



Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 3/5/2018 Version: 8

| SECTION 1: Identification   |  |
|---|--|
| 1.1. Identification   |  |
| Product form  | : Mixture  |
| Product name  | : Assure Paste   |
| 1.2. Recommended use and restriction  | s on use   |
| Use of the substance/mixture  | : For Rx Only  |
| 1.3. Supplier   |  |
| 630-773-4009, during normal business hours<br>www.RelianceOrthodontics.com<br>1.4. Emergency telephone number |  |
| • • •   |  |
| Emergency number  | : CHEMTREC - 24-Hour Hazmat Emergency Communications Center<br>Domestic: 1-800-424-9300 Outside the U.S.: 1-703-527-3887, collect calls accepted |
| SECTION 2: Hazard(s) identification   |  |
| 2.1. Classification of the substance or r   | nixture  |
| GHS-US classification   |  |
| Acute toxicity (oral) H302<br>Category 4  | Harmful if swallowed   |

| Category 4                   |      |                                     |
|------------------------------|------|-------------------------------------|
| Skin corrosion/irritation    | H315 | Causes skin irritation              |
| Category 2                   |      |                                     |
| Serious eye damage/eye       | H319 | Causes serious eye irritation       |
| irritation Category 2        |      |                                     |
| Skin sensitization, Category | H317 | May cause an allergic skin reaction |
| 1                            |      |                                     |

Full text of H statements : see section 16

| 2.2. | <b>GHS Label elements</b> | , including precautionar | v statements |
|------|---------------------------|--------------------------|--------------|
|------|---------------------------|--------------------------|--------------|

#### **GHS-US** labeling Hazard pictograms (GHS-US) :

| Signal word (GHS-US)<br>Hazard statements (GHS-US) | <ul> <li>Warning</li> <li>H302 - Harmful if swallowed<br/>H315 - Causes skin irritation<br/>H317 - May cause an allergic skin reaction<br/>H319 - Causes serious eye irritation</li> </ul>  |
|--|---|
| Precautionary statements (GHS-US)                  | <ul> <li>P261 - Avoid breathing vapors</li> <li>P264 - Wash hands thoroughly after handling</li> <li>P270 - Do not eat, drink or smoke when using this product.</li> <li>P272 - Contaminated work clothing must not be allowed out of the workplace</li> <li>P280 - Wear protective gloves, face protection, eye protection</li> <li>P301+P312 - If swallowed: Call a POISON CENTER, a doctor if you feel unwell</li> <li>P302+P352 - If on skin: Wash with plenty of Wash skin with soap and water</li> <li>P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact</li> <li>lenses, if present and easy to do. Continue rinsing</li> <li>P321 - Specific treatment (see First aid measures on this label)</li> <li>P330 - Rinse mouth.</li> <li>P332+P313 - If skin irritation occurs: Get medical advice/attention.</li> <li>P337+P313 - If eye irritation persists: Get medical advice/attention.</li> <li>P362+P364 - Take off contaminated clothing and wash it before reuse.</li> <li>P363 - Wash contaminated clothing before reuse.</li> <li>P501 - Dispose in a safe manner in accordance with local/national regulations</li> </ul> |

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2.3. Other hazards which do not result in classification

#### No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

#### Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

#### Not applicable

#### 3.2. Mixtures

| Name  | Product identifier   | %       | GHS-US classification   |
|---|----------------------|---------|---|
| 2-Hydroxyethyl Methacrylate                         | (CAS-No.) 868-77-9   | 10 - 30 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317                                 |
| BisGMA  | (CAS-No.) 1565-94-2  | 5 - 10  | Skin Irrit. 2, H315<br>Eye Irrit. 2B, H320<br>Skin Sens. 1, H317                                |
| Sodium Fluoride                                     | (CAS-No.) 7681-49-4  | 1 - 5   | Acute Tox. 3 (Oral), H301<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Aquatic Acute 3, H402 |
| Epiclon B4400                                       | (CAS-No.) 73003-90-4 | 1 - 5   | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319   |
| 3-(Trimethoxysilyl)propyl-2-Methyl-2-Propenoic Acid | (CAS-No.) 2530-85-0  | 1 - 5   | Skin Sens. 1B, H317   |

