

**Safety Data Sheet**  
**According to Regulation (EC) No 1907/2006, Annex II.**  
**Amended by COMMISSION REGULATION (EU) 2020/878.**  
**According to REGULATION (EC) No 1272/2008**

Liquid Chalk ink

Version 1.0

Issue date: 16-11-2021

Revision date: 16-11-2021

SDS Record Number: CSSS-TCO-010-146140

**Section 1 Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier:**

| Article        | EAN           |
|----------------|---------------|
| CMA100-V2-WT   | 4897096650006 |
| CMA100-V4-PAS  | 4897096650020 |
| CMA100-V4-WT   | 4897096650013 |
| CMA100-V7-AS   | 4897096650037 |
| CMA520-V2-GDSL | 4897096650044 |
| CMA520-V2-WT   | 4897096650051 |
| CMA520-V4-WT   | 4897096650068 |
| CMA520-V7-AS   | 4897096650075 |
| CMA720-V1-WT   | 4897096650082 |
| CMA720-V3-AS   | 4897096650099 |

## 1.2

Identification on the label/Trade name: Liquid Chalk ink  
Additional identification: Nanoform is NOT covered by this SDS.  
UFI: N/A  
Identification of the product: See section 3  
Index Number: See section 3  
REACH registration No.: See section 3

## 1.3 Relevant identified uses of the substance or mixture and uses advised against:

### 1.3.1 Identified uses:

Stationery for drawing.

### 1.3.2 Uses advised against:

Not available.

## 1.4 Details of the supplier of the safety data sheet:

Supplier(Only representative): -  
Supplier(Manufacturer):  
Address: -  
Contact person(E-mail):  
Telephone:  
Fax:

## 1.5 Emergency telephone Number:

Only available during office hours (9:00a.m.-17:30p.m.)

Available outside office hours? YES ☐ NO ☒

## Section 2 Hazards Identification

### 2.1 Classification of the substance or mixture:

#### 2.1.1 Classification of the mixture:

This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

| REGULATION (EC) No 1272/2008     |              |
|----------------------------------|--------------|
| Hazard classes/Hazard categories | Hazard codes |
| N/A                              | N/A          |

### 2.2 Label elements:

Hazard pictogram(s): No hazard pictogram is used.  
Signal word: No signal word is used.  
Hazard statement(s): Not applicable.  
Precautionary statement(s): Not applicable.

**2.3 Other hazards:**

The mixture does not contain PBT/vPvB substance.

The mixture does not contain endocrine disruptor.

**Section 3 Composition/information on ingredients**

Substance/Mixture:

Mixture

Ingredient(s):

| Chemical Name |                            | Registration No. | CAS No.   | EC No.    | Concentration | Classification | Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE) |
|---------------|----------------------------|------------------|-----------|-----------|---------------|----------------|--------------------------------------------------------------------------|
| Pastel purple | Water                      | N/A              | 7732-18-5 | 231-791-2 | 72.3%         | Not Classified | N/A                                                                      |
|               | Glycerol                   | N/A              | 56-81-5   | 200-289-5 | 15%           | Not Classified | N/A                                                                      |
|               | Titanium oxide             | N/A              | 1317-80-2 | 215-282-2 | 10%           | Not available  | N/A                                                                      |
|               | Pigment Blue 15:3          | N/A              | 147-14-8  | 205-685-1 | 1.4%          | Not Classified | N/A                                                                      |
|               | Pigment Red 53:1           | N/A              | 5160-02-1 | 225-935-3 | 1%            | Not Classified | N/A                                                                      |
|               | Tris(2-Hydroxyethyl) Amine | N/A              | 102-71-6  | 203-049-8 | 0.3%          | Not Classified | N/A                                                                      |
| Pastel orange | Water                      | N/A              | 7732-18-5 | 231-791-2 | 70.7%         | Not Classified | N/A                                                                      |
|               | Glycerol                   | N/A              | 56-81-5   | 200-289-5 | 15%           | Not Classified | N/A                                                                      |
|               | Titanium oxide             | N/A              | 1317-80-2 | 215-282-2 | 10%           | Not Classified | N/A                                                                      |
|               | Pigment Yellow 110         | N/A              | 5590-18-1 | 226-999-5 | 3%            | Not available  | N/A                                                                      |
|               | Pigment Red 53:1           | N/A              | 5160-02-1 | 225-935-3 | 1%            | Not Classified | N/A                                                                      |
|               | Tris(2-Hydroxyethyl) Amine | N/A              | 102-71-6  | 203-049-8 | 0.3%          | Not Classified | N/A                                                                      |
| Pastel Green  | Water                      | N/A              | 7732-18-5 | 231-791-2 | 71.7%         | Not Classified | N/A                                                                      |
|               | Glycerol                   | N/A              | 56-81-5   | 200-289-5 | 15%           | Not Classified | N/A                                                                      |
|               | Titanium oxide             | N/A              | 1317-80-2 | 215-282-2 | 9%            | Not Classified | N/A                                                                      |
|               | Pigment Blue 15:3          | N/A              | 147-14-8  | 205-685-1 | 3%            | Not Classified | N/A                                                                      |
|               | Pigment Yellow 110         | N/A              | 5590-18-1 | 226-999-5 | 1%            | Not Classified | N/A                                                                      |
|               | Tris(2-Hydroxyethyl) Amine | N/A              | 102-71-6  | 203-049-8 | 0.3%          | Not Classified | N/A                                                                      |
| Pastel pink   | Water                      | N/A              | 7732-18-5 | 231-791-2 | 71.7%         | Not Classified | N/A                                                                      |

