



Material safety data sheet
According to EU Regulation 1907/2006 in the current version
Brown 23 Oxide Cosmetic Pigment

1. Identification of the substance/mixture and company

Trade name: Brown 23 Oxide Cosmetic Pigment
High purity brown iron oxide
INCI CI 77499, CI 77491, CI 77492
CAS No. : 1317-61-9/ 1309-37-1/ 51274-00-1
EINESCS No. : 215-277-5/ 215-168-2/ 257-098-5
REACH pre-registration No. : -
Utilization: Raw material for cosmetic or professional use
Supplier company identification: **Elemental SRL**, Piața Cazărmii no.15, 410188-Oradea, jud.Bihor, Romania
Tel/Fax: +40259-436.755, www.elemental.eu
Emergency: RO: număr național pentru cazuri de urgență: 021 3183606 Institutul de Sănătate Publică București.
International emergency number: +49 180 2273-112

2. Hazards Identification

2.1 Classification of the substance or mixture

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
Adverse physico-chemical, human health and environmental effects: No other hazards

2.2 Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
Special provisions according to Annex XVII of REACH and subsequent amendments: None

2.3 Other hazards

No PBT Ingredients are present.
Other Hazards: No other hazards.

3. Declaration of ingredients

3.1 Substances

Not Available

3.2 Mixtures

Mixture identification: CI 77499, CI 77491, CI 77492

Hazardous components within the meaning of the CLP regulation and related classification:

Name	Ident. Numb.	Classification	Registration Number	Qty
Diiron trioxide	CAS:1309-37-1 EC:215-168-2	-	01-2119457614-35-XXXX	60-70 %
Triiron tetraoxide	CAS:1317-61-9 EC:215-277-5	Self-heat. 2, H252	01-2119457646-28-XXXX	5-7 %



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4. First aid measures

4.1 Description of first aid measures

In case of skin contact: Wash with plenty of water and disinfectant/non-abrasive soap.

In case of eye contact: Wash immediately with water.

In case of ingestion: Do not induce vomiting, get medical attention showing the MSDS and hazards label.

In case of inhalation: Remove casualty to fresh air and keep warm and at rest.

4.2 Most important symptoms and effects, both acute and delayed

Not Available

4.3 Indication of any immediate medical attention and special treatment needed

None

5. Fire fighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water, CO₂, foam, chemical powders, according to the materials involved in the fire.

In case of fire, use foam, dry chemical, CO₂.

Unsuitable extinguishing media: None in particular.

5.2 Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases. Burning produces heavy smoke.

5.3 Advice for fire-fighters

Use suitable breathing apparatus. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment. Remove persons to safety. See protective measures under point 7 and 8.

6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose of it following local legislation. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities if required.

6.3 Methods and material for containment and cleaning up

Suitable material for cleaning up: dry and inert absorbing material (e.g. vermiculite, sand, earth). Wash with plenty of water.



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6.4 Reference to other sections

See also section 8 and 13.

7. Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapors and mists. Do not eat or drink while working. See also section 8 for recommended protective equipment.

7.2 Conditions for safe storage, including any incompatibilities

Store in a tightly closed container in a cool, dry, well-ventilated area.

Incompatible materials: None in particular.

Instructions regarding storage premises: Adequately ventilated premises.

7.3 Specific end use(s)

Recommendation(s): Storage temperature < 25°C

Industrial sector specific solutions: None in particular.

8. Exposure controls / personal protection

8.1 Control parameters

Community Occupational Exposure Limits (OEL)

Component	OEL Type	Country	Long Term mg/m ³	Long Term ppm	Short Term mg/m ³	Short Term ppm	Behaviour
Diiron trioxide	ACGIH		5				
	NATIONAL	France	5				
	NATIONAL	Spain	5				
	NATIONAL	Finland	5				
	NATIONAL	Portugal	5				
	NATIONAL	Belgium	5				
	NATIONAL	Poland	5			10	
	NATIONAL	Russian Federation	6				
	NATIONAL	United Kingdom	5			10	
	NATIONAL	United Kingdom	5			30	
	NATIONAL	United Kingdom	5			12	
	NATIONAL	United Kingdom	10			10	
	NATIONAL	United Kingdom	4			10	
	NATIONAL	France	10				
Triiron tetraoxide	ACGIH		5				
	ACGIH		5.000				
	NATIONAL	France	10.000				
NATIONAL	France	5.000					

8.2 Exposure controls

Eye/face protection: Eye glasses with side protection.

Skin protection: Chemical protection clothing.



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Hand protection: NBR (nitrile rubber).

Respiratory protection: Filtering Half-face mask (DIN EN 149).

8.3 Hygienic and Technical measures

Not Available

9. Physical and chemical properties

9.1 Information on physical and chemical properties

Physical State Solid

Appearance: Powder, Brown

Odour: Odorless

Odour threshold: Not Available

pH: Not Available

Melting point/ range: Not Available

Boiling point/ range: Not Available

Flash point: Not Applicable

Evaporation rate: Not Available

Upper/lower flammability or explosive limits: Not Available

Vapour density: Not Available

Vapour pressure (20°C): Not Available

Density (20°C): Not Available

Water solubility: Insoluble

Lipid solubility: Insoluble

Partition coefficient (n-octanol/water): Not Available

Auto-ignition temperature: Not Available

Decomposition temperature: Not Available

Viscosity (20°C): Not Available

Explosive properties: Not Available

Oxidising properties: Not Available

Flammability (Solid, Gas): Not Available

Volatile Organic compounds - VOCs = Not Available

9.2 Other information

Substance group relevant properties: Not Available

Miscibility: Not Available

Conductivity: Not Available

10. Stability and reactivity

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Data not Available.