Full text of hazard classes and H-statements : see section 16

| SECTION 4: First-aid measures           |  |
|---|--|
| 4.1. Description of first aid measures  |  |
| First-aid measures general              | : Call a poison center/doctor/physician if you feel unwell.  |
| First-aid measures after inhalation     | : Remove person to fresh air and keep comfortable for breathing.   |
| First-aid measures after skin contact   | : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.   |
| First-aid measures after eye contact    | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| First-aid measures after ingestion      | : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.   |
| 4.2. Most important symptoms and ef     | fects (acute and delayed)  |
| Symptoms/effects after skin contact     | : Irritation. May cause an allergic skin reaction.   |
| Symptoms/effects after eye contact      | : Eye irritation.  |
| 4.3. Immediate medical attention and    | special treatment, if necessary  |
| Treat symptomatically.                  |  |
| <b>SECTION 5: Fire-fighting measure</b> | S  |
| 5.1. Suitable (and unsuitable) extingu  | ishing media   |
| Suitable extinguishing media            | : Water spray. Dry powder. Foam.   |
| 5.2. Specific hazards arising from the  | chemical   |
| Reactivity                              | : The product is non-reactive under normal conditions of use, storage and transport.   |
| 5.3. Special protective equipment and   | I precautions for fire-fighters  |
| Protection during firefighting          | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.   |
| SECTION 6: Accidental release me        | easures  |
| 6.1. Personal precautions, protective   | equipment and emergency procedures   |
| 6.1.1. For non-emergency personnel      |  |
| Emergency procedures                    | : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing mist, vapors.   |
| 6.1.2. For emergency responders         |  |
| Protective equipment                    | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".                      |
|   |  |

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|--|---------------------|--|---|
| 6.2. Environmental precaut                       | tions               |  |   |
| Avoid release to the environment.                |                     |  |   |
| 6.3. Methods and material f                      | for containment     | and cleaning up  |   |
| Methods for cleaning up                          |                     | Mechanically recover the product.  |   |
| Other information                                | :                   | Dispose of materials or solid residues at an authorize   | ed site.                                |
| 6.4. Reference to other sec                      | tions               |  |   |
| For further information refer to sec             | tion 13.            |  |   |
| SECTION 7: Handling and                          | storage             |  |   |
| 7.1. Precautions for safe ha                     | andling             |  |   |
| Precautions for safe handling                    | :                   | Ensure good ventilation of the work station. Avoid co<br>protective equipment. Avoid breathing mist, vapors.                             | ntact with skin and eyes. Wear personal |
| Hygiene measures                                 | :                   | Wash contaminated clothing before reuse. Contamin<br>out of the workplace. Do not eat, drink or smoke whe<br>after handling the product. |   |
| 7.2. Conditions for safe sto                     | orage, including    | ny incompatibilities   |   |
| Storage conditions                               | :                   | Store in a well-ventilated place. Keep cool.   |   |
|  |                     |  |   |
| SECTION 8: Exposure cor                          | ntrois/person       | al protection  |   |
| 8.1. Control parameters                          |                     | /  |   |
| 3-(Trimethoxysilyl)propyl-2-Me<br>Not applicable | thyl-2-Propenoi     | Acid (2530-85-0)   |   |
|  |                     |  |   |
| Sodium Fluoride (7681-49-4) ACGIH                | ACGIH TWA (mg/      | n <sup>3</sup> ) 2.5 mg/m <sup>3</sup>   |   |
|  |                     | 2.5 mg/m   |   |
| BisGMA (1565-94-2)                               |                     |  |   |
| Not applicable                                   |                     |  |   |
| Epiclon B4400 (73003-90-4)                       |                     |  |   |
| Not applicable                                   |                     |  |   |
| 2-Hydroxyethyl Methacrylate (8                   | 368-77-9)           |  |   |
| Not applicable                                   |                     |  |   |
|  |                     |  |   |
| 8.2. Appropriate engineerir                      | -                   | Encourse and the first of the second station   |   |
| Appropriate engineering controls                 |                     | Ensure good ventilation of the work station.   |   |
| Environmental exposure controls                  | :                   | Avoid release to the environment.  |   |
| 8.3. Individual protection m                     | neasures/Person     | al protective equipment  |   |
| Hand protection:                                 |                     |  |   |
| Protective gloves                                |                     |  |   |
| Eye protection:                                  |                     |  |   |
| Safety glasses                                   |                     |  |   |
| Skin and body protection:                        |                     |  |   |
| Wear suitable protective clothing                |                     |  |   |

Wear suitable protective clothing

**Respiratory protection:** 

In case of insufficient ventilation, wear suitable respiratory equipment

| SECTION 9: Physical and chemical properties |                                       |  |  |  |  |
|---|---------------------------------------|--|--|--|--|
| 9.1. Information on ba                      | asic physical and chemical properties |  |  |  |  |
| Physical state                              | : Solid                               |  |  |  |  |
| Appearance                                  | : Paste.                              |  |  |  |  |
| Color                                       | : Yellow                              |  |  |  |  |

