# **SAFETY DATA SHEETS**

# This SDS packet was issued with item: 070871384

# The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

070619593 070619601 070823799 070830737 070869248 070871350 070871368 070871376 070871392 070871970 070871988 070871996 070872630 070872648 070873581 070873836 070873844 070873851 070874156 223000884 223000885 223000886 273044893 273044895 273044896 273044897 273044898 273045096 273045133 273045217



SI0343 Date of issue: 03/08/2015 In conformity with: EG-Nr.1907/2006

# VITA YZ HT SHADE LIQUID

#### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

**1.1 PRODUCT IDENTIFIER** 

1.1.1 COMMERCIAL PRODUCT NAME

1.1.2 ITEM NUMBER

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE

1.2.1 IDENTIFIED USES

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

1.3.1 PRODUCER

1.3.2 SUPPLIER

VITA YZ HT SHADE LIQUID

EZ0CY03XXX-EZ0CY80XXX

Liquid for the colouring of zirconium oxide for dental technical application

Zirkonzahn GmbH, An der Ahr 7, IT 39030 Gais

VITA Zahnfabrik H. Rauter GmbH & Co. KG Postfach 1338 Tel.: 07761/562-0 D 79704 Bad Säckingen Fax: 07761/562299 E-mail: <u>info@vita-zahnfabrik.com</u>

1.3.3 TOX EMERGENCY NUMBER

+49-(0)761-19240

#### 2. POSSIBLE DANGERS

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

2.1.1 CLASSIFICATION ACCORDING TO REGULATION (EG) NO. 1272/2008



H314 – Causes severe skin burns and eye damage. H318 – Causes serious eye damage.



H335 May cause respiratory irritation.

The product falls under the EC Directive 93/42 for medical products. The device is classified and labelled according to GefStoff / GHS guidelines.

2.1.2 ADDITIONAL INFORMATION



#### 2.2 LABEL ELEMENTS

2.2.1 LABELLING ACCORDING TO REGULATION (EC) NO 1272/2008

#### 2.2.1.1 HAZARD PICTOGRAMS



2.2.1.2 SIGNALWORD	Danger.
2.2.1.3 HAZARD-DETERMINING COMPONENTS OF LABELLING	Erbium nitrate hydrate.
2.2.1.4 HAZARD STATEMENT	H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H335 May cause respiratory irritation.
2.2.1.5 PRECAUTIONARY STATEMENTS	<ul> <li>P261 Avoid breathing mist/vapours/spray.</li> <li>P264 Wash face, hands and all exposed areas of the skin thoroughly after handling.</li> <li>P280 Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.</li> <li>P305+P351+P338 IF IN EYES: Rinse cautiosly with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P405 Store locked up.</li> <li>P501 Dispose of contents/container in accordance with local/regional/national/international regulations or disposal.</li> </ul>
2.2.1.6 ADDITIONAL LABELLING	None.
2.3 OTHER HAZARDS	None.

# 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 CHEMICAL CHARACTERIZATION

Mixture.



#### **3.2 HAZARDOUS INGREDIENTS**

Designation	Proportion (% weight)	CAS-No.	EC-No.	Classification
Chrome (III) – nitrate Nonahydrate (Purity 99 %)	0,03 – 1,6 %	7789-02-8	236-921-1	Skin Irrit. 2 H315; Eye Irrit. 2 H319; Ox.Sol. 3 H272
Iron (III) – nitrate Nonahydrate (Purity > 98 %)	0,1-6,9 %	7782-61-8	233-899-5	Skin Irrit. 1B H314
Erbium nitrate – hydrate (Purity > 98 %	0-47 %	100641-14-3	233-436-7	Skin Irrit. 2 H315; Eye Irrit. 2 H319; STOT SE 3 H335 Ox.Sol. 2 H272
Manganese (II) – nitrathexahydrat (Purity 98 %)	0-0,06 %	15710-66-4	236-196-1	Skin Irrit. 2 H315; Eye Irrit. 2 H319; STOT SE 3 H335 Ox.Sol. 3 H272

#### 3.3 NOTE

None.

point 16.

The exact wording of the listed hazard statements is given in

3.4 ADDITIONAL INFORMTION

# 4. FIRST AID MEASURES

4.1 EYE CONTACT	Immediately flush with plenty of water for 10-15 minutes. Lift eyelid to ensure thourough flush. If irritation persists, consult physician.
4.2 SKIN CONTACT	Cover wound with a sterile dressing. Seek medical treatment. Immediate transport to a hospital.
4.3 INGESTION	Do not induce vomiting under any circumstances. Rinse out mouth thoroughly with water if the person is conscious.
4.4 INHALATION	Fresh air supply. Consult physician if problem persists. If unconscious, place and transport the patient in a stable side position.
4.5 ADDITIONAL INFORMATION	Remove any clothing that has been contaminated with the product immediately. In case of doubt or if symptoms should persist consult physician.