|               |                              |     |           |           |       |                                        |     |
|---------------|------------------------------|-----|-----------|-----------|-------|----------------------------------------|-----|
|               | Glycerol                     | N/A | 56-81-5   | 200-289-5 | 15%   | Not Classified                         | N/A |
|               | Titanium oxide               | N/A | 1317-80-2 | 215-282-2 | 10%   | Not Classified                         | N/A |
|               | Pigment Red 53:1             | N/A | 5160-02-1 | 225-935-3 | 2.5%  | Not Classified                         | N/A |
|               | Pigment Yellow 110           | N/A | 5590-18-1 | 226-999-5 | 0.5%  | Not Classified                         | N/A |
|               | Tris(2-Hydroxyethyl) Amine   | N/A | 102-71-6  | 203-049-8 | 0.3%  | Not Classified                         | N/A |
| Pastel Yellow | Water                        | N/A | 7732-18-5 | 231-791-2 | 71.7% | Not Classified                         | N/A |
|               | Glycerol                     | N/A | 56-81-5   | 200-289-5 | 15%   | Not Classified                         | N/A |
|               | Titanium oxide               | N/A | 1317-80-2 | 215-282-2 | 10%   | Not Classified                         | N/A |
|               | Pigment Yellow 110           | N/A | 5590-18-1 | 226-999-5 | 3%    | Not Classified                         | N/A |
|               | Tris(2-Hydroxyethyl) Amine   | N/A | 102-71-6  | 203-049-8 | 0.3%  | Not Classified                         | N/A |
| Light blue    | Water                        | N/A | 7732-18-5 | 231-791-2 | 63.7% | Not Classified                         | N/A |
|               | Glycerol                     | N/A | 56-81-5   | 200-289-5 | 15%   | Not Classified                         | N/A |
|               | Titanium oxide               | N/A | 1317-80-2 | 215-282-2 | 15%   | Not Classified                         | N/A |
|               | Pigment Blue 15:3            | N/A | 147-14-8  | 205-685-1 | 6%    | Not Classified                         | N/A |
|               | Tris(2-Hydroxyethyl) Amine   | N/A | 102-71-6  | 203-049-8 | 0.3%  | Not Classified                         | N/A |
| Metallic blue | Water                        | N/A | 7732-18-5 | 231-791-2 | 78.2% | Not Classified                         | N/A |
|               | Glycerol                     | N/A | 56-81-5   | 200-289-5 | 15%   | Not Classified                         | N/A |
|               | Pigment Blue 15:3            | N/A | 147-14-8  | 205-685-1 | 4.5%  | Not Classified                         | N/A |
|               | Aluminium Powder(stabilised) | N/A | 7429-90-5 | 231-072-3 | 2%    | Flam. Sol. 1 H228; Water-react. 2 H261 | N/A |
|               | Tris(2-Hydroxyethyl) Amine   | N/A | 102-71-6  | 203-049-8 | 0.3%  | Not Classified                         | N/A |
| Metallic pink | Water                        | N/A | 7732-18-5 | 231-791-2 | 79.7% | Not Classified                         | N/A |
|               | Glycerol                     | N/A | 56-81-5   | 200-289-5 | 15%   | Not Classified                         | N/A |
|               | Pigment Red 53:1             | N/A | 5160-02-1 | 225-935-3 | 3%    | Not Classified                         | N/A |
|               | Aluminium Powder(stabilised) | N/A | 7429-90-5 | 231-072-3 | 2%    | Flam. Sol. 1 H228; Water-react. 2 H261 | N/A |
|               | Tris(2-Hydroxyethyl) Amine   | N/A | 102-71-6  | 203-049-8 | 0.3%  | Not Classified                         | N/A |

