Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Code(s) SDS-06112 EN  E
Product Name DigitalABSPlus™ Component, RGD535
PN (Part Number) OBJ-03253, OBJ-06268, OBJ-18002

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Printing inks
Uses advised against This product is a cartridge containing ink. Under normal conditions of use, the substance is released from a cartridge only inside an appropriate printing system, and therefore, exposure is limited

1.3. Details of the supplier of the safety data sheet

Importer
Stratasys EMEA Regional Office
Airport Boulevard B 120
77836 Rheinmünster, Germany
Phone: +49-7229-7772-0

For further information, please contact info@Stratasys.com

1.4. Emergency telephone number

Emergency Telephone +44 1235 239670 - Europe - Multi lingual response

Austria
Belgium
Croatia
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary

Poison Information Centre (AT): +43-(0)1-406 43 43
Poison Centre (BE): +32 70 245 245
Poison Control (CR): +385 1 2348 342
Poison Control (CS): +420 224 919 293, +420 224 915 402
Poison Control Hotline (DK): +45 82 12 12 12
Poison Control (ET): 16662, (+372) 626 93 90
Poison Information Centre (FI): +358 9 471 977
ORFILA (FR): + 01 45 42 59 59
Poison Centre Berlin (DE): +49 030 30686 790 (24 h service, Advice in German and English)
Poison Information Center (EL): (0030) 2107793777
Poison Information Service (HU): (+ 36-80) 201-199
Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture
Regulation (EC) No 1272/2008

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Category 4 - (H302)</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2 - (H315)</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1 - (H318)</td>
</tr>
<tr>
<td>Skin sensitisation</td>
<td>Category 1B - (H317)</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Category 2 - (H373)</td>
</tr>
<tr>
<td>Chronic aquatic toxicity</td>
<td>Category 2 - (H411)</td>
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</table>

2.2. Label elements
Contains 4-(1-Oxo-2-propenyl)-morpholine, (Octahydro-4,7-methano-1H-indenediyl)bis(methylene)diacrylate, Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate, Tripropylene glycol diacrylate

Signal word
Danger

Hazard statements
H302 - Harmful if swallowed
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H373 - May cause damage to organs through prolonged or repeated exposure
H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements
P101 - If medical advice is needed, have product container or label at hand
P102 - Keep out of reach of children
P260 - Do not breathe dust/fume/gas/mist/vapours/spray
P273 - Avoid release to the environment
P280 - Wear protective gloves and eye/face protection
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor
P391 - Collect spillage
P501 - Dispose of contents/container to an approved waste disposal plant

2.3. Other hazards
Toxic to aquatic life.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS
### 3.2 Mixtures

<table>
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<tr>
<th>Chemical name</th>
<th>EC No</th>
<th>CAS No</th>
<th>Index no.</th>
<th>Weight-%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 (CLP)</th>
<th>REACH Registration Number</th>
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<td>-</td>
<td>10-30</td>
<td>Skin Sens. 1B (H317) Aquatic Chronic 2 (H411)</td>
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<td>-</td>
<td>-</td>
<td>10-30</td>
<td>Acute Tox. 4 (H302) Eye Dam. 1 (H318) Skin Sens. 1 (H317) STOT RE.2 (H373)</td>
<td>01-0000016491-73-XXX X</td>
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<tr>
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<td>-</td>
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<td>-</td>
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<td>Skin Irrit. 2 (H315) Eye Irrit.2 H319 Skin Sens. 1B (H317) STOT SE 3 (H335) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)</td>
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<td>Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) STOT SE 3 (H335) Aquatic Chronic 2 (H411)</td>
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<td>Acrylic acid, 2-hydroxyethyl ester</td>
<td>212-454-9</td>
<td>818-61-1</td>
<td>607-072-00-8</td>
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<td>Acute Tox. 4 (H302) Acute Tox. 3 (H311) Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)</td>
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<tr>
<td>Aluminium Hydroxide</td>
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<td>camphene</td>
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<td>208-083-7</td>
<td>508-32-7</td>
<td>-</td>
<td>&lt;0.1</td>
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<td>2-methoxy-1-methylethyl acetate</td>
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<td>108-65-6</td>
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<td>Aquatic Chronic 2 (H411)</td>
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<tr>
<td>Phosphoric acid</td>
<td>231-633-2</td>
<td>7664-38-2</td>
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<td>Skin Corr. 1B (H314) Eye Dam. 1 (H318)</td>
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<td>79-10-7</td>
<td>607-061-00-8</td>
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<td>Flam. Liq. 3 (H226) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Corr. 1A (H314) Eye Dam. 1 (H318) STOT SE 3 (H335) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)</td>
<td>No data available</td>
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<tr>
<td>Heptane</td>
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<td>142-82-5</td>
<td>-</td>
<td>&lt;0.1</td>
<td>Skin Irrit. 2 (H315) STOT SE 3 (H336) Asp. 1 (H304) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Flam. Liq. 2 (H225)</td>
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</tr>
</tbody>
</table>

Full text of H- and EUH-phrases: see section 16
**Section 4: FIRST AID MEASURES**

4.1. Description of first aid measures

**General advice**  
Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

**Inhalation**  
Remove to fresh air. Get medical attention immediately if symptoms occur.

**Eye contact**  
Get immediate medical advice/attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.

**Skin contact**  
Wash off immediately with soap and plenty of water for at least 15 minutes. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor.

