

# 01 PRODUCT IDENTIFICATION

Manufacture/Supplier: DMAX Co., Ltd.

37-26, Dasa-ro 71 gil, Dasa-eup, Dalseong-gun,

Daegu, 42907, Korea

Emergency Phone: +82-53-592-3146 Business Phone : +82-53-592-3146 Fax : +82-53-592-3148

Preparation Date: April 10, 2015 **Revision Date:** February 3, 2020(Rev.3)

**Product Name:** Total 410 types including A1-15ml(Brand: DMAX Coloring liquid, Confident coloring liquid, CAMeleon coloring liquid)

**Chemical Name:** Mixtures

Recommended use of the chemical and restrictions on use: Colouring liquid for shading zirconia crown & bridge frame work. For dental lab use only

Further information obtainable from:

http://hellodmax.com info@dmax.biz

### 02 HAZARDS IDENTIFICATION

• Hazard Description: May be harmful if inhaled or swallowed. May cause eye and skin irritation.

- Eye Effects: cause eye irritation
- Skin Effects: cause skin irritation
- Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of the "General Classification" guideline for preparations of the CE" in the latest valid version.

• Classification system:

The classification is according to the latest editions of the CE, and extended by company and literaturedata.

- Results of PBT and vPvB assessment:
  - PBT: Not applicable.
  - vPvB: Not applicable.

## OB COMPOSITION/INFORMATION ON COMPONENTS

- "coloring Liquid" components
  - Water
  - nickel(II) chloride hexahydrate
  - iron(Ⅲ) nitrate nonahydrate
  - sodium silicate solution
  - manganese( II ) nitrate hexahydrate
  - copper(II) nitrate trihydrate
  - chromium(**III**) nitrate nonahydrate
- Chemical characterization: Mixtures



**Description:** Mixture of substances listed below with nonhazardous additions.

Components	Content(%)	CAS.No.
Water	91.1~96.8	7732-18-5
Nickel(Ⅱ) chloride hexahydrate	0~2.7	7791-20-0
Iron(Ⅲ) nitrate nonahydrate	0~3.0	7782-61-8
Sodium silicate solution	0~4.2	1344-09-8
Manganese(II) nitrate hexahydrate	0~2.6	17141-63-8
Erbium(III) nitrate pentahydrate	0~4.8	10031-51-3
Copper(Ⅱ) nitrate trihydrate	0~3.2	10031-43-3
Chromium(III) nitrate nonahydrate	0~3.1	7789-02-8

**Dangerous components:** none

### 04 DESCRIPTION OF FIRST AID MEASURES

- **General information:** No special measures required.
- After inhalation: Supply fresh air.
- After skin contact: Rinse with warm water.
- After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

#### Information for doctor:

- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

# 05 FIREFIGHTING MEASURES

- · Extinguishing media
- Suitable extinguishing agents:

Use fire extinguishing methods suitable to surrounding conditions.

- Special hazards arising from the substance or mixture
  - No further relevant information available.
- Advice for firefighters
- **Protective equipment:** Mount respiratory protective device.









### **06** ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions:

Do not allow product to reach sewage system or any water course.

Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

### 07 HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Do not breathe vapors or spray mist. Do not ingest.

- Conditions for safe storage, including any incompatibilities Keep in a dry, cool and well-ventilated place.
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Specific end uses**

### OB EXPOSURE CONTROLS/PERSONAL PROTECTION

- Additional information about design of technical facilities: No further data
- Control parameters
- Ingredients with limit values that require monitoring at the workplace:

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

- Additional information: The lists valid during the making were used as basis.
- Exposure controls
- Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

- Respiratory protection: Not required.
- Protection of hands:

Protective gloves

- Eye protection: Goggles recommended during refilling
- Body protection: Protective work clothing

## 09 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

### **GENERAL INFORMATION**

- Appearance:
  - Form: Fluid
  - Odour: Weak, characteristic
  - pH-value at 20°C: 9









- Change in condition
  - Melting point/Melting range: Undetermined.
  - **Boiling point/Boiling range:** ca. 105°C
- **Self-igniting:** Product is not selfigniting.
- Danger of explosion: Product does not present an explosion hazard.
- Flash point: Not applicable.
- **Explosion limits:** 
  - Oxidizing properties None
- Density at 20°C: 1.02 g/cm<sup>3</sup>
- **Solubility in / Miscibility withwater:** Fully miscible.

OTHER INFORMATION: No further relevant information available.

### 10 STABILITY AND REACTIVITY

- Reactivity
- Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications. To avoid thermal decomposition do not overheat.

- **Possibility of hazardous reactions** Reacts with acids releasing sulphur dioxide.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- Hazardous decomposition products: Ammonia

#### 11 TOXICOLOGICAL INFORMATION

- Information on toxicological effects
- **Acute toxicity:** Based on available data, the classification criteria are not met.
- Irritation and corrosivity: Based on available data, the classification criteria are not met.
- **Sensitizing effects:** Based on available data, the classification criteria are not met.
- Carcinogenic/mutagenic/toxic effects for reproduction Based on available data, the classification criteria are not met.
- Specific target organ toxicity (STOT) single exposure Based on available data, the classification criteria are not met.
- Specific target organ toxicity (STOT) repeated exposure Based on available data, the classification criteria are not met.

Carcinogenicity (OSHA): No ingredient of this mixture is listed.

Carcinogenicity (IARC): No ingredient of this mixture is listed.

Carcinogenicity (NTP): No ingredient of this mixture is listed.

- Aspiration hazard: Based on available data, the classification criteria are not met.
- Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

04



## 12 ECOLOGICAL INFORMATION

- Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- Behaviour in environmental systems:
- **Bioaccumulative potential** No further relevant information available.
- Mobility in soil No further relevant information available.
- Additional ecological information:
- **General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - **vPvB:** Not applicable.
- Other adverse effects No further relevant information available.

## 13 DISPOSAL CONSIDERATIONS

#### WASTE TREATMENT METHODS

Recommendation

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts inaccordance with Local Authority requirements.

#### **UNCLEANED PACKAGING:**

Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning. Packagings that may not be cleansed are to be disposed of in the same manner as the product.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

# 14 TRANSPORTATION INFORMATION

• Transport Hazard class: Void. • Environmental hazards: No • ADR, ADN, IMDG, IATA: Void

# 15 REGULATORY INFORMATION

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations:
- Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.



### 16 OTHER INFORMATION

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of stability of this information to ensure proper use and protect the health and safety of employees

#### **DISCLAIMER OF EXPRESSED AND INPLIED WARRANTIES**

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representation as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use.

Each individual should make a determination as to the suitability of the information for his or her particular purpose(s).

06