|                 |                              |     |           |           |       |                                           |     |
|-----------------|------------------------------|-----|-----------|-----------|-------|-------------------------------------------|-----|
| Metallic violet | Water                        | N/A | 7732-18-5 | 231-791-2 | 77.2% | Not Classified                            | N/A |
|                 | Glycerol                     | N/A | 56-81-5   | 200-289-5 | 15%   | Not Classified                            | N/A |
|                 | Pigment Violet 23            | N/A | 6358-30-1 | 228-767-9 | 5.5%  | Not Classified                            | N/A |
|                 | Aluminium Powder(stabilised) | N/A | 7429-90-5 | 231-072-3 | 2%    | Flam. Sol. 1 H228;<br>Water-react. 2 H261 | N/A |
|                 | Tris(2-Hydroxyethyl) Amine   | N/A | 102-71-6  | 203-049-8 | 0.3%  | Not Classified                            | N/A |
| Metallic green  | Water                        | N/A | 7732-18-5 | 231-791-2 | 78.2% | Not Classified                            | N/A |
|                 | Glycerol                     | N/A | 56-81-5   | 200-289-5 | 15%   | Not Classified                            | N/A |
|                 | Pigment Yellow 110           | N/A | 5590-18-1 | 226-999-5 | 3.5%  | Not Classified                            | N/A |
|                 | Aluminium Powder(stabilised) | N/A | 7429-90-5 | 231-072-3 | 2%    | Flam. Sol. 1 H228;<br>Water-react. 2 H261 | N/A |
|                 | Pigment Blue 15:3            | N/A | 147-14-8  | 205-685-1 | 1%    | Not Classified                            | N/A |
|                 | Tris(2-Hydroxyethyl) Amine   | N/A | 102-71-6  | 203-049-8 | 0.3%  | Not Classified                            | N/A |
| Metallic silver | Water                        | N/A | 7732-18-5 | 231-791-2 | 79.7% | Not Classified                            | N/A |
|                 | Glycerol                     | N/A | 56-81-5   | 200-289-5 | 15%   | Not Classified                            | N/A |
|                 | Aluminium Powder(stabilised) | N/A | 7429-90-5 | 231-072-3 | 5%    | Flam. Sol. 1 H228;<br>Water-react. 2 H261 | N/A |
|                 | Tris(2-Hydroxyethyl) Amine   | N/A | 102-71-6  | 203-049-8 | 0.3%  | Not Classified                            | N/A |
| Metallic Gold   | Water                        | N/A | 7732-18-5 | 231-791-2 | 78.2% | Not Classified                            | N/A |
|                 | Glycerol                     | N/A | 56-81-5   | 200-289-5 | 15%   | Not Classified                            | N/A |
|                 | Pigment Yellow 110           | N/A | 5590-18-1 | 226-999-5 | 4.5%  | Not Classified                            | N/A |
|                 | Aluminium Powder(stabilised) | N/A | 7429-90-5 | 231-072-3 | 2%    | Flam. Sol. 1 H228;<br>Water-react. 2 H261 | N/A |
|                 | Tris(2-Hydroxyethyl) Amine   | N/A | 102-71-6  | 203-049-8 | 0.3%  | Not Classified                            | N/A |
| Metallic copper | Water                        | N/A | 7732-18-5 | 231-791-2 | 78.2% | Not Classified                            | N/A |
|                 | Glycerol                     | N/A | 56-81-5   | 200-289-5 | 15%   | Not Classified                            | N/A |
|                 | Pigment Yellow 110           | N/A | 5590-18-1 | 226-999-5 | 3.5%  | Not Classified                            | N/A |

|                    |                                 |     |           |           |       |                                           |     |
|--------------------|---------------------------------|-----|-----------|-----------|-------|-------------------------------------------|-----|
|                    | Aluminium Powder(stabilised)    | N/A | 7429-90-5 | 231-072-3 | 2%    | Flam. Sol. 1 H228;<br>Water-react. 2 H261 | N/A |
|                    | Pigment Red 53:1                | N/A | 5160-02-1 | 225-935-3 | 1%    | Not Classified                            | N/A |
|                    | Tris(2-Hydroxyethyl) Amine      | N/A | 102-71-6  | 203-049-8 | 0.3%  | Not Classified                            | N/A |
| Fluorescent yellow | Water                           | N/A | 7732-18-5 | 231-791-2 | 70.6% | Not Classified                            | N/A |
|                    | Glycerol                        | N/A | 56-81-5   | 200-289-5 | 15%   | Not Classified                            | N/A |
|                    | Titanium oxide                  | N/A | 1317-80-2 | 215-282-2 | 10%   | Not Classified                            | N/A |
|                    | Pigment Yellow 110              | N/A | 5590-18-1 | 226-999-5 | 4%    | Not Classified                            | N/A |
|                    | Tris(2-Hydroxyethyl) Amine      | N/A | 102-71-6  | 203-049-8 | 0.3%  | Not Classified                            | N/A |
|                    | 4,4'-bis(2-benzoxazoly)stilbene | N/A | 1533-45-5 | 216-245-3 | 0.1%  | Aquatic Chronic 2 H411                    | N/A |
| Fluorescent Purple | Water                           | N/A | 7732-18-5 | 231-791-2 | 68.6% | Not Classified                            | N/A |
|                    | Glycerol                        | N/A | 56-81-5   | 200-289-5 | 15%   | Not Classified                            | N/A |
|                    | Titanium oxide                  | N/A | 1317-80-2 | 215-282-2 | 10%   | Not Classified                            | N/A |
|                    | Pigment Red 53:1                | N/A | 5160-02-1 | 225-935-3 | 5%    | Not Classified                            | N/A |
|                    | Pigment Blue 15:3               | N/A | 147-14-8  | 205-685-1 | 1%    | Not Classified                            | N/A |
|                    | Tris(2-Hydroxyethyl) Amine      | N/A | 102-71-6  | 203-049-8 | 0.3%  | Not Classified                            | N/A |
|                    | 4,4'-bis(2-benzoxazoly)stilbene | N/A | 1533-45-5 | 216-245-3 | 0.1%  | Aquatic Chronic 2 H411                    | N/A |
| Fluorescent orange | Water                           | N/A | 7732-18-5 | 231-791-2 | 70.6% | Not Classified                            | N/A |
|                    | Glycerol                        | N/A | 56-81-5   | 200-289-5 | 15%   | Not Classified                            | N/A |
|                    | Titanium oxide                  | N/A | 1317-80-2 | 215-282-2 | 10%   | Not Classified                            | N/A |
|                    | Pigment Yellow 110              | N/A | 5590-18-1 | 226-999-5 | 2%    | Not Classified                            | N/A |
|                    | Pigment Red 53:1                | N/A | 5160-02-1 | 225-935-3 | 2%    | Not Classified                            | N/A |
|                    | Tris(2-Hydroxyethyl) Amine      | N/A | 102-71-6  | 203-049-8 | 0.3%  | Not Classified                            | N/A |
|                    | 4,4'-bis(2-benzoxazoly)stilbene | N/A | 1533-45-5 | 216-245-3 | 0.1%  | Aquatic Chronic 2 H411                    | N/A |
| White              | Water                           | N/A | 7732-18-5 | 231-791-2 | 69.6% | Not Classified                            | N/A |
|                    | Glycerol                        | N/A | 56-81-5   | 200-289-5 | 15%   | Not Classified                            | N/A |