**Ingestion**  
Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a doctor.

**Self-protection of the first aider**  
Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

4.2. Most important symptoms and effects, both acute and delayed

**Symptoms**  

4.3. Indication of any immediate medical attention and special treatment needed

**Note to doctors**  
May cause sensitisation in susceptible persons. Treat symptomatically.

**Section 5: FIRE-FIGHTING MEASURES**

5.1. Extinguishing media

**Suitable Extinguishing Media**  
Use extinguishing agent suitable for type of surrounding fire  
Class B fires: Use carbon dioxide (CO2), regular dry chemical (sodium bicarbonate), regular foam (Aqueous Film Forming Foam-AFFF), or water spray to cool containers

**Unsuitable extinguishing media**  
No information available.

5.2. Special hazards arising from the substance or mixture

**Specific hazards arising from the chemical**  
Product is or contains a sensitiser. May cause sensitisation by skin contact.

5.3. Advice for firefighters

**Special protective equipment for fire-fighters**  
Move containers from fire area if you can do it without risk. Cool containers with flooding quantities of water until well after fire is out. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Keep out of drains, sewers, ditches and waterways. Inhalation is a health risk. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

**Section 6: ACCIDENTAL RELEASE MEASURES**

6.1. Personal precautions, protective equipment and emergency procedures
**Personal precautions**  
Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Occupational Spill Release**  
Intact cartridges do not pose a leak or spill hazard. Damaged cartridges may leak uncured ink. Stop leak if you can do it without risk Use water spray to reduce vapours or divert vapour cloud drift Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container Keep out of drains, sewers, ditches and waterways

**Other Information**  
Refer to protective measures listed in Sections 7 and 8.

**For emergency responders**  
Use personal protection recommended in Section 8.

**6.2. Environmental precautions**  
Environmental precautions  
Prevent further leakage or spillage if safe to do so.

**6.3. Methods and material for containment and cleaning up**  
Methods for containment  
Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Methods for cleaning up  
Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards  
Clean contaminated objects and areas thoroughly observing environmental regulations.

**6.4. Reference to other sections**  
Reference to other sections  
See section 8 for more information. See section 13 for more information.

### Section 7: HANDLING AND STORAGE

**7.1. Precautions for safe handling**  
Advice on safe handling  
Do not eat, drink or smoke when using this product. Avoid breathing vapours or mists. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Use only outdoors or in a well-ventilated area. Wear protective gloves and eye/face protection. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment.

General hygiene considerations  
Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

**7.2. Conditions for safe storage, including any incompatibilities**  
Storage Conditions  
Store in a cool, dry area away from potential sources of heat, open flames, sunlight or other chemicals. Store in a cool, well ventilated area. Store in accordance with local regulations. Keep container tightly closed. Store between 15 °C and 27 °C. Shipment temperature (up to 5 weeks) is -20 °C to 50 °C. Store in a combustible storage area away from heat and open flame.

Hints on joint storage

Storage class  
LGK10 - Combustible liquids unless storage class 3

**7.3. Specific end use(s)**  
Risk Management Methods (RMM)  
The information required is contained in this Material Safety Data Sheet.
### Exposure disclaimer

Personal protection measures are only needed if cartridge is damaged punctured causing spillage of material.

### 8.1. Control parameters

#### Exposure Limits

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>European Union</th>
<th>United Kingdom</th>
<th>France</th>
<th>Spain</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>-</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 10 mg/m³</td>
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<tr>
<td>Aluminium Hydroxide</td>
<td>21645-51-2</td>
<td>-</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 4 mg/m³</td>
<td>-</td>
</tr>
<tr>
<td>camphene</td>
<td>79-92-5</td>
<td>-</td>
<td>TWA: 1000 mg/m³</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1,7,7-Trimethyltricyclo[2.2.1.0²,6]heptane</td>
<td>508-32-7</td>
<td>-</td>
<td>TWA: 50 ppm</td>
<td>STEL: 1500 mg/m³</td>
<td>-</td>
</tr>
<tr>
<td>2-methoxy-1-methylethyl acetate</td>
<td>108-65-6</td>
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<td>TWA: 50 ppm STEL: 548 mg/m³</td>
<td>TWA: 50 ppm STEL: 550 mg/m³</td>
<td>TWA: 50 ppm STEL: 550 mg/m³ via dérmica*</td>
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<tr>
<td>Phosphoric acid</td>
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<td>TWA: 10 ppm STEL: 30 mg/m³</td>
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<td>TWA: 500 ppm TWA: 1668 mg/m³</td>
<td>TWA: 500 ppm TWA: 1500 mg/m³</td>
<td>TWA: 500 ppm TWA: 2100 mg/m³</td>
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<td>TWA: 5 mg/m³</td>
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<td>Poland</td>
<td>Norway</td>
<td>Ireland</td>
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<tr>
<td>Acrylic acid 79-10-7</td>
<td>TWA: 2 ppm P*</td>
<td>STEL: 2 mg/m³</td>
<td>TWA: 29 mg/m³</td>
<td>STEL: 59 mg/m³</td>
<td>TWA: 2 ppm TWA: 6 mg/m³ Ceiling: 15 ppm Ceiling: 45 mg/m³</td>
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<td>Heptane 142-82-5</td>
<td>TWA: 500 ppm TWA: 2085 mg/m³</td>
<td>STEL: 500 ppm</td>
<td>TWA: 1200 mg/m³ STEL: 1600 mg/m³</td>
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### Biological occupational exposure limits

