Version: 3 / 08.2018 Compiled at 30.08.2018 Effective date: 30.08.2018 Replaces version: 2 / 04.2015 Page 1 of 5



Safety Data Sheet according to 1907/2006/EC

#### 1. Substance/Preparation and company name

| 1.1 Trade name            | Zfx™ Color Liquid allround   |
|---------------------------|--|
| 1.2 Utilization           | Zfx™ AoS Color Liquid allround are fluids for colouring pre sintered zirconia restorations made from Zfx™ milling-blanks for the manufacture of dental prosthesis. |
| 1.3 Manufacturer/Supplier | <b>Zfx GmbH</b> Kopernikusstr. 15, 85221 Dachau, Germany  Tel.: +49 (0)8131 33 244 - 0, Fax: +49 (0)8131 33 244 - 10  info@zfx-dental.com, www.zfx-dental.com      |

#### 2. Hazards identification



Irritan

Classification of each ingredient see point 3.

#### 3. Compositions/information on ingredients

| Ingredient                   | Conc. % | CAS No.    | Classification   |
|------------------------------|---------|------------|--|
| Water                        | ≤ 90 %  | 7732-18-5  | No hazardous substance.  |
| Poly (Ethylene glycol)       | ≤ 10 %  | 25322-68-3 | No hazardous substance.  |
| Citric acid monohydrate      | ≤ 10 %  | 5949-29-1  | H319-Eye Irrit. 2; R36; Xi   |
| Ferric chloride hexahydrate  | ≤ 10 %  | 10025-77-1 | H290-Met. Corr.1; H302-Acute Tox. 4;<br>H315-Skin Irrit. 2 ; H318-Eye Dam. 1;<br>R22; R36; R41; Xn |
| Manganese(II)-nitrate hydrat | ≤ 1 %   | 15710-66-4 | H272-Ox. Sol. 3; H315-Skin Irrit. 2; H319-Eye<br>Irrit. 2; H335-STOT SE 3;<br>R8; R36/37/38; O; Xi |
| Erbium chloride              | ≤ 50 %  | 10138-41-7 | H315-Skin Irrit. 2 ; H319-Eye Irrit. 2;<br>H335-STOT SE 3;<br>R36/37/38; Xi                        |

Version: 3 / 08.2018 Compiled at 30.08.2018 Effective date: 30.08.2018 Replaces version: 2 / 04.2015 Page 2 of 5



#### 4. First-aid measures

| 4.1 After inhalation   | Supply fresh air; consult doctor in case of health problems.               |
|--|--|
| 4.2 After skin contact   | Rinse with plenty of water. If skin irritation, seek medical advice.       |
| <b>4.3 After eye contact</b> Rinse opened eye under runwater for 15 minutes and seek medical advice. |  |
| 4.4 After swallowing   | Rinse mouth with water and seek medical attention. Do not induce vomiting. |

## 5. Fire fighting measures

| 5.1 Suitable extinguishing agents                  | Use fire extinguishers measures to the surroundings. The product itself does not burn.    |
|--|---|
| 5.2 Extinguishing Media                            | Unknown   |
| 5.3 Specific hazards                               | Unknown   |
| 5.4 Special protective equipment for fire fighting | Use standard protective equipment for fire.   |
| 5.5 Additional information                         | Prevent fire extinguishing water from contaminating surface water or ground water system. |

#### 6. Accidental release measures

| 6.1 Person-related safety precautions | Wear protective gloves. Avoid breathing vapours, use only in a well-ventilated area. Personal protective equipment see point 8. |
|---------------------------------------|---|
| 6.2 Environmental protection measures | Do not empty into drains.   |
| 6.3 Cleaning measures                 | Wipe off with damp cloth and rinse off residues with plenty of water.   |
| 6.4 Further information               | No dangerous substances are released.   |

## 7. Handling and storage

| 7.1 Information for safe handling                          | Prevent spillage. Avoid contact with eyes and skin.  |
|--|--|
| 7.2 Storage  | Store rooms requirement and receptacle: Product must be stored cool and dry in original container. Protect from direct sunlight. |
| 7.3 Information about storage in common storage facilities | Not required   |



Version: 3 / 08.2018 Compiled at 30.08.2018 Effective date: 30.08.2018 Replaces version: 2 / 04.2015 Page 3 of 5