|                   |                                 |     |           |           |       |                        |     |
|-------------------|---------------------------------|-----|-----------|-----------|-------|------------------------|-----|
|                   | Titanium oxide                  | N/A | 1317-80-2 | 215-282-2 | 15%   | Not Classified         | N/A |
|                   | Tris(2-Hydroxyethyl) Amine      | N/A | 102-71-6  | 203-049-8 | 0.3%  | Not Classified         | N/A |
|                   | 4,4'-bis(2-benzoxazoly)stilbene | N/A | 1533-45-5 | 216-245-3 | 0.1%  | Aquatic Chronic 2 H411 | N/A |
| Black             | Water                           | N/A | 7732-18-5 | 231-791-2 | 69.6% | Not Classified         | N/A |
|                   | Glycerol                        | N/A | 56-81-5   | 200-289-5 | 15%   | Not Classified         | N/A |
|                   | Carbon Black                    | N/A | 1333-86-4 | 215-609-9 | 15%   | Not Classified         | N/A |
|                   | Tris(2-Hydroxyethyl) Amine      | N/A | 102-71-6  | 203-049-8 | 0.3%  | Not Classified         | N/A |
|                   | 4,4'-bis(2-benzoxazoly)stilbene | N/A | 1533-45-5 | 216-245-3 | 0.1%  | Aquatic Chronic 2 H411 | N/A |
| Fluorescent green | Water                           | N/A | 7732-18-5 | 231-791-2 | 69.6% | Not Classified         | N/A |
|                   | Glycerol                        | N/A | 56-81-5   | 200-289-5 | 15%   | Not Classified         | N/A |
|                   | Titanium oxide                  | N/A | 1317-80-2 | 215-282-2 | 10%   | Not Classified         | N/A |
|                   | Pigment Yellow 110              | N/A | 5590-18-1 | 226-999-5 | 4%    | Not Classified         | N/A |
|                   | Pigment Blue 15:3               | N/A | 147-14-8  | 205-685-1 | 1%    | Not Classified         | N/A |
|                   | Tris(2-Hydroxyethyl) Amine      | N/A | 102-71-6  | 203-049-8 | 0.3%  | Not Classified         | N/A |
|                   | 4,4'-bis(2-benzoxazoly)stilbene | N/A | 1533-45-5 | 216-245-3 | 0.1%  | Aquatic Chronic 2 H411 | N/A |
| Fluorescent Blue  | Water                           | N/A | 7732-18-5 | 231-791-2 | 70.6% | Not Classified         | N/A |
|                   | Glycerol                        | N/A | 56-81-5   | 200-289-5 | 15%   | Not Classified         | N/A |
|                   | Titanium oxide                  | N/A | 1317-80-2 | 215-282-2 | 10%   | Not Classified         | N/A |
|                   | Pigment Blue 15:3               | N/A | 147-14-8  | 205-685-1 | 4%    | Not Classified         | N/A |
|                   | Tris(2-Hydroxyethyl) Amine      | N/A | 102-71-6  | 203-049-8 | 0.3%  | Not Classified         | N/A |
|                   | 4,4'-bis(2-benzoxazoly)stilbene | N/A | 1533-45-5 | 216-245-3 | 0.1%  | Aquatic Chronic 2 H411 | N/A |
| Fluorescent Red   | Water                           | N/A | 7732-18-5 | 231-791-2 | 70.6% | Not Classified         | N/A |
|                   | Glycerol                        | N/A | 56-81-5   | 200-289-5 | 15%   | Not Classified         | N/A |
|                   | Titanium oxide                  | N/A | 1317-80-2 | 215-282-2 | 10%   | Not Classified         | N/A |
|                   | Pigment Red 53:1                | N/A | 5160-02-1 | 225-935-3 | 4%    | Not Classified         | N/A |