### 5. FIRE FIGHTING MEASURES

5.1 SUITABLE EXTINGUISHING DEVICES	Use fire fighting measures that suit the environment.
5.2 UNSUITABLE EXTINGUISHING DEVICES	Water with full jet.
5.3 ADDITIONAL INFORMATION	Toxic fumes may be released due to heat during fire. Protective clothing and suitable respiratory protection are required.



#### 6. ACCIDENTAL RELEASE MEASURES

6.1 INDIVIDUAL PROTECTION	Minimize direct contact with skin and eyes and inhalation of fumes through suitable protective measures. Ventilate room sufficiently.
6.2 MEASURES FOR ENVIRONMENTAL PROTECTION	Avoid spilling into drains and waterways. Collect spilled material in the best possible way and store in acid-proof container (Polyethylene). Dispose of at toxic waste collection point. Do not mix with residual waste.
6.3 MEASURES FOR CLEANING	Use inorganic fluid-absorbing material (diatomaceous earth or universal binder) to pick up. Ventilate room sufficiently.
6.4 ADDITIONAL INFORMATION	None.

### 7. HANDLING AND STORAGE

7.1 HANDLING	Handling of this product only by trained personnel. Keep out of reach of children. Ensure good ventilation/exhaustion at the workplace. Consider TRGS 401 - "Hazard through skin contact - Determination, evaluation, measures".
7.2 INDUSTRIAL HYGIENE	Obey customary hygine measures. Do not eat, drink or smoke during work.
7.3 STORAGE	Store in a cool place and out of the reach of flammable materials and fireplaces. Consider regulations of the TRGS 510.
7.4 INFORMATION ABOUT STORAGE IN ONE COMMON FACILITY	Do not store together with food.
7.5 FIRE AND EXPLOSION PROTECTION	None.
7.6 INDICATIONS FOR SAFE HANDLING	Keep away from heat sources. Keep container tightly closed.
7.7 STORAGE CLASS	8A: Combustible, corrosive hazardous substances.
7.8 ADDITIONAL INFORMATION	None.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMTERS
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8.1.1 OCCUPATIONAL EXPOSURE LIMITS

8.1.2 BIOLOGCAL LIMIT VALUES

8.2 EXPOSURE CONTROLS

8.3 PERSONAL PROTECTIVE

8.3.1 RESPIRATORY PROTECTION

8.3.2 HAND PROTECTION

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

No indications.

No limit established.

Yes.

Do not inhale fumes. Not required if safety regulations are observed. Acid resistant gloves.



8.3.3 EYE PROTECTION	Wear protective glasses (possibly with side protection).
8.3.4 OTHER	None.
8.4 FURTHER INFORMATION	None.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

9.1.1 FORM	Liquid.
9.1.2 COLOUR	Variable.
9.1.3 ODOUR	Odourless.
9.1.4 CHANGES IN PHYSICAL STATE	
9.1.4.1 FREEZING POINT	Approx. 0 °C
9.1.4.2 MELTING POINT	Not defined.
9.1.4.3 BOILING POINT	Approx. 100 °C
9.1.5 DENSITY	1 g/cm <sup>3</sup> (20 °C)
9.1.6 SOLUBILITY	Water-soluble.
9.1.7 PH-VALUE	> 1,4
9.1.8 FLASH POINT	Not applicable.
9.1.9 IGNITION POINT	Not applicable.
9.1.10 EXPLOSION LIMITS	Lower: Vol. % Upper: Vol. % Not applicable.
9.1.11 SOLIDS CONTENT/VISCOSITY	Not available.
9.2 PROPERTIES RELEVANT TO THE ELEMENT GROUP	No indications.
9.3 ADDITIONAL INFORMATION	No indications.

### **10. STABILITY AND REACTIVITY**

10.1 REACTIVITY	No indications.
10.2 CHEMICAL STABILITY	No indications.
10.3 POSSIBILITY OF HAZARDOUS REACTIONS	Keep away from heat sources, otherwise containers can burst. Avoid contact with chemical products. Corrosive action on metals. Formation of corrosive gases/vapours.
10.4 CONDITIONS TO AVOID	Keep away from heat sources. No decomposition if used and stored according to specifications.
10.5 INCOMPATIBLE MATERIALS	No indications.
10.6 HAZARDOUS DECOMPOSITION PRODUCTS	No hazardous decomposition products if stored and handled as prescribed/indicated.



