

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

**1.1. Product identifier**

Trade Name: EnhanceU-T-rich  
 INCI: Titanium Dioxide, CI-77492, CI-77491, CI-77499, Silica

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

Identified use: Cosmetic raw material.  
 Uses advised against: None.

**1.3. Details of the supplier of the safety data sheet**

Company: Advanced Dispersed Particles S.L.  
 Address: Calle del Oro, 45 -nave 14- P. I. Sur;  
 28770 Colmenar Viejo, Madrid (España).  
 Telephone: +34910136640  
 E-mail address: technical@ad-particles.com

**1.4. Emergency telephone number**

Advanced Dispersed Particles S.L.: +34910136640 (accessible during business hours: 8am-5.30pm)  
 Or please contact your local distributor.

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

This mixture it is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

**2.2. Label elements**

Labelling according to Regulation (EC) No 1272/2008: not applicable (Mixture not classified hazardous under SGH).

**2.3. Others**

None known.

**SECTION 3: Composition/information on ingredients**

Mixture of components.

Hazardous components: none

Components	%weight	CAS No.	EC No.	REACH Registration No.
Titanium dioxide	61-71	13463-67-7	236-675-5	01-2119489379-17-xxxx
Iron oxide CI-77492	15-19	51274-00-1	257-098-5	01-2119457554-33-xxxx
Iron oxide CI-77491	5-9	1309-37-1	215-168-2	01-2119457614-35-xxxx
Iron oxide CI-77499	4-8	1317-61-9	215-277-5	01-2119457646-28-xxxx
Silicon dioxide	1-5	7631-86-9	231-545-4	01-2119379499-16-xxxx

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

General information: Remove the victim out of the danger area.  
 Inhalation: Provide fresh air. Seek medical attention if breathing is difficult.  
 Following skin-contact: Take off all contaminated clothing. Rinse skin with water/shower. Following eye-contact: Rinse out with plenty of water. Seek medical attention if irritation occurs.

Following ingestion: Rinse mouth thoroughly with water. Seek medical attention. Do not induce vomiting or give anything by mouth to an unconscious person. If a victim vomits when lying on his back or unconscious, place the person on her/his side (recovery position).

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

We have no description of any toxic symptoms.

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

No information available.

### SECTION 5: Firefighting measures

#### 5.1. Firefighting measures

Suitable extinguishing media: Water spray, Alcohol resistant foam, Dry extinguishing powder, Carbon dioxide (CO<sub>2</sub>).

Unsuitable extinguishing media: Strong water jet.

#### 5.2. Special hazards arising from the substance or mixture

Not combustible. Ambient fire might liberate hazardous vapours.

#### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus. Do not breath vapours.

Water spray jet may be used to cool down containers and to suppress gases/vapours/mists.

Collect firefighting water and residues according to local regulations. Do not allow firefighting water entering drains or surface water.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment, see section 8. Avoid generation and breath of dust. Ensure adequate ventilation.

#### 6.2. Environmental precautions

Make sure spills can be contained. Do not allow to enter into drains or surface water.

#### 6.3. Methods and material for containment and cleaning up

For cleaning up: Do not use compressed air. Avoid dust generation. Take up materials mechanically, placing in suitable containers for disposal. Dispose in a safe manner in accordance with local/national regulations. Report massive spills to your local authorities.

#### 6.4. Reference to other sections: Personal protective equipment, see section 8.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Work in well-ventilated areas or use personal protective equipment, see section 8. Handle carefully to avoid dust generation. Use dust vacuum collection if dust generation. Do not breathe dust. Remove wash-water according to national and local regulations. Advice in general occupational hygiene: do not eat, drink or smoke when using; wash hands and face after manipulation, remove contaminated clothes and personal equipment before breaks and after work.

#### 7.2. Conditions for safe storage, including any incompatibilities

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

Common storage: No special restrictions (storage class 13).

### 7.3. Specific end uses

Those named in section 1.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Main component: Titanium Dioxide (CAS No.13463-67-7)

Country	Value type	Control parameters	Basis
Austria	KZW respirable dust/ alveolar fraction	10 mg/m <sup>3</sup>	AT OEL
	TMW respirable dust/ alveolar fraction	5 mg/m <sup>3</sup>	
Belgium	VLE 8h	10 mg/m <sup>3</sup>	BE OEL
Denmark	GV	6 mg/m <sup>3</sup>	DK OEL
France	VME inhalable dust	10 mg/m <sup>3</sup>	FR VLE
	VME respirable dust	5 mg/m <sup>3</sup>	
Germany	AGW inhalable dust	10 mg/m <sup>3</sup>	DE TRGS 900
	AGW respirable dust	1.25 mg/m <sup>3</sup>	
Great Britain	TWA LTEL inhalable dust	10 mg/m <sup>3</sup>	GB EH40
	TWA LTEL respirable dust	4 mg/m <sup>3</sup>	
Italy	TWA	10 mg/m <sup>3</sup>	ACGIH
USA	TWA ACGIH-TLV	10 mg/m <sup>3</sup>	NIOSH
	TWA LTEL OSHA-PEL	15 mg/m <sup>3</sup>	OSHA

Component Iron oxides :

Component	CAS No.	Value type	Control parameters	Basis
CI-77492	51274-00-1	Total Inhalable Dust- 8hr TWA	10mg/m <sup>3</sup>	TLV ACGIH (2006)
CI-77491	1309-37-1	Total Inhalable Dust- 8hr TWA	5mg/m <sup>3</sup>	
CI-77499	1317-61-9	Total Inhalable Dust- 8hr TWA	10mg/m <sup>3</sup>	

DNEL: no information available.