|                  |                                 |     |           |           |      |                        |     |
|------------------|---------------------------------|-----|-----------|-----------|------|------------------------|-----|
|                  | Tris(2-Hydroxyethyl) Amine      | N/A | 102-71-6  | 203-049-8 | 0.3% | Not Classified         | N/A |
|                  | 4,4'-bis(2-benzoxazoly)stilbene | N/A | 1533-45-5 | 216-245-3 | 0.1% | Aquatic Chronic 2 H411 | N/A |
| Fluorescent Pink | Water                           | N/A | 7732-18-5 | 231-791-2 | 72%  | Not Classified         | N/A |
|                  | Glycerol                        | N/A | 56-81-5   | 200-289-5 | 15%  | Not Classified         | N/A |
|                  | Titanium oxide                  | N/A | 1317-80-2 | 215-282-2 | 12%  | Not Classified         | N/A |
|                  | Pigment Red 53:1                | N/A | 5160-02-1 | 225-935-3 | 0.5% | Not Classified         | N/A |
|                  | Tris(2-Hydroxyethyl) Amine      | N/A | 102-71-6  | 203-049-8 | 0.3% | Not Classified         | N/A |
|                  | 4,4'-bis(2-benzoxazoly)stilbene | N/A | 1533-45-5 | 216-245-3 | 0.1% | Aquatic Chronic 2 H411 | N/A |
|                  | Pigment Yellow 110              | N/A | 5590-18-1 | 226-999-5 | 0.1% | Not Classified         | N/A |

0% of the mixture consists of component (s) of unknown toxicity.

0% of components with unknown hazards to the aquatic environment.

## Section 4 First aid measures

### 4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

#### 4.1.1 In case of inhalation:

Move person to fresh air; if effects occur, consult a physician.

#### 4.1.2 In case of skin contact:

Wash skin with plenty of water.

#### 4.1.3 In case of eyes contact:

Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

#### 4.1.4 In case of ingestion:

If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

### 4.2 Most important symptoms and effects, both acute and delayed:

The product is not classified as harmful to human health effect.

### 4.3 Indication of any immediate medical attention and special treatment needed:

No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

## Section 5 Firefighting measures

### 5.1 Extinguishing media:

**Suitable extinguishing media:**

Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred.

**Unsuitable extinguishing media:**

Do not use direct water stream. May spread fire. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

### 5.2 Special hazards arising from the substance or mixture

Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or

irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

### 5.3 Advice for firefighters:

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

## Section 6 Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures:

#### 6.1.1 For non-emergency personnel:

Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment.

#### 6.1.2 For emergency responders:

Avoid skin and eye contact. Refer to section 8 of SDS for personal protection details.

### 6.2 Environmental Precautions:

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

### 6.3 Methods and material for Containment and Cleaning up:

Recover spilled material if possible. Contain spilled material if possible. Absorb with materials such as: Sand. Collect in suitable and properly labeled containers.

### 6.4 Reference to other sections:

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

## Section 7 Handling and storage

### 7.1 Precautions for safe handling:

#### 7.1.1 Protective measures:

Ensure good ventilation/exhaustion at the workplace. Wash thoroughly after handling.

#### 7.1.2 Advice on general occupational hygiene:

Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

### 7.2 Conditions for safe storage, including any incompatibilities:

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

### 7.3 Specific end use(s):

Not available.

## Section 8 Exposure Controls/Personal Protection

### 8.1 Control parameters:

#### 8.1.1 Occupational exposure limits:

| Country       | Substance                 | EC No.    | CAS No.   | Occupational Exposure Limit Value (8-hour reference period) |                        | Occupational Exposure Limit Value (15-minute reference period) |                        |       |
|---------------|---------------------------|-----------|-----------|-------------------------------------------------------------|------------------------|----------------------------------------------------------------|------------------------|-------|
|               |                           |           |           | ppm                                                         | mg/m <sup>3</sup>      | ppm                                                            | mg/m <sup>3</sup>      | Notes |
| Ireland       | Glycerol                  | 200-289-5 | 56-81-5   | -                                                           | 10                     | -                                                              | -                      | -     |
| Ireland       | Tris(2-Hydroxyethyl)Amine | 203-049-8 | 102-71-6  | -                                                           | 5                      | -                                                              | -                      | -     |
| Ireland       | Carbon Black              | 215-609-9 | 1333-86-4 | -                                                           | 3 Inhalable fraction   | -                                                              | -                      | -     |
| Denmark       | Tris(2-Hydroxyethyl)Amine | 203-049-8 | 102-71-6  | 0.5                                                         | 3.1                    | 1                                                              | 6.2                    | -     |
| Finland       | Glycerol                  | 200-289-5 | 56-81-5   | -                                                           | 20                     | -                                                              | -                      | -     |
| Finland       | Carbon Black              | 215-609-9 | 1333-86-4 | -                                                           | 3.5                    | -                                                              | 7                      | -     |
| Germany (AGS) | Glycerol                  | 200-289-5 | 56-81-5   | -                                                           | 200 Inhalable fraction | -                                                              | 400 Inhalable fraction | -     |
| Germany (DFG) | Glycerol                  | 200-289-5 | 56-81-5   | -                                                           | 200 Inhalable          | -                                                              | 400 Inhalable          | -     |