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10.3 Possibility of hazardous reactions

Burning produces carbon monoxide and/or carbon dioxide.

10.4 Conditions to avoid

Stable under normal conditions of temperature and pressure.

10.5 Incompatible materials

Avoid strong oxidizing agents, peroxides, acids, alkali metals.

10.6 Hazardous decomposition products

Burning produces carbon monoxide and/or carbon dioxide.

11. Toxicological information

11.1 Information on toxicological effects

Toxicological Information:

FDA-EEC : positive lists

Toxicological Information of the Preparation

- a) acute toxicity LD50 > 2000.00000 mg/kg
- b) skin corrosion/irritation Skin Irritant No Irritant effect
- c) serious eye damage/irritation Eye Irritant No Irritant effect

Toxicological information on main components of the mixture:

Diiron trioxide	a) acute toxicity LD50 Oral Rat > 10000 mg/kg		
Triiron tetraoxide	a) carcinogenicity	Carcinogeneticity Rat Negative Genotoxicity Negative	OCDE 473 OCDE 471 - In vitro mammalian chromosome aberration test: OCDE 473 (hamster) - Reverse mutation assay (Ames test): OCDE 471 (Salmonella typhimurium)
	b) reproductive toxicity	Reproductive Toxicity Negative	
	c) respiratory or skin sensitisation	Inhalation Sensitization Rat 5000.00000 mg/kg	
	d) skin corrosion/irritation	Skin Irritant Rabbit No Irritant effect 24h	OCDE 404
	e) serious eye damage/irritation	Eye Irritant Rabbit No Irritant effect	OCDE 405
	f) acute toxicity LD50 Oral Rat > 5000.00000 mg/kg	Standard acute method	

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation



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- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

Component	CMR Properties	Effect dose	Value	Exposure time	Species	Method	Evaluation	Remark
Triiron tetraoxide	Chronic inhalative							Potential chronic respiratory irritation

Sub-acute and Chronic Toxicity

12. Ecological information

12.1 Toxicity

Adopt good working practices, so that the product is not released into the environment.
Eco-toxicity:

List of Eco-Toxicological properties of the components

Quantity	Component	Ident. Numb.	Ecotox Data
5-7 %	Triiron tetraoxide	CAS: 1317-61-9 - EINECS: 215-277-5	c) Bacteria toxicity : EC0 > 1000.00000 mg/l 24h - Static test EU C.2 a) Aquatic acute toxicity : LC0 Fish > 1000.00000 mg/l 48h - Static test OCDE 203

12.2 Persistence and degradability

Triiron tetraoxide Not Biodegradable

12.3 Bioaccumulative potential

Triiron tetraoxide Not bioaccumulative

12.4 Mobility in soil

Triiron tetraoxide Not mobile

12.5 Results of PBT and vPvB assessment

No PBT Ingredients are present

12.6 Other adverse effects

Not Available



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13. Disposal considerations

13.1 Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

14. Transport information

14.1 UN number

N/A

14.2 UN proper shipping name

ADR-Shipping Name: N/A

IATA-Technical name: N/A

IMDG-Technical name: N/A

14.3 Transport hazard class(es)

ADR-Class: N/A

IATA-Class: N/A

IMDG-Class: N/A

14.4 Packing Group

ADR-Packing Group: N/A

IATA-Packing group: N/A

IMDG-Packing group: N/A

14.5 Environmental hazards

Toxic Ingredients Qty: 0.00

High Toxicity Ingredients Qty: 0.00

Marine pollutant: No

Environmental Pollutant: No

14.6 Special Precautions for User

Road and Rail (ADR-RID):

ADR-Label: N/A

ADR-Upper number: N/A

ADR-Special Provisions: N/A

ADR-Transport category (Tunnel restriction code): N/A

Air (IATA):

IATA-Passenger Aircraft: N/A

IATA-Cargo Aircraft: N/A

IATA-Label: N/A

IATA-Sub Risk: N/A

IATA-Erg: N/A

IATA-Special Provisioning: N/A



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Sea (IMDG):

IMDG-Stowage Code: N/A

IMDG-Stowage Note: N/A

IMDG-Sub Risk: N/A

IMDG-Special Provisioning: N/A

IMDG-Page: N/A

IMDG-Label: N/A

IMDG-EMS: N/A

IMDG-MFAG: N/A

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not Available

15. Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 453/2010 (Annex II)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications: Restrictions related to the product: None

Restrictions related to the substances contained: None

Provisions related to directive EU 2012/18 (Seveso III): Not Available

German Water Hazard Class: Not Available

SVHC Substances: No Data Available

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for the mixture.

16. Additional information

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities



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SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

Code Description

H252 Self-heating in large quantities; may catch fire.

Code Hazard class and hazard category Description

2.11/2 Self-heat. 2 Self-heating substance or mixture, Category 2

16.1 Abbreviations:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

Disclaimer:

This material safety data sheet does not constitute a guarantee of the properties of the product and is not a contractual legal report. The information is given in good faith on the basis of our best knowledge of the product at the indicated time. However, we cannot accept responsibility or liability for any consequences arising from its use, no warranty for correctness and completeness is given. We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned. It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.