



BUFF TITANIUM HITOX® STD, ULX and SF & TIOPREM® C BEIGE

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

1.1. Product identifier

Product form	: Substance
Substance name	: HITOX® STD, ULX and SF & TIOPREM® C BEIGE
IUPAC name	: Ilmenite (FeTiO ₃), conc.
EC-No.	: 308-551-1
CAS-No.	: 98072-94-7
REACH registration No	: 01-2119556873-27

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

1.2.1. Relevant identified uses

Industrial/Professional use spec	: Pigment
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1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

L. Cornelissen & Son
105 Great Russell Street
London WC1B 3RY

1.4. Emergency telephone number

Emergency number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to displayExtra classification(s) to display

Precautionary statements (CLP)	: P261 - Avoid breathing dust. P273 - Avoid release to the environment. P314 - Get medical advice/attention if you feel unwell. P391 - Collect spillage. P402 - Store in a dry place. P501 - Dispose of container to National regulations.
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2.3. Other hazards not contributing to the classification

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	: HITOX® STD, ULX and SF & TIOPREM® C BEIGE
CAS-No.	: 98072-94-7
EC-No.	: 308-551-1

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acc	Name	Product identifier	%
	Iron oxide (Fe ₂ O ₃)	(CAS-No.) 1309-37-1 (EC-No.) 215-168-2 (REACH-no) not available	< 5
	Silicon dioxide	(CAS-No.) 112926-00-8 (EC-No.) 601-214-2 (REACH-no) not available	1.25

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- First-aid measures after skin contact : Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Wash hands with water and soap.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- First-aid measures after ingestion : Rinse mouth immediately and drink plenty of water. If you feel unwell, seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects after inhalation : Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure. Irritating to the respiratory system, may cause throat pain and cough. may aggravate pre-existing respiratory conditions or allergies.
- Symptoms/effects after skin contact : Frequent or prolonged contact with skin may cause dermal irritation.
- Symptoms/effects after eye contact : May cause mechanical irritation on direct contact with eyes.
- Symptoms/effects after ingestion : Ingestion of used product may cause abdominal discomfort.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Non flammable. Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : Do not use water jet.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : None known.
- Explosion hazard : None known.
- Hazardous decomposition products in case of fire : None.

5.3. Advice for firefighters

- Firefighting instructions : The product is not flammable.
- Protective equipment for firefighters : In case of fire: Wear self-contained breathing apparatus. Special protective equipment for firefighters.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Wear suitable protective clothing.
- Emergency procedures : Ensure adequate ventilation. Evacuate unnecessary personnel.
- Measures in case of dust release : Avoid breathing dust. Mechanically ventilate the spillage area.

6.1.2. For emergency responders

- Protective equipment : Wear suitable protective clothing, gloves and eye/face protection. In case of fire: Wear self-contained breathing apparatus.
- Emergency procedures : Provide adequate ventilation. Evacuate area.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6.3. Methods and material for containment and cleaning up

- For containment : Ventilate affected area. Stop leak if safe to do so. Avoid creating or spreading dust. Use clean-up methods that avoid dust generation (vacuum wet).
- Methods for cleaning up : Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.

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a 6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- | | |
|-----------------------------------|---|
| Additional hazards when processed | : Generation of airborne dust. |
| Precautions for safe handling | : Do not breathe dust. Avoid creating or spreading dust. Minimize generation of dust. Where excessive dust may result, wear approved mask. |
| Hygiene measures | : Do not eat, drink or smoke when using this product. Remove all contaminated clothing and footwear. Wash hands thoroughly after handling. Take care for general good hygiene and housekeeping. |

7.2. Conditions for safe storage, including any incompatibilities

- | | |
|--------------------|---|
| Storage conditions | : Store in dry, cool, well-ventilated area. Keep container tightly closed. Protect from sunlight. |
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7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