|               |                              |           |           |     | fraction                                                |     | fraction |   |
|---------------|------------------------------|-----------|-----------|-----|---------------------------------------------------------|-----|----------|---|
| Germany (DFG) | Aluminium Powder(stabilised) | 231-072-3 | 7429-90-5 | -   | 4 Inhalable fraction;<br>1.5 Respirable fraction        | -   | -        | - |
| Latvia        | Pigment Blue 15:3            | 205-685-1 | 147-14-8  | -   | 5                                                       | -   | -        | - |
| Poland        | Aluminium Powder(stabilised) | 231-072-3 | 7429-90-5 | -   | 2.5 (Fume, total dust );<br>1.2 (Fume, respirable dust) | -   | -        | - |
| Poland        | Carbon Black                 | 215-609-9 | 1333-86-4 | -   | 4 Inhalable fraction                                    | -   | -        | - |
| Sweden        | Tris(2-Hydroxyethyl)Amine    | 203-049-8 | 102-71-6  | 0.8 | 5                                                       | 1.6 | 10       | - |
| Sweden        | Carbon Black                 | 215-609-9 | 1333-86-4 | -   | 3                                                       | -   | -        | - |

**8.1.2 Additional exposure limits under the conditions of use:** Not available.

**8.1.3 DNEL/DMEL and PNEC-Values:** Not available.

## 8.2 Exposure controls:

**8.2.1 Appropriate engineering controls:** Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

### 8.2.2 Individual protection measures, such as personal protective equipment:

**Eye/face protection:** Use safety glasses. Safety glasses should be consistent with EN 166 or equivalent.

#### Skin protection

**Hand protection:** Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Butyl rubber. Polyethylene. Neoprene. Natural rubber ("latex"). Polyvinyl chloride ("PVC" or "vinyl"). Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl alcohol ("PVA"). Ethyl vinyl alcohol laminate ("EVAL"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 4 or higher (breakthrough time greater than 120 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 1 or higher (breakthrough time greater than 10 minutes according to EN 374) is recommended. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**Body protection:** When prolonged or frequently repeated contact could occur, use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full-body suit will depend on the task.

**Respiratory protection:**

Atmospheric levels should be maintained below the exposure guideline. For most

conditions, no respiratory protection should be needed; however, if material is heated or sprayed, use an approved air-purifying respirator. Use the following CE approved air-purifying respirator: Organic vapor cartridge with a particulate pre-filter, type AP2.

**Thermal hazards:**

Wear suitable protective clothing to prevent heat.

**8.2.3 Environmental exposure controls:**

Avoid discharge into the environment. Dispose of rinse water in accordance with local and national regulations

## Section 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties:

|                                 |                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appearance:                     | Liquid                                                                                                                                                                                                                                                                                                                                               |
| Colour:                         | Pastel purple, pastel orange, pastel green, pastel pink, pastel yellow, light blue, metallic blue, metallic pink, metallic violet, metallic green, metallic silver, metallic gold, metallic copper, fluorescent yellow, fluorescent purple, fluorescent orange, white, black, fluorescent green, fluorescent blue, fluorescent red, fluorescent pink |
| Odour:                          | Odorless                                                                                                                                                                                                                                                                                                                                             |
| Odour threshold:                | Not available                                                                                                                                                                                                                                                                                                                                        |
| pH:                             | Not available                                                                                                                                                                                                                                                                                                                                        |
| Melting point/range (°C):       | Not available                                                                                                                                                                                                                                                                                                                                        |
| Boiling point/range (°C):       | Not available                                                                                                                                                                                                                                                                                                                                        |
| Flash point (°C):               | Not available                                                                                                                                                                                                                                                                                                                                        |
| Evaporation rate:               | Not available                                                                                                                                                                                                                                                                                                                                        |
| Flammability limit - lower (%): | Not available                                                                                                                                                                                                                                                                                                                                        |
| Flammability (solid, gas):      | Not applicable                                                                                                                                                                                                                                                                                                                                       |
| Ignition temperature (°C):      | Not available                                                                                                                                                                                                                                                                                                                                        |
| Upper/lower explosive limits:   | Not available                                                                                                                                                                                                                                                                                                                                        |
| Vapour pressure (20°C):         | Not available                                                                                                                                                                                                                                                                                                                                        |
| Vapour density:                 | Not available                                                                                                                                                                                                                                                                                                                                        |
| Relative Density:               | Not available                                                                                                                                                                                                                                                                                                                                        |
| Bulk density (kg/m³):           | Not available                                                                                                                                                                                                                                                                                                                                        |
| Water solubility (g/l):         | Not available                                                                                                                                                                                                                                                                                                                                        |
| n-Octanol/Water (log Po/w):     | Not available                                                                                                                                                                                                                                                                                                                                        |
| Auto-ignition temperature:      | Not available                                                                                                                                                                                                                                                                                                                                        |
| Decomposition temperature:      | Not available                                                                                                                                                                                                                                                                                                                                        |
| Viscosity, dynamic (mPa.s):     | Not available                                                                                                                                                                                                                                                                                                                                        |
| Explosive properties:           | Non-explosive                                                                                                                                                                                                                                                                                                                                        |
| Oxidising properties:           | No oxidizing properties                                                                                                                                                                                                                                                                                                                              |