## **11. TOXICOLOGICAL INFORMATION**

- 11.1.1 SKIN
- 11.1.2 EYES
- 11.1.3 SENSIBILIZATION
- 11.2 ADDITIONAL TOXICOLOGICAL INFORMATION

Caustic effect on skin and mucous membranes. Strongly irritant with the danger of severe eye injury. No sensitizing effect known. None.

No adverse ecological effects if handled and used according

#### **12. ECOLOGICAL INFORMATION**

#### 12.1 TOXICITY

	to the relevant regulations.
12.2 PERSISTENCE AND DEGRADABILITY	No indications.
12.3 BIOACCUMULATIVE POTENTIAL	No indications.
12.4 MOBILITY IN SOIL	No indications.
12.5 RESULTS OF PBT AND VPVB ASSESSMENT	No indications.
12.6 OTHER ADVERSE EFFECTS	No indications.

## **13. DISPOSAL CONSIDERATION**

13.1 WASTE TREATMENT METHOD	Must not be disposed together with household garbage. Do not empty into drains. Disposal according to instructions of local authorithies. Product must be disposed of in an appropriate manner in accordance with the regulations concerning the recycling/disposal of waste. The classification of the waste has to be carried out according to the European Waste Catalogue.
13.1.1 EG-WASTE KEY	06 00 00 WASTES FROM INORGANIC CHEMICAL PROCESSES 06 01 Wastes from manufacture, preparation, distribution and use (HZVA) 06 01 99 Wastes not specified elsewhere.
13.2 CONTAINER	Entirely emptied container can be disposed of at collection station.
13.3 ADDITIONAL INFORMATION	None.

#### **14. TRANSPORT INFORMATION**

#### 14.1 TRANSPORT AT LAND (ADR/RIG/GGVSE)

14.1.1 CLASSIFICATION	-
14.1.2 HAZARD LABEL	-
14.1.3 UN-NO.	-



14.1.4 KEMLER NUMBER	-
14.1.5 PACKING GROUP	-
14.1.6 CLASSIFICATION CODE	-
14.1.7 WARNING SIGN	-
14.1.8 PACKING CODE	-
14.1.9 VOLUME OR MASS	-
14.1.10 CORRECT TECHNICAL TERM	-
14.1.11 LIMITED QUANTITY	-
14.2 TRANSPORT AT SEA (IMDG-CODE/GGVSEE)	
14.2.1 CLASSIFICATION	-
14.2.2 UN-NO	-
14.2.3 PACKING GROUP	-
14.2.4 EMS	-
14.2.5 MARINE POLLUTANT	-
14.2.6 ADDITIONAL DANGER	-
14.3 AIR TRANSPORT (ICAO-CODE/GGVSEE)	-
14.3.1 CLASSIFICATION	-
14.3.2 UN-NO:	-
14.3.3 PACKING GROUP	-
14.3.4 SUBSIDIARY RISK	-
14.4 ADDITIONAL INFORMATION	None.

#### **15. REGULATORY INFORMATION**

15.1 SAFETY, HEALTH AND ENVIRONMENTAL<br/>REGULATIONS/LEGISLATION SPECIFIC FOR THE<br/>SUBSTANCE OR MIXTURENo indications.15.2 NATIONAL REGULATIONS15.2.1 CLASSIFICATION IN ACCORDANCE WITH THE<br/>INDUSTRIAL SAFETY REGULATIONS (BETRSICHV)No indications.15.3 TECHNICAL GUIDELINES AIR<br/>15.4 WATER POLLUTION CLASSNo indications.Water pollution class 2 (Self assessment): hazardous for<br/>water.15.5 CHEMICAL SAFETY ASSESSMENTA chemical safety assessment has not been carried out.A

## **16. OTHER INFORMATION**

The above mentioned data correspond to our present state of knowledge and experience. The material safety data sheet serves as description of the products with regards to necessary safety measures. The indications do not have the meaning of guarantees on properties.



Human Zirconium Technology

RELEVANT PHRASES

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H318 Causes serious eye damage.

H335 May cause respiratory irritation.

P261 Avoid breathing mist/vapours/spray.

P264 Wash face, hands and all exposed areas of the skin thouroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiosly with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations or disposal.

#### ABBREVIATIONS AND ACRONYMS

ICAO: International Civil Aviation Organization ADR: Accord européen sur le transport des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods GHS: Globally Harmonized System of Classification and Labelling of Chemicals BETRSICHV: Betriebssicherheitsverordnung (Industrial safety ordinance)

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