thermal Decomposition:</b>	n.a.	°C	Lit.
<b>Flash point:</b> not flammable			
<b>Flammable properties:</b> The product is not flammable under standardized conditions.			
<b>Explosion risks:</b> The product is not explosive			
<b>Specific Gravity:</b> Greater than 1			
<b>Viscosity:</b> Not applicable.			
<b>Vapour pressure:</b> Not applicable.	n.a.	mbar	
<b>Density:</b>	(20°C) 4,1	g/cm <sup>3</sup>	DIN/ISO 787 part 10 B
<b>Solubility in water:</b>	(20°C) <0,5	%	DIN/ISO 787 part 3
<b>PH-Value:</b> (at 100 g/l H <sub>2</sub> O)	(20°C) ca.3.5-7		DIN/ISO 787 part 9

### 10. Stability and reactivity

**Hazardous Polymerization:** Will not occur.

**Stability:** Stable Material.

**Incompatibilities:** None known.

**Instability conditions:** None known.

**Decomposition temperature:** Greater than 120 C.

**Decomposition products:** None known.

### 11. Toxicological Information

**Acute Toxicity:**

**LD50/oral/rat:** Not tested.

**LD50/inhal/rat:** Not tested.

**Sensitizing:** None expected.

**Primary skin irritation/rabbit:** No data available.

**Primary mucous membrane irritation/rabbit' eyes:** No data available.

Because of experiences with the product mentioned, there are no recognizable hazards for human beings,  
If it is correctly used and applied.

### 12. Ecological informations

**Mobility:** No data available.  
**Degradability:** No data available.  
**Accumulation:** No data available.  
**Short and long term effects on:**  
**Ecotoxicity:** No data available.  
**Other adverse effects:** No data available.

### **13. Disposal considerations**

**Product:**

Material which can not be re-used should be disposed in according with federal, state and local environmental control regulations at an authorized site by an approved contractor. This product when discarded as sold is not a RCRA hazardous waste. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40CFR 261.20-24)

**Waste Code No.:**

Check re-use as alternative.

**Contaminated packages and containers:**

Emptied, but contaminated packages and containers may be recycled.

**Waste Code No.:** 18715 (Germany)

### **14. Transport information**

**International:**

**Land transport:** ADR/RID/GGVS/GGVE: Not Regulated

**Sea transport:** IMDG/GGV See UN-No.: Not Regulated

**Air transport:** ICAO/IATA UN/ID-No.: Not Regulated

**U.S.** D.O.T. Classification: Not Regulated

**CANADA** Transport of dangerous goods: Not Regulated

**DOT Shipping Name:** None

**Technical Shipping Name:** Inorganic Oxide

**DOT Hazardous Classification:** Non-Regulated. This product is not classed as a dangerous substance under the Classification, Packaging and Labeling of Dangerous Goods Act.

**DOT Hazard Class:** Non-Regulated.

**DOT Identification Number:** None

**DOT Labels required:** None

**DOT Placards required:** None. No specific transportation precautions required.

**UN Class:** None.

**UN/NA Number:** None.

### **15. Regulatory information**

**Labeling according to EEC Directives:** Not Regulated.

**SARA**

**SARA 312:**

**US FEDERAL**

**TSCA :**

CAS. No. 51274-00-1 is listed on the TSCA inventory.

**Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

**Section 12b**

None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

**CERCLA Hazardous Substances and corresponding RQs**

None of the chemicals in this material have an RQ.

**SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

**Section 313**

No chemicals are reportable under Section 313.

**Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

**Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

**California Prop 65**

California No Significant Risk Level: None of the chemicals in this product are listed.

**China: IECSC (Inventory of Existing Chemical Sunstances of China) :** Not Regulated

**Australia: AICS (Australian Inventory of Chemical Substances):** Not Regulated

**Philipine: PICCS :** Not Regulated

**Japan: MITI (Ministry of International Trade & Industry list of existing Chemical Substance) :** Not Regulated

**Korea: TCCL (Toxic Chemical Control Law):** Not Regulated

<b>Health:</b> Immediate (Acute):	No*	<b>Fire:</b>	None
Delayed (Chronic):	No**	<b>Reactivity:</b>	None
		<b>Sudden release of pressure:</b>	None

Not an acute hazard, however may cause irritation due to abrasiveness.

These products are not classified as Carcinogens by the National Toxicology Program, the International Agency for Research on Cancer or the Occupational Safety and Health Administration. We do not know of any chronic health effect from these products. The finished pigment is a fine powder and may increase the risk of respiratory and skin disorders aggravated by dust.

The product is not a substance subject to mandatory marking in accordance with the EEC Directive 67/548/EEC or amendments.

**Water risk class:** NWG (Non-hazardous to waters, listed in annex I. of German Water Utilization Act (WHG))

**16. Further information:**

HMIS Codes: H=0,F=0,R=0,P=0 (0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe)

Vertical markings at left margin denote alterations of previous issue.

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**Department issuing this data sheet:** Product safety department