

SAFETY DATA SHEET IRON OXIDE YELLOW PREPARATION

according to Regulation (EC) No. 1907/2006

SolidFlow **PR101 Trasparent Oxide Red** - Product code **SF 235-X**

Date of Revision: October 10th 2024 Revision N: 1 Country / Language: ITA / EN

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name:	Transparent Oxide Red Preparation
Product code:	SF 235-X
CAS number:	1309-37-1/51274-00-1
INDEX number:	CI Pigment Red 101
EEC (EINECS) number:	215-168-2/257-098-5
Structural Formula:	$\text{Fe}_2\text{O}_3/\text{FeO}(\text{OH})$
Note:	This substance/ mixture contains nanoforms.

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

Use of the Substance/Mixture:	Synthetic iron oxide mixed with anionic and non-ionic surfactants
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1.3. Details of the supplier of the safety data sheet

Company	SIOF S.p.A. Via Garibaldi 62 15068 - Pozzolo Formigaro (AL) Italy Tel: +39 0143417781 VAT nr.: IT 0016470069 Production sites: 1) Pozzolo Formigaro (AL) - Via Garibaldi 62 2) Verona - Via Pisano 53/A
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Email address of the competent person:

siof@siof.it

1.4. Emergency telephone number

Emergency telephone number:	+39 0143417781
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.2. Label elements

None.

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mix does not contain components considered to have endocrine disrupting properties according to REACH article 57(f) or Commission Delegated regulation (UE) 2017/2100 of the Commission Regulation (UE) 2018/605 at levels of 0.1% or higher.



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Toxicological information: The substance/mix does not contain components considered to have endocrine disrupting properties according to REACH article 57(f) or Commission Delegated regulation (UE) 2017/2100 of the Commission Regulation (UE) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Remarks: Non hazardous ingredients

Components:

Name: Transparent Iron Oxide Fe₂O₃

EEC(EINECS) number: 215-168-2

CAS number: 1309-37-1

Name: Transparent Iron Oxide FeO(OH)

EEC(EINECS) number: 257-098-5

CAS number: 51274-00-1

Other components:

Name: Anionic and non-ionic additives

This substance/mixture contains nanoforms. As a precautionary measure, the D10 of the pigmentary preparation may be considered to approach the size of the primary particle. The nanoforms pertain to the pigment as a single component.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Remove contaminated clothes.

After inhalation: Supply fresh air and seek medical advice in case of complaints.

After skin contact: Remove contaminated clothing. Wash off immediately with plenty of water and soap.

After eye contact: Rinse open eyes with plenty of water for at least 15 minutes.

After ingestion: Rinse mouth with water and drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No further information available. See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment (decontamination, vital functions), no specific antidote known. See Section 11 for more detailed information on health effects and symptoms.



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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: powder, foam.

Unsuitable extinguishing media: carbon dioxide (CO₂)

5.2 Special hazards arising from the substance or mixture

In case of fire: hazardous vapors may be released.

Development of fumes/aerosol.

5.3 Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.

Further information: Collect contaminated extinguishing water and debris separately; avoid contamination of sewage system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid formation of dust, wear protective clothing. (See section 8)

6.2 Environmental precautions

Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

6.3 Methods and material for containment and cleaning up

Small spills: Clean up with suitable appliance and dispose adequately.

Large spills: Contain with dust binding material and dispose accordingly.

Avoid dust formation.

6.4 Reference to other sections

For emergency phone numbers see Section 1. For the appropriate safety measures see Section 8. For information regarding the treatment of waste products see Section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Instructions on safe handling: Respiratory protection when handling without exhaust system.

Hygiene measures: Wash hands before breaks and after work.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions:

Store in tightly sealed containers in a dry room.

Information on fire and explosion protection:

Avoid dust formation.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

It does not contain substances with occupational exposure limit values.



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8.2 Exposure controls

Technical protective measures:

Provide adequate ventilation in case of dust formation.

Personal Protection:

General protective measures:

Protective clothing recommended due to the coloring effects of the product. The usual precautionary measures are to be adhered to when handling chemicals.

Protective clothing recommended due to the coloring effects of the product. Wash hands before breaks and after work.

Respiratory protection:

In case of higher concentration or long-term exposure of dust: particle filter type P1 or FFP1, EN 143 or 149 (for solid particles).

Hand protection:

Chemical protective gloves (EN 374 (Europe), F739 (US)).

The manufacturer's directions for use should be observed because of the great diversity of types.

Protective glove material:

Nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm).

Recommended: Protective index 6, > 480 min. of permeation time accord. EN 374.

Nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinyl chloride (0.7 mm).

Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material and dexterity.

Always seek advice from glove suppliers.

Eye protection:

Safety glasses with protective shields (EN 166).

Body protection:

Protective clothing.

Environmental precautions:

No special measures required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Granules

Physical state: Solid

Colour: Orange

Odour: Characteristic

Solubility: Insoluble in water. Insoluble in organic solvents. It disperses.

Density: ~ 4 kg/l (pigment)

Bulk density: 0.8 - 1.2 kg/l

Decomposition temperature: 180 °C (pigment)

Flammability: Not applicable

9.2 Other information

No data

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable if used according to specifications.



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10.2 Chemical stability

Stable if used according to specifications.

10.3 Possibility of hazardous reactions

Hazardous reactions:

None if handled and stored according to specifications.

10.4 Conditions to avoid

Conditions to avoid:

Avoid formation of dust.

