

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

1.1. Product identifier

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

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 (Spain).
 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	66-76	13463-67-7	236-675-5	01-2119489379-17-xxxx
Iron oxide CI-77492	13-18	51274-00-1	257-098-5	01-2119457554-33-xxxx
Iron oxide CI-77491	4-8	1309-37-1	215-168-2	01-2119457614-35-xxxx
Silicon dioxide	1-5	7631-86-9	231-545-4	01-2119379499-16-xxxx
Iron oxide CI-77499	1-5	1317-61-9	215-277-5	01-2119457646-28-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 (CO₂).

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

Component Iron oxides :

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

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 red brown

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 ³ (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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