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| Odor  | : Acrylic           |
|---|---------------------|
| Odor threshold                              | : No data available |
| рН  | : No data available |
| Melting point                               | : No data available |
| Freezing point                              | : Not applicable    |
| Boiling point                               | : No data available |
| Flash point                                 | : Not applicable    |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability (solid, gas)                   | : Non flammable.    |
| Vapor pressure                              | : No data available |
| Relative vapor density at 20 °C             | : No data available |
| Relative density                            | : Not applicable    |
| Solubility                                  | : No data available |
| Log Pow                                     | : No data available |
| Auto-ignition temperature                   | : Not applicable    |
| Decomposition temperature                   | : No data available |
| Viscosity, kinematic                        | : Not applicable    |
| Viscosity, dynamic                          | : No data available |
| Explosion limits                            | : Not applicable    |
| Explosive properties                        | : No data available |
| Oxidizing properties                        | : No data available |
| 9.2. Other information                      |                     |
|   |                     |

No additional information available

| SECTION 10: Stability and  | d reactivity   |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|
| 10.1. Reactivity   |  |  |  |  |  |  |  |  |
| The product is non-reactive under normal conditions of use, storage and transport. |  |  |  |  |  |  |  |  |
| 0.2. Chemical stability  |  |  |  |  |  |  |  |  |
| Stable under normal conditions.  |  |  |  |  |  |  |  |  |
| 10.3. Possibility of hazardou  | us reactions   |  |  |  |  |  |  |  |
| No dangerous reactions known ur  |  |  |  |  |  |  |  |  |
| 10.4. Conditions to avoid  |  |  |  |  |  |  |  |  |
|  | e and handling conditions (see section 7).   |  |  |  |  |  |  |  |
| 10.5. Incompatible materials   |  |  |  |  |  |  |  |  |
| No additional information available  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 10.6. Hazardous decomposi  |  |  |  |  |  |  |  |  |
| -  | e and use, hazardous decomposition products should not be produced.  |  |  |  |  |  |  |  |
| SECTION 11: Toxicologic  | al information   |  |  |  |  |  |  |  |
| 11.1. Information on toxicol   | ogical effects   |  |  |  |  |  |  |  |
| Acute toxicity   | : Oral: Harmful if swallowed.  |  |  |  |  |  |  |  |
| Assure Paste   |  |  |  |  |  |  |  |  |
| ATE US (oral)  | 1710.526 mg/kg body weight   |  |  |  |  |  |  |  |
| 3-(Trimethoxysilyl)propyl-2-Me   | ethyl-2-Propenoic Acid (2530-85-0)   |  |  |  |  |  |  |  |
| LD50 oral rat  | > 2000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat,<br>Male/female, Experimental value) |  |  |  |  |  |  |  |
| LD50 dermal rat  | > 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male/female,<br>Experimental value)                    |  |  |  |  |  |  |  |
| LC50 inhalation rat (mg/l)   | > 2.28 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male/female, Experimental value)                                   |  |  |  |  |  |  |  |
| Sodium Fluoride (7681-49-4)  |  |  |  |  |  |  |  |  |
| LD50 oral rat  | 52 mg/kg (Rat)   |  |  |  |  |  |  |  |
| ATE US (oral)  | 52 mg/kg body weight   |  |  |  |  |  |  |  |

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| 2-Hydroxyethyl Methacrylate (868-77-9)                                    |  |
|---|--|
| LD50 oral rat   | 5564 mg/kg body weight (Rat; Experimental value)   |
| LD50 dermal rabbit  | > 5000 mg/kg body weight (Rabbit; Experimental value)                                      |
| ATE US (oral)   | 5564 mg/kg body weight   |
| Skin corrosion/irritation   | : Causes skin irritation.  |
| Serious eye damage/irritation   | : Causes serious eye irritation.   |
| Respiratory or skin sensitization   | : May cause an allergic skin reaction.   |
| Germ cell mutagenicity  | : Not classified   |
| Carcinogenicity   | : Not classified   |
| Reproductive toxicity   | : Not classified   |
| Specific target organ toxicity – single exposure                          | : Not classified   |
| Specific target organ toxicity – repeated exposure                        | : Not classified   |
| Aspiration hazard   | : Not classified   |
| Symptoms/effects after skin contact<br>Symptoms/effects after eye contact | <ul><li>Irritation. May cause an allergic skin reaction.</li><li>Eye irritation.</li></ul> |

| SECT  | ION 12: Ecological informati | ion |      |  |  |  |  |
|-------|------------------------------|-----|------|--|--|--|--|
| 12.1. | Toxicity                     |     |      |  |  |  |  |
|       |                              |     | <br> |  |  |  |  |

| 1.441.1.1 | - I O AIOIL J |
|-----------|---------------|
| Ecology   | - general     |