Protect from heat.

Thermal decomposition:

> 180 °C. Conversion to Fe₂O₃

10.5 Incompatible materials

Substance subject to catalytic decomposition caused by the powder, such as peroxides. Avoid contact with aluminum, calcium hypochlorite, idrazin, and ethyl oxide powders.

10.6 Hazardous decomposition products

Does not generate hazardous decomposition products in the standard use and storage conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of exposure:

Product:

Acute toxicity

LD50 Oral:

> 5000 mg/kg (rat)

Not toxic after single oral exposure.

LD50, dermal:

No information available.

LC50, inhalation:

No information available.

Primary effects:

Irritant effect on skin:

Non irritating (rabbit; OECD 404)

Irritant effect on eyes:

Non-irritating to eyes (rabbit; OECD 405)

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

Non sensitizing.

Mutagenicity:

Product does not show a mutagenic effect in a test with bacteria.

Reproductive toxicity:

No information available.

Carcinogenicity:

No cancerogenic effect known.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

Single exposure: no organospecific toxicity expected.

Repeated exposure: the substance may cause increase in lung mass and lung tissue changes after repeated inhalation. The effects observed were reversible.

Additional toxicological information:

Aspiration hazard: not applicable

By analogy with a product of similar composition.



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SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish:	LC0: > 1000 mg/l (48h, Leuciscus idus)
Daphnia toxicity:	LC50: > 100 mg/l (48h, Daphnia magna; OECD 202)
Bacteria toxicity:	EC50: > 10000 mg/l (3h, active sludge)
Algae toxicity:	Not determined.

12.2 Persistence and degradability

The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.

12.3 Bioaccumulative potential

Bioaccumulation is not to be expected. The product settles on the sediment due to its high density and stratification.

12.4 Mobility in soil

Not expected to absorb on soil.

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Water hazard class:	Do not let product contaminate ground water, waterways or sewage system.
Behaviour in sewage systems:	
Further ecological effects:	The product does not contain any substances which can deplete the ozone layer, according to Section I of EC-Directive 2037/2000/EC. The product contains iron. Result based on a product with similar composition.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product:	In accordance with current regulations, product may be taken to a waste disposal site or incineration plant, after consultation with site operator and/or with the responsible authority.
European Waste Code (EWC):	
Uncleaned packaging:	Uncontaminated packaging may be recycled. Packaging may be disposed of in the same manner as the product. Classified as non-hazardous waste.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / AND

14.1 UN number	The product is a non-hazardous material for both national and international transport on road, rails, sea and air.
14.2 UN proper shipping name	The product is a non-hazardous material for both national and international transport on road, rails, sea and air.
14.3 Transport hazard class(es)	No danger sign is required for the transport of this product.



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14.4 Packing group	The product is a non-hazardous material for both national and international transport on road, rails, sea and air.
14.5 Environmental hazards	The product is a non-hazardous material for both national and international transport on road, rails, sea and air.
14.6 Special precautions for user	None.
14.7 Marine Transport in bulk in accordance with IMO acts	Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH- Restrictions in production, entry in the market, and use of such substances, mixtures and hazardous products:

Not applicable

International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors:

Not applicable

REACH- list of substances extremely problematic, candidates for authorization (Article 59) This product does not contain extremely problematic substances. **Regulation (CE) n1907/2006 REACH article 57:**

Not applicable

Regulation (CE) n1005/2009 of substances that reduce the ozone layer:

Not applicable Regulation (CE)n2019/ 1021 relative persistent organic pollutants:

Not applicable

Regulation (CE)n111/2005 of the Council for the control of trade of drug precursors between the European Union and third countries:

The product is not illegal/ under restrictions

Regulation (EU) 2019/1021 on persistent organic pollutants (recast):

Not applicable.

Regulation (CE) n 649/2012 of the European Parliament on the exportation and importation of hazardous chemical substances:

Not applicable REACH - List of substances subject to authorization (XIV)

Not applicable.

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable.

Regulation (EC) no. 1907/2006 of the European Parliament and of the Council, of 18 December 2006 concerning registration, evaluation, authorization and restriction of chemical substances (REACH), and subsequent amendments.

Commission Regulation no. 453/2010 on Safety Data Sheets.

Regulation (EC) no. 1272/2008 relating to the classification, labeling and packaging of substances and mixtures.

Other legislations:

Legislative Decree 9 April 2008, n°81 (Implementation of article 1 of Law 3 August 2007, n°123, regarding protection of health and safety in the workplace) and subsequent amendments.

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Legislative Decree 3 April 2006, n°152, (environmental regulations) and subsequent amendments. Legislative Decree 6 February 2009, n°21 (Regulation implementing the provisions of the Regulation (EC) n648/2004 relative to detergents.

15.2 Chemical safety assessment

Not applicable.

SECTION 16: Other information

Issued by:	Responsible for Health, Safety, and Environment
Issue date:	October 10 th , 2024
Revision N:	1

More information:

This safety data sheet is drawn up in compliance with in force the regulations in classification and labeling matter on the revision date indicated in the header. The information provided on this SAFETY DATA SHEET corresponds to the state of our knowledge and knowledge our experience of the product, and it is not exhaustive.

It applies to the product as is, compliant with specifications. In case of combinations or mixtures, make sure that no new danger can arise. In no case does it exempt the user of the product from complying with all legislative provisions, administrative and regulatory issues relating to the product, hygiene and safety at work.