PNEC: no information available.

### 8.2. Exposure controls

Engineering measures: No specific measures. When handling high concentrations of powder, technical measures should be given priority over the use of personal protective equipment.

Personal protective equipment:

Respiratory protection: Use filter EN 149:FFP2 if dust generation possibility.

Eye protection: Safety glasses.

Hand protection: Preventive skin protection is advised by using chemical resistant gloves such as nitrile gloves. Chemical protective gloves must meet the requirements of EN ISO 374: 2016.

Body protection: adequate work clothes based on the amount to handle.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance: Powder.

Colour: Light brownish to brownish

Smell: Odourless (Odour threshold: Not applicable).

pH (100 g/L at 20°C): 5-8

Melting point: > 1800 °C.  
 Boiling point: No data available.  
 Flash point: No data available.  
 Evaporation rate: No data available.  
 Flammability (solid, gas): No data available.  
 Lower and upper explosion limits: No data available.  
 Vapour pressure: No data available.  
 Relative vapour density: Does not apply.  
 Density: ca. 0.5kg/L  
 Water solubility: <5%. No water-soluble but dispersible.  
 Partition coefficient: n-octanol/water: No data available.  
 Solubilities (in other solvents): <10% (chlorhidric acid)  
 Auto-ignition temperature: No data available.  
 Decomposition temperature: No data available.  
 Viscosity, kinematic or dynamic: Does not apply.  
 Explosive properties: Not classified as explosive.  
 Oxidising properties: Not classified as oxidising.

**9.2. Other data**

No additional information relevant to the safe use of this mixture.

**SECTION 10: Stability and reactivity**

**10.1. Reactivity:** No specific test data available for this mixture or its components.  
**10.2. Chemical stability:** The mixture is chemically stable under recommended conditions of storage, use and temperature. Above 120° C, it turns to reddish-brown due to iron oxide component dehydration to hematite.  
**10.3. Possibility of hazardous reactions:** No dangerous reactions known under normal use.  
**10.4. Conditions to avoid:** No further data; see section 7.  
**10.5. Incompatible materials:** Avoid strong oxidising agents.  
**10.6. Hazardous decomposition products:** None known.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**Acute toxicity**

Product: No data available.

Main component Titanium Dioxide (CAS No.13463-67-7)

Oral LD50	Dermal LD50	Inhalative LC50
rat: >5000 mg/kg (OECD 425)	rabbit: >5000 mg/kg	rat: >6.8 mg/L (4h)

Components: Iron oxides

CI-77492 (CAS No. 51274-00-1)	CI-77491 (CAS No. 1309-37-1)	CI-77499 (CAS No. 1317-61-9)
Oral LD50	Oral LD50	Oral LD50
rat: >5000 mg/kg	rat: >5000 mg/kg	rat: >5000 mg/kg

**Skin corrosion/ irritation**

Product: No data available.

Main component: Titanium Dioxide 13463-67-7, No irritant (Method: OECD 404).

**Serious eye damage/eye irritation**

Product: No data available. Dust particles may cause (mechanical) irritation.

Main component: Titanium Dioxide 13463-67-7. No irritant (Method: OECD 405).

**Respiratory or skin sensitisation**

Product: No data available.

Main component: Titanium Dioxide 13463-67-7. No irritant (Method: OECD 406, 409).

**Subacute to chronic toxicity**

Product: No data available.

Main component: Titanium Dioxide (CAS No.13463-67-7)

Oral NOAEL	Dermal NOAEL	Inhalative NOAEC
rat: 3500 mg/kg /d (90d)	No relevant information available	rat: 10mg/m <sup>3</sup> (90d)

**Germ Cell Mutagenicity**

Product: No CMR according to Ames Test (OECD Guidelines n° 471)

Main component: Titanium Dioxide (CAS No.13463-67-7): No indications of CMR effect in humans.

**Carcinogenicity**

Product: No data available.

Main component: Titanium Dioxide (CAS No.13463-67-7): No indications of CMR effect in humans.

**Reproductive Toxicity**

Product: No CMR according to In Vitro Micronucleus Assay (OECD Guidelines n° 487)

Main component: Titanium Dioxide (CAS No.13463-67-7): No indications of CMR effect in humans.

**STOT- single exposure**

Product: No data available.

Main component: Titanium Dioxide (CAS No.13463-67-7): No specific target organ toxicity according to the criteria defined in Regulation (EC) no.1272/2008.

**STOT- repeated exposure**

Product: No data available.