: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

| 3-(Trimethoxysilyl)propyl-2-Methyl-2-Propenoic Acid (2530-85-0) |   |
|---|---|
| LC50 fish 1   | > 100 mg/l (EU Method C.1, 96 h, Brachydanio rerio, Semi-static system, Fresh water,<br>Experimental value)                                     |
| EC50 Daphnia 1  | > 100 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)   |
| ErC50 (algae)   | > 100 mg/l (EU Method C.3, 72 h, Scenedesmus subspicatus, Static system, Fresh water,<br>Weight of evidence)                                    |
| Sodium Fluoride (7681-49-4)                                     |   |
| LC50 fish 1   | > 530 mg/l (96 h, Lepomis macrochirus)  |
| EC50 Daphnia 1  | 98 mg/l (48 h, Daphnia magna)   |
| 2-Hydroxyethyl Methacrylate (86                                 | 8-77-9)   |
| LC50 fish 1   | 227 mg/l (LC50; 96 h)   |
| EC50 Daphnia 1  | 171 mg/l (NOEC; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)           |
| EC50 Daphnia 2  | 380 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)           |
| Threshold limit algae 1   | 836 mg/l (ErC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value) |
| Threshold limit algae 2   | 345 mg/l (EbC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value) |

### 12.2. Persistence and degradability

| 3-(Trimethoxysilyl)propyl-2-Methyl-2-Propenoic Acid (2530-85-0) |                                   |
|---|-----------------------------------|
| Persistence and degradability                                   | Readily biodegradable in water.   |
| Sodium Fluoride (7681-49-4)                                     |                                   |
| Persistence and degradability                                   | Biodegradability: not applicable. |
| Biochemical oxygen demand (BOD)                                 | Not applicable                    |
| Chemical oxygen demand (COD)                                    | Not applicable                    |
| ThOD  | Not applicable                    |
| BOD (% of ThOD)   | Not applicable                    |

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| 2-Hydroxyethyl Methacrylate (868-77-9) |   |
|--|---|
| Persistence and degradability          | Readily biodegradable in water. Biodegradability in soil: no data available. Adsorbs into the |
|  | soil.   |

#### 12.3. Bioaccumulative potential

| 3-(Trimethoxysilyl)propyl-2-Methyl-2-Propenoic Acid (2530-85-0) |   |
|---|---|
| BCF other aquatic organisms 1                                   | 3.2 (Estimated value)   |
| Log Pow   | 2.1 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 21 °C)                |
| Bioaccumulative potential                                       | Low potential for bioaccumulation (Log Kow < 4).  |
| Sodium Fluoride (7681-49-4)                                     |   |
| BCF fish 1  | 2.3 (Salmo gairdneri)   |
| Bioaccumulative potential                                       | Not bioaccumulative.  |
| 2-Hydroxyethyl Methacrylate (868-77-                            | 9)  |
| BCF fish 1  | 1.3 - 1.5 (BCF)   |
| Log Pow   | -0.55 - 0.49 (0.42; Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 25 °C) |
| Bioaccumulative potential                                       | Low potential for bioaccumulation (BCF < 500).  |

12.4. Mobility in soil

| 3-(Trimethoxysilyl)propyl-2-Methyl-2-Propenoic Acid (2530-85-0) |  |
|---|--|
| Log Koc   | 3.23 (log Koc, Calculated value)                           |
| Ecology - soil  | Adsorbs into the soil. Low potential for mobility in soil. |
| Sodium Fluoride (7681-49-4)                                     |  |
| Ecology - soil  | Toxic to flora.  |

#### 12.5. Other adverse effects

No additional information available

| SECTION 13: | Disposa | I considerations |
|-------------|---------|------------------|

**13.1. Disposal methods** Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

#### **SECTION 14: Transport information**

#### **Department of Transportation (DOT)**

In accordance with DOT

Not applicable

**Transportation of Dangerous Goods** 

Not applicable

#### Transport by sea

Not applicable

#### Air transport

Not applicable

#### SECTION 15: Regulatory information

15.1. US Federal regulations

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#### 2-Hydroxyethyl Methacrylate (868-77-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### **15.2. International regulations**

CANADA No additional information available

EU-Regulations No additional information available

#### **National regulations**

No additional information available

#### 15.3. US State regulations

No additional information available

### SECTION 16: Other information

#### Full text of H-phrases:

| H301 | Toxic if swallowed                  |
|------|-------------------------------------|
| H302 | Harmful if swallowed                |
| H315 | Causes skin irritation              |
| H317 | May cause an allergic skin reaction |
| H319 | Causes serious eye irritation       |
| H320 | Causes eye irritation               |
| H402 | Harmful to aquatic life             |

#### SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product