HITOX® STD, ULX and SF & TIOPREM® C BEIGE (98072-94-7)		
Bulgaria	OEL TWA (mg/m³)	2 mg/m³
Estonia	OEL TWA (mg/m³)	2 mg/m³
Finland	HTP-arvo (8h) (mg/m³)	2 mg/m³
Lithuania	IPRV (mg/m³)	1 mg/m³
Sweden	nivågränsvärde (NVG) (mg/m³)	1 mg/m³
USA - ACGIH	ACGIH TWA (mg/m³)	1 mg/m³
Iron oxide (Fe2O3) (1309-37-1)		
Austria	MAK (mg/m³)	5 mg/m³ (respirable fraction) 10 mg/m³ (inhalable fraction)
Austria	MAK Short time value (mg/m³)	10 mg/m³ (respirable fraction)
Belgium	Limit value (mg/m³)	5 mg/m³ (fume)
Bulgaria	OEL TWA (mg/m³)	5 mg/m³
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	4 mg/m³ (respirable dust) 5 mg/m³ (fume) 10 mg/m³ (total dust)
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m³)	10 mg/m³ (fume)
Denmark	Grænseværdie (langvarig) (mg/m³)	3.5 mg/m³
Estonia	OEL TWA (mg/m³)	3.5 mg/m³ (respirable dust)
Finland	HTP-arvo (8h) (mg/m³)	5 mg/m³ (fume)
France	Local name	Fer (Trioxyde de di-, fumées), en Fe
France	VME (mg/m³)	5 mg/m³
France	Note (FR)	Valeurs recommandées/admises
Greece	OEL TWA (mg/m³)	10 mg/m³
Greece	OEL STEL (mg/m³)	10 mg/m³
Hungary	AK-érték	6 mg/m³ (respirable dust)
Ireland	OEL (8 hours ref) (mg/m³)	5 mg/m³ (fume) 10 mg/m³ (total inhalable dust) 4 mg/m³ (respirable dust)
Ireland	OEL (15 min ref) (mg/m³)	30 mg/m³ (calculated-total inhalable dust) 12 mg/m³ (fume) 12 mg/m³ (calculated-respirable dust)
Lithuania	IPRV (mg/m³)	3.5 mg/m³ (inhalable fraction)
Poland	NDS (mg/m³)	5 mg/m³ (respirable fraction)
Poland	NDSch (mg/m³)	10 mg/m³ (respirable fraction)
Portugal	OEL TWA (mg/m³)	5 mg/m³ (respirable fraction)
Romania	OEL TWA (mg/m³)	5 mg/m³ (dust and fume)
Romania	OEL STEL (mg/m³)	10 mg/m³ (dust and fume)
Slovakia	NPHV (priemerná) (mg/m³)	1.5 mg/m³

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Iron oxide (Fe₂O₃) (1309-37-1)		
Spain	VLA-ED (mg/m ³)	5 mg/m ³ (dust and fume)
Sweden	nivågränsvärde (NVG) (mg/m ³)	3.5 mg/m ³ (respirable dust)
United Kingdom	Local name	Iron oxide
United Kingdom	WEL TWA (mg/m ³)	5 mg/m ³ fume (as Fe)
United Kingdom	WEL STEL (mg/m ³)	10 mg/m ³ fume (as Fe)
Norway	Grenseverdier (AN) (mg/m ³)	3 mg/m ³
Norway	Grenseverdier (Korttidsverdi) (mg/m ³)	6 mg/m ³ (value calculated)
Switzerland	MAK (mg/m ³)	3 mg/m ³ (respirable dust)
Australia	TWA (mg/m ³)	5 mg/m ³ (fume) 10 mg/m ³ (containing no asbestos and <1% crystalline silica-inhalable dust)
Canada (Quebec)	VEMP (mg/m ³)	5 mg/m ³ (dust and fume) 10 mg/m ³ (containing no Asbestos and <1% Crystalline silica, regulated under Rouge-total dust)
USA - ACGIH	Local name	Iron oxide (Fe O)
USA - ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³
USA - ACGIH	Remark (ACGIH)	Pneumoconiosis
USA - IDLH	US IDLH (mg/m ³)	2500 mg/m ³ (dust and fume)
USA - NIOSH	NIOSH REL (TWA) (mg/m ³)	5 mg/m ³ (dust and fume)
USA - OSHA	Local name	Iron oxide fume
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	10 mg/m ³
Silicon dioxide (112926-00-8)		
Austria	MAK (mg/m ³)	4 mg/m ³
Austria	Remark (AT)	inhalable aerosol
Denmark	Grænseværdie (langvarig) (mg/m ³)	2 mg/m ³
Denmark	Grænseværdie (kortvarig) (mg/m ³)	4 mg/m ³
Denmark	Anmærkninger (DK)	inhalable aerosol
Finland	HTP-arvo (8h) (mg/m ³)	5 mg/m ³
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	4 mg/m ³
Germany	TRGS 900 Remark	(gemessen als einatembarer Aerosolanteil)
Spain	VLA-ED (mg/m ³)	10 mg/m ³
Spain	Notes	respirable aerosol
United Kingdom	WEL TWA (mg/m ³)	6 mg/m ³ inhalable aerosol 2.4 mg/m ³ respirable aerosol
Switzerland	MAK (mg/m ³)	4 mg/m ³
Switzerland	Remark (CH)	inhalable aerosol
Canada (Quebec)	VEMP (mg/m ³)	6 mg/m ³
USA - NIOSH	NIOSH REL (TWA) (mg/m ³)	6 mg/m ³
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	80 mg/m ³
USA - OSHA	OSHA PEL (TWA) (ppm)	20 ppm