### 9.2. Other information:

|                                                      |               |
|------------------------------------------------------|---------------|
| Fat solubility(solvent– oil to be specified)<br>etc: | Not available |
| Surface tension:                                     | Not available |
| Dissociation constant in water( pKa):                | Not available |
| Oxidation-reduction Potential:                       | Not available |

## Section 10 Stability and reactivity

#### **10.1 Reactivity:**

The substance is stable under normal storage and handling conditions.

|                                                 |                                                                                                                                                                                    |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>10.2 Chemical stability:</b>                 | Stable under recommended storage conditions. Hygroscopic.                                                                                                                          |
| <b>10.3 Possibility of hazardous reactions:</b> | No dangerous reactions known.                                                                                                                                                      |
| <b>10.4 Conditions to avoid:</b>                | Exposure to elevated temperatures can cause product to decompose. Avoid moisture.                                                                                                  |
| <b>10.5 Incompatible materials:</b>             | Avoid contact with strong oxidizers.                                                                                                                                               |
| <b>10.6 Hazardous decomposition products:</b>   | Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Acrolein, carbon oxide. |

## Section 11 Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:

#### Acute toxicity:

##### Glycerol (CAS# 56-81-5)

|                        |                                   |
|------------------------|-----------------------------------|
| LD50(Oral, Rat):       | 27 200 mg/kg bw                   |
| LD50(Dermal, Rabbit):  | Not available                     |
| LC50(Inhalation, Rat): | > 5 850 mg/m <sup>3</sup> air, 4h |

##### Pigment Blue 15:3 (CAS# 147-14-8)

|                        |                  |
|------------------------|------------------|
| LD50(Oral, Rat):       | > 6 400 mg/kg bw |
| LD50(Dermal, Rat):     | > 5 000 mg/kg bw |
| LC50(Inhalation, Rat): | Not available    |

##### Pigment Red 53:1 (CAS# 5160-02-1)

|                        |                     |
|------------------------|---------------------|
| LD50(Oral, Rat):       | > 10 000 mg/kg bw   |
| LD50(Dermal, Rabbit):  | Not available       |
| LC50(Inhalation, Rat): | > 5.24 mg/L air, 4h |

##### Tris(2-Hydroxyethyl)Amine (CAS# 102-71-6)

|                        |                  |
|------------------------|------------------|
| LD50(Oral, Rat):       | 6 400 mg/kg bw   |
| LD50(Dermal, Rabbit):  | > 2 000 mg/kg bw |
| LC50(Inhalation, Rat): | Not available    |

##### Pigment Yellow 110 (CAS# 5590-18-1)

|                        |                  |
|------------------------|------------------|
| LD50(Oral, Rat):       | 2 340 mg/kg bw   |
| LD50(Dermal, Rat):     | > 5 000 mg/kg bw |
| LC50(Inhalation, Rat): | Not available    |

##### 4,4'-bis(2-benzoxazoly)stilbene (CAS# 1533-45-5)

|                        |                  |
|------------------------|------------------|
| LD50(Oral, Rat):       | > 2 000 mg/kg bw |
| LD50(Dermal, Rat):     | > 2 000 mg/kg bw |
| LC50(Inhalation, Rat): | Not available    |

##### Carbon Black (CAS# 1333-86-4)

|                        |                  |
|------------------------|------------------|
| LD50(Oral, Rat):       | > 8 000 mg/kg bw |
| LD50(Dermal, Rabbit):  | Not available    |
| LC50(Inhalation, Rat): | Not available    |

|                                           |                |
|-------------------------------------------|----------------|
| <b>Skin corrosion/Irritation:</b>         | Not classified |
| <b>Serious eye damage/irritation:</b>     | Not classified |
| <b>Respiratory or skin sensitization:</b> | Not classified |
| <b>Germ cell mutagenicity:</b>            | Not classified |
| <b>Carcinogenicity:</b>                   | Not classified |
| <b>Reproductive toxicity:</b>             | Not classified |

|                                          |                                                   |
|------------------------------------------|---------------------------------------------------|
| STOT- single exposure:                   | Not classified                                    |
| STOT-repeated exposure:                  | Not classified                                    |
| Aspiration hazard:                       | Not classified                                    |
| <b>11.2 Information on other hazards</b> |                                                   |
| Endocrine disrupting properties          | The mixture does not contain endocrine disruptor. |
| Other information                        | Not applicable                                    |

## Section 12 Ecological information

### 12.1 Toxicity:

Glycerol (CAS# 56-81-5)

