# **SAFETY DATA SHEETS**

# This SDS packet was issued with item:

070874156

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 070871384 070871392 070871970 070871988 070871996 070872630 070872648 070873581 070873836 070873844 070873851 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 VITA YZ HT SHADE LIQUID

1.1.2 ITEM NUMBER EZ0CY03XXX-EZ0CY80XXX

 $1.2\ RELEVANT$  IDENTIFIED USES OF THE SUBSTANCE OR

MIXTURE

1.2.1 IDENTIFIED USES Liquid for the colouring of zirconium oxide for dental

technical application

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA

SHEET

1.3.1 PRODUCER Zirkonzahn GmbH, An der Ahr 7, IT 39030 Gais

1.3.2 SUPPLIER VITA Zahnfabrik

H. Rauter GmbH & Co. KG Postfach 1338 Tel.: 07761/562-0

D 79704 Bad Säckingen Fax: 07761/562299

E-mail: info@vita-zahnfabrik.com

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.

2.1.2 ADDITIONAL INFORMATION

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



#### 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 Erbium nitrate hydrate. LABELLING

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 P261 Avoid breathing mist/vapours/spray.

P264 Wash face, hands and all exposed areas of the skin

thoroughly 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.

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<br>Nonahydrate (Purity 99 %)   | 0,03 – 1,6 %          | 7789-02-8   | 236-921-1 | Skin Irrit. 2 H315;<br>Eye Irrit. 2 H319;<br>Ox.Sol. 3 H272                   |
| Iron (III) – nitrate Nonahydrate<br>(Purity > 98 %)   | 0,1 – 6,9 %           | 7782-61-8   | 233-899-5 | Skin Irrit. 1B H314   |
| Erbium nitrate – hydrate<br>(Purity > 98 %            | 0 – 47 %              | 100641-14-3 | 233-436-7 | Skin Irrit. 2 H315;<br>Eye Irrit. 2 H319;<br>STOT SE 3 H335<br>Ox.Sol. 2 H272 |
| Manganese (II) –<br>nitrathexahydrat<br>(Purity 98 %) | 0 – 0,06 %            | 15710-66-4  | 236-196-1 | Skin Irrit. 2 H315;<br>Eye Irrit. 2 H319;<br>STOT SE 3 H335<br>Ox.Sol. 3 H272 |

3.3 NOTE None.

3.4 ADDITIONAL INFORMTION The exact wording of the listed hazard statements is given in

point 16.

#### 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.

None.

7.4 INFORMATION ABOUT STORAGE IN ONE

COMMON FACILITY

Do not store together with food.

7.5 FIRE AND EXPLOSION PROTECTION

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

8.1.1 OCCUPATIONAL EXPOSURE LIMITS

The product does not contain any relevant quantities of

materials with critical values that have to be monitored

at the workplace.

8.1.2 BIOLOGCAL LIMIT VALUES No indications.

8.2 EXPOSURE CONTROLS No limit established.

8.3 PERSONAL PROTECTIVE Yes.

8.3.1 RESPIRATORY PROTECTION Do not inhale fumes. Not required if safety regulations

are observed.

8.3.2 HAND PROTECTION Acid resistant gloves.



8.3.3 EYE PROTECTION Wear protective glasses (possibly with side protection).

Odourless.

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.

9.1.4 CHANGES IN PHYSICAL STATE

9.1.3 ODOUR

9.1.4.1 FREEZING POINT

9.1.4.2 MELTING POINT

Not defined.

9.1.4.3 BOILING POINT

Approx. 100 °C

9.1.5 DENSITY

1 g/cm³ (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

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 INFORMATION ON TOXICOLOGICAL EFFECTS

11.1.1 SKIN Caustic effect on skin and mucous membranes.

11.1.2 EYES Strongly irritant with the danger of severe eye injury.

11.1.3 SENSIBILIZATION No sensitizing effect known.

11.2 ADDITIONAL TOXICOLOGICAL INFORMATION None.

#### 12. ECOLOGICAL INFORMATION

12.1 TOXICITY

No adverse ecological effects if handled and used according

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 REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

No indications.

15.2 NATIONAL REGULATIONS

 $15.2.1\ CLASSIFICATION\ IN\ ACCORDANCE\ WITH\ THE\\ INDUSTRIAL\ SAFETY\ REGULATIONS\ (BETRSICHV)$ 

No indications.

No indications.

15.3 TECHNICAL GUIDELINES AIR

15.4 WATER POLLUTION CLASS

Water pollution class 2 (Self assessment): hazardous for

water.

15.5 CHEMICAL SAFETY ASSESSMENT

A chemical safety assessment has not been carried out.

#### 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.



#### RELEVANT PHRASES

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H318 Causes serious eye damage.

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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)

#### Department issuing data specification sheet:

Zirkonzahn GmbH, An der Ahr 7, IT 39030 Gais