8.2. Exposure controls

Appropriate engineering controls:

Provide local exhaust or general room ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment:

Safety glasses. Gloves. Protective clothing. Dust production: dust mask with filter type P3.

Materials for protective clothing:

Wear suitable protective clothing. Wear chemical resistant protective clothing (EN 14605) and protective shoes (S1P or S3)

Hand protection:

Wear suitable gloves tested to EN 374. NBR (Nitrile rubber). Thickness of glove material: > 0.35 mm. Breakthrough time : > 60 minutes. Unsuitable material: neoprene

Eye protection:

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classified as a substance with a hazard of EN (P3) with its amendment Regulation (EU) 2015/830

Respiratory protection:

Dust production: dust mask with filter type P3. half-mask with filter according to EN 149.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder.
Colour	: Beige.
Odour	: Odourless.
Odour threshold	: No data available
pH	: 6.5 - 7.5 @ 10% as an aqueous slurry
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 1840 °C
Freezing point	: No data available
Boiling point	: 2500 - 3000 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 4.1
Solubility	: insoluble in water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Not explosive.
Oxidising properties	: not oxidizing.
Explosive limits	: No data available

9.2. Other information

Bulk density	: 400 - 450 kg/m³
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SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None known. hazardous polymerization.

10.4. Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition.

10.5. Incompatible materials

None known under normal conditions of use.

10.6. Hazardous decomposition products

None known.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Iron oxide (Fe ₂ O ₃) (1309-37-1)	
LD50 oral rat	> 10000 mg/kg

Skin corrosion/irritation : Not classified
pH: 6.5 - 7.5 @ 10% as an aqueous slurry

Serious eye damage/irritation : Not classified
pH: 6.5 - 7.5 @ 10% as an aqueous slurry

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

HITOX® STD, ULX and SF & TIOPREM® C BEIGE (98072-94-7)	
NOAEL (oral, rat, 90 days)	3225 mg/kg bodyweight/day

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Not harmful to aquatic organisms.

HITOX® STD, ULX and SF & TIOPREM® C BEIGE (98072-94-7)	
NOEC chronic fish	0.17 mg/l <i>Salvelinus fontinalis</i> - 60 days

12.2. Persistence and degradability

HITOX® STD, ULX and SF & TIOPREM® C BEIGE (98072-94-7)	
Persistence and degradability	not applicable. The methods for determining the biological degradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

HITOX® STD, ULX and SF & TIOPREM® C BEIGE (98072-94-7)	
Bioaccumulative potential	Not applicable.

12.4. Mobility in soil

HITOX® STD, ULX and SF & TIOPREM® C BEIGE (98072-94-7)	
Ecology - soil	Not applicable.

12.5. Results of PBT and vPvB assessment

HITOX® STD, ULX and SF & TIOPREM® C BEIGE (98072-94-7)	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

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ADR	IMDG	IATA	ADN	RID
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Not regulated

- Transport by sea

Not regulated

- Air transport

Not regulated

- Inland waterway transport

Not regulated

- Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

HITOX® STD, ULX and SF & TIOPREM® C BEIGE is not on the REACH Candidate List

HITOX® STD, ULX and SF & TIOPREM® C BEIGE is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

Denmark

Recommendations Danish Regulation : Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

Chemical safety assessments for substances in this preparation were not carried out

SECTION 16: Other information

Indication of changes:

REACH registration No.

Oct 2019 rev 1.2 – Changed EC number of Silicon Dioxide impurity

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
	CAS (Chemical Abstracts Service) number

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a		CLP - Classification, Labelling and Packaging
		CSR - Chemical Safety Report
	IATA	International Air Transport Association
	IMDG	International Maritime Dangerous Goods
	PBT	Persistent Bioaccumulative Toxic
	RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
	vPvB	Very Persistent and Very Bioaccumulative

SDS EU (Reach Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product