Acute (short-term) toxicity:

LC50(96h, Fish): 54 000 mg/L

LC50(48h, Crustacea): 1 955 mg/L

EC50(72h, Algae/aquatic plants): Not available

Pigment Blue 15:3 (CAS# 147-14-8)

Acute (short-term) toxicity:

LC50(96h, Fish): > 100 mg/L

EC50(48h, Crustacea): > 500 mg/L

EC50(72h, Algae/aquatic plants): > 100 mg/L

Pigment Red 53:1 (CAS# 5160-02-1)

Acute (short-term) toxicity:

LC50(96h, Fish): > 500 mg/L

EC50(48h, Crustacea): > 3.8 mg/L

EC50(72h, Algae/aquatic plants): > 100 mg/L

Tris(2-Hydroxyethyl)Amine (CAS# 102-71-6)

Acute (short-term) toxicity:

LC50(96h, Fish): 11 800 mg/L

EC50(48h, Crustacea): 609.88 mg/L

EC50(72h, Algae/aquatic plants): 512 mg/L

Chronic (long-term) toxicity:

NOEC(Fish): Not available

NOEC(Crustacea): 125 mg/L, 21d

EC50(Algae/aquatic plants): Not available

Aluminium Powder(stabilised) (CAS# 7429-90-5)

Acute (short-term) toxicity:

LC50(96h, Fish): 6.17 mg/L

LC50(48h, Crustacea): 1.88 mg/L

EC50(72h, Algae/aquatic plants): 350 µg/L

Chronic (long-term) toxicity:

NOEC(Fish): 548.3 µg/L, 33d

NOEC(Crustacea): 962.5 µg/L, 17d

EC50(Algae/aquatic plants): 14 537 µg/L, 7d

4,4'-bis(2-benzoxazoly)stilbene (CAS# 1533-45-5)

Acute (short-term) toxicity:

LC50(96h, Fish): > 0.731 mg/L

EC50(48h, Crustacea): > 0.645 mg/L

EC50(72h, Algae/aquatic plants): 2.391 mg/L

Carbon Black (CAS# 1333-86-4)

Acute (short-term) toxicity:

LC50(96h, Fish): > 1 000 mg/L

LC50(48h, Crustacea): Not available

EC50(72h, Algae/aquatic plants): > 10 000 mg/L

12.2 Persistence and degradability: Not available.

12.3 Bioaccumulative potential: Not available.

12.4 Mobility in soil: Not available.

12.5 Results of PBT and vPvB assessment: The mixture does not contain PBT / vPvB substance.

12.6 Endocrine disrupting properties: The mixture does not contain endocrine disruptor.

12.7 Other adverse effects: Not available.

12.8 Additional information: Not available.

## Section 13 Disposal considerations

13.1 Waste treatment methods: The material should be disposed of by incineration in a chemical incinerator in compliance with national and regional requirements.

## Section 14 Transport information

|                                                              | Land transport<br>(ADR/RID) | Inland waterways<br>(ADN) | Sea transport<br>(IMDG) | Air transport<br>(ICAO/IATA) |
|--------------------------------------------------------------|-----------------------------|---------------------------|-------------------------|------------------------------|
| 14.1 UN number or ID number                                  | Not regulated               | Not regulated             | Not regulated           | Not regulated                |
| 14.2 UN Proper shipping name                                 | Not regulated               | Not regulated             | Not regulated           | Not regulated                |
| 14.3 Transport hazard Class(es)                              | Not regulated               | Not regulated             | Not regulated           | Not regulated                |
| 14.4 Packing group                                           | Not regulated               | Not regulated             | Not regulated           | Not regulated                |
| 14.5 Environmental hazards                                   | No                          | No                        | No                      | No                           |
| 14.6 Special precautions for user                            | See section 2.2             | See section 2.2           | See section 2.2         | See section 2.2              |
| 14.7 Maritime transport in bulk according to IMO instruments | Not regulated               | Not regulated             | Not regulated           | Not regulated                |

## Section 15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Relevant information regarding authorization: Not applicable.

Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

Other National regulations: Not applicable

15.2 Chemical safety assessment

YES

☐

NO

☒

## Section 16 Other information

### 16.1 Indication of changes:

Version 1.0 Amended by (EU) 2020/878

### 16.2 Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation for rail International transportation of Dangerous goods

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: Code international maritime dangerous goods code

ICAO: International Civil Aviation Organization

IATA: International Air Transport Association

UFI: Unique Formula Identifier

LC50: median lethal concentration

EC50: The effective concentration of substance that causes 50% of the maximum response.

NOEC: No Observed Effect Concentration

DNEL: derived no-effect level

PNEC: predicted no-effect concentration

### 16.3 Key literature references and sources for data

ECHA Registered substances data

### 16.4 Training instructions:

Not applicable.

### 16.5 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

### 16.6 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Author: Hangzhou C&K Testing Technic Co., Ltd.

Website: [www.cirs-ck.com](http://www.cirs-ck.com)

Tel: 0571-89900715

Email: [test@cirs-group.com](mailto:test@cirs-group.com)