#### 8. Exposure control and personal protection

| 8.1 General protective measures   |   |
|---|---|
| Ingredients with limit values that require monitoring at the work-place | Not applicable  |
| 8.2 Exposure controls   |   |
| Personal protective equipment   | Respiratory protection: Not required. Hand protection: Required. Eye protection: Required. Skin and body protection: Not required.  Hygiene measures: Typical occupational hygiene is required. Wash hands with water and soap after using the product. |

## 9. Physical and chemical properties

| 9.1 Appearance    |                         |
|-------------------|-------------------------|
| Aggregation state | liquid                  |
| Colour            | depends on pigmentation |
| Odour             | characteristic          |

| 2 Safety related data       |                   |
|-----------------------------|-------------------|
| Freezing point              | No available data |
| Boiling point               | No available data |
| Flash point                 | No available data |
| Auto ignition temperature   | No available data |
| Lower explosion limit       | No available data |
| Upper explosion limit       | No available data |
| Vapour pressure at 20°C     | No available data |
| Density at 20°C             | No available data |
| Rel. vapour density at 20°C | No available data |
| Solubility in water         | soluble           |
| Miscibility                 | No available data |
| Hazardous reactions         | No available data |
| Additional information      | No available data |



Version: 3 / 08.2018 Compiled at 30.08.2018 Effective date: 30.08.2018 Replaces version: 2 / 04.2015 Page 4 of 5



## 10. Stability and reactivity

| 10.1 Reactivity                         | Unknown   |
|---|---|
| 10.2 Chemical stability                 | Stable under recommended storage conditions for two years from date of manufacture. |
| 10.3 Possibility of hazardous reactions | Unknown   |
| 10.4 Conditions to avoid                | Unknown   |
| 10.5 Incompatible materials             | Unknown   |
| 10.6 Hazardous decomposition products   | Unknown; In case of fire: See chapter 5   |

#### 11. Toxicological information

| 11.1 Skin contact           | Slight skin irritation   |
|-----------------------------|--|
| 11.2 Eye contact            | Irritating effect  |
| 11.3 Sensitization          | No available data  |
| 11.4 Additional information | To our knowledge no harmful effects are to be expected if used and handled using personal, protective equipment. |

#### 12. Ecological information

| 12.1 Eco-toxicity                       | No available data |
|---|-------------------|
| 12.2 Persistence and degradability      | No available data |
| 12.3 Bio-accumulation potential         | No available data |
| 12.4 Mobility in soil                   | No available data |
| 12.5 Results of PBT and vPvB assessment | No available data |
| 12.6 Other eco-toxicological effects    | No available data |

## 13. Disposal considerations

| 13.1 Waste treatment methods | Offer surplus and non-recyclable solutions to a licensed disposal company. |
|------------------------------|--|
| 13.2 Contaminated Packaging  | Dispose of as unused product.  |

## 14. Transport information

Not dangerous substance according to the transport regulation.



Version: 3 / 08.2018 Compiled at 30.08.2018 Effective date: 30.08.2018 Replaces version: 2 / 04.2015 Page 5 of 5



#### 15. Regulatory information

**15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture**Additional regulations

Xi: Irritant

R36/37/38: Irritating to eyes, respiratory system and skin. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S37/39: Wear suitable gloves and eye/face protection.

#### 16. Other information

#### O: Oxidizing.

Xi: Irritant

Xn: Harmful

R8: Contact with combustible material may cause fire

R22: Harmful if swallowed R36: Irritating to eyes

R37: Irritating to respiratory system

R38: Irritating to skin

R41: Risk of serious damage to eyes

#### Full text of H-phrases:

H272: May intensify fire; Oxidant

H290: May be corrosive to metals

H302: Harmful if swallowed

H315: Causes skin irritation

H318: Causes severe eye damage

H319: Causes severe eye irritation

H335: May cause respiratory irritation

#### Wording of the hazard classes:

Eye Irrit.: Eye irritation

Met. Corr.: Corrosive to metals

STOT SE 3: May cause irritation to the respiratory tract

Acute Tox.: Acute toxicity

This information is based on our current knowledge and is intended to describe the product for the purpose of health, safety and environmental requirements only. It is not a guarantee for any specific property of the product and it does not justify a contractual legal relationship. All the information given in this safety data sheet should be understood as general guidelines for the correct storage, transport, handling and disposal of the product. If the above-mentioned product is mixed and/or processed or subjected to treatment, the information contained in this material safety data sheet, if not expressly indicated, are not transferable to the new material. The information are not quality, description of features, or warranty.