Main component: Titanium Dioxide (CAS No.13463-67-7): No specific target organ toxicity according to the criteria defined in Regulation (EC) no.1272/2008.

**Aspiration Hazard.**

Product: No data available.

Main component: No data available.

**11.2. Other information**

Even inert dusts may impair respiratory organ functions, inhalation of dusts should be avoided.

**SECTION 12: Ecological information**

**12.1. Toxicity:**

Product: No data available.

Main component: Titanium Dioxide (CAS No.13463-67-7)

Cyprinodon variegatus (Marine water fish)	LC50 (96h) >10000 mg/L	Method OECD203
Daphnia magna (Daphnia)	EC50 (48h) >1000 mg/L	Method OECD202
Pseudokirchneriella subcapitata (Algae)	EC50 (72h) >100 mg/L	Method OECD201

Components: Iron oxides

CI-77492 (CAS No. 51274-00-1)	Leiciscus Idus (fish)	LC50 (48h) >1000 mg/L
CI-77491 (CAS No. 1309-37-1)	Leiciscus Idus (fish)	LC50 (48h) >1000 mg/L
CI-77499 (CAS No. 1317-61-9)	Leiciscus Idus (fish)	LC50 (48h) >1000 mg/L

**12.2. Persistence and degradability:** No data available.

**12.3. Bioaccumulative potential:** No data available.

**12.4. Mobility in soil:** No data available.

**12.5. Results of PBT and vPvB assessment:**

Product: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB)

Components: 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. Other adverse effects:**

No data available.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods:**

Product waste and packaging must be treated following the Directive 2008/98/EC, national and local regulations. Uncleaned containers may be handled like the product itself.

**SECTION 14: Transport Information**

**14.1. UN number**

ADR, ADN (land transport), IMDG (sea transport), IATA (air transport): It does not apply.

**14.2. UN proper shipping name**

ADR, ADN, IMDG, IATA: It does not apply.

**14.3. Transport hazard class(es)**

ADR, ADN, IMDG, IATA: It does not apply.

**14.4. Packing group**

ADR, ADN, IMDG, IATA: It does not apply.

**14.5. Environmental hazards:** It is not an environmentally hazardous substance.

**14.6. Special precautions for user:** No relevant.

**14.7. Transport in bulk according to Annex II of Marpol 73/78 and the IBC Code:** Not applicable

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Regulation (EC) No. 1272/2008: the product does not need to be classified or labelled.

The components of this mixture are listed in the following inventories: EINECS, TSCA, ENCS, AICS, DSL, PICCS, IECSC, KECI.

REACH - List of substances subject to authorisation (Annex XIV) and Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII): It does not apply.

Not listed as SVHC, according to REACH, article 57.

Regulation (EC) No 850/2004 on persistent organic pollutants: It does not apply.

National Regulation (ES): Not hazardous for water.

**15.2 Chemical Safety Assessment:** No carried out for this mixture.

**SECTION 16: Other informations****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; AICS - Australian Inventory of Chemical Substances; ca.: *circa*, approximatively; CAS - Chemical Abstracts Service; CMR - Carcinogenic, Mutagenic or toxic to Reproduction; DNEL: Derived No Effect Level; DSL-Canada Domestic Substance List; EC50- Half maximal effective concentration; ENCS - Inventory of Existing and New Chemical Substances in Japan; GHS Global Harmonized System; IATA - International Air Transport; IBC - International code for the construction and equipment of ships carrying dangerous chemicals in bulk; IECSC - Inventory of Existing Chemical Substance in China; IMDG - International Maritime Dangerous Goods; INCI- International Nomenclature of Cosmetic Ingredients; ISO - International Organization for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration required to kill 50% of the population; LD50 - Lethal dose at which 50% of the population if killed in a given period of time; LTEL: Long-term exposure limit (8-hr TWA reference period; the maximum exposure permitted over an 8-hour period); MARPOL - International Convention for the Prevention of Pollution from Ships; NOAEC - No Observed Adverse Effect Concentration; NOAEL - No Observed Adverse Effect Level; OECD - Organisation for Economic Co-operation and Development; PBT - Persistent, bioaccumulative and toxic substance; PICCS - Philippine Inventory of Chemicals and Chemical Substances; PNEC: Predicted No effect concentration; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SDS - Safety Data Sheet; STOT specific target organ toxicity; TLV- Threshold Limit Value; STEL: Short-term exposure limit (the maximum exposure permitted over a short period of time); TCSI - Taiwan Chemical Substance Inventory; TWA- Time Weighted Average; TSCA - Toxic Substances Control Act (US); UN - United Nations; vPvB - very Persistent and very Bioaccumulative

**Advices on workers' training:**

Information and training must be provided to workers for the safe manipulation of powders.

**Responsability:**

This information contained herein is based on the present state of our knowledge. This SDS is a guide for the safe manipulation, use, processing, transport and disposal and it is not a guarantee of any properties of the product. This SDS has been compiled and is solely intended for this product: it may not be valid for this product used in combination in any material or any process.

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