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<th>Poland</th>
<th>Norway</th>
<th>Ireland</th>
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<tr>
<td>4-Methoxyphenol/Mequinol 150-76-5</td>
<td>TWA: 5 mg/m³ STEL 10 mg/m³</td>
<td>STEL: 2 mg/m³</td>
<td>TWA: 5 mg/m³ STEL: 10 mg/m³</td>
<td>TWA: 5 mg/m³ STEL: 15 mg/m³</td>
<td>TWA: 5 mg/m³</td>
</tr>
</tbody>
</table>

**Derived No Effect Level (DNEL)**: No information available.

**Predicted No Effect Concentration (PNEC)**: No information available.
8.2. Exposure controls

Personal protective equipment

Eye/face protection  
Tight sealing safety goggles.

Hand Protection  
Wear suitable gloves. Impervious gloves.

Skin and body protection  
Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection  
No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations  
Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

Environmental exposure controls  
No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Ink cartridge</td>
<td></td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic</td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td>green</td>
<td></td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt;= 100 - &lt; 250 °C</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Vapour density</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.09</td>
<td>g/cm3</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Insoluble in water</td>
<td></td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

9.2. Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Softening point</td>
<td>No information available</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No information available</td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>No information available</td>
</tr>
<tr>
<td>Liquid Density</td>
<td>No information available</td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information available</td>
</tr>
<tr>
<td>Particle Size</td>
<td>No information available</td>
</tr>
<tr>
<td>Particle Size Distribution</td>
<td>No information available</td>
</tr>
</tbody>
</table>
Section 10: STABILITY AND REACTIVITY

10.1. Reactivity
Reactivity Heating may cause a fire.

10.2. Chemical stability
Stability Decomposes on exposure to light. Unstable if heated.

Explosion data
- Sensitivity to Mechanical Impact: None.
- Sensitivity to Static Discharge: None.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions Uncured ink will polymerize on exposure to light.

10.4. Conditions to avoid
Conditions to avoid Avoid exposure to heat and light.

10.5. Incompatible materials
Incompatible materials Not applicable under normal conditions of use and storage.

10.6. Hazardous decomposition products

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Information on likely routes of exposure

- **Product Information**
  - **Inhalation**: May cause irritation of respiratory tract. (based on components).
  - **Eye contact**: Severely irritating to eyes. Causes serious eye damage. May cause irreversible damage to eyes. (based on components).
  - **Skin contact**: May cause sensitisation by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes skin irritation.
  - **Ingestion**: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on components).

Information on toxicological effects


Numerical measures of toxicity

- **Acute toxicity**
  - The following values are calculated based on chapter 3.1 of the GHS document
  - **ATEmix (oral)**: 1,965.30 mg/kg
## Component Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary</td>
<td>= 2,000 mg/kg (Rat) (Method: OECD Test Guideline 423)</td>
<td>= 2,000 mg/kg (Rat) (Method: OECD Test Guideline 402)</td>
<td>-</td>
</tr>
<tr>
<td>Proprietary</td>
<td>= 588 mg/kg (rat)</td>
<td>&gt; 2000 mg/kg (rat)</td>
<td>= 5.28 mg/l (rat)</td>
</tr>
<tr>
<td>Proprietary</td>
<td>= 4890 mg/kg</td>
<td>&gt; 3000 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>aliphatic methacrylate</td>
<td>&gt; 2000 mg/kg (rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tripropylene glycol diacrylate</td>
<td>= 6200 mg/kg</td>
<td>&gt; 2 g/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>Proprietary</td>
<td>&gt; 2000 mg/kg</td>
<td>&gt; 2000 mg/kg (Rat)</td>
<td>-</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>&gt; 10000 mg/kg</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Acrylic acid, 2-hydroxyethyl ester</td>
<td>= 548 mg/kg</td>
<td>= 154 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>Aluminium Hydroxide</td>
<td>&gt; 5000 mg/kg</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>camphene</td>
<td>&gt; 5 g/kg</td>
<td>&gt; 2500 mg/kg (Rabbit)</td>
<td>= 1,710 mg/m³ (Rat) 1 h</td>
</tr>
<tr>
<td>2-methoxy-1-methylethyl acetate</td>
<td>= 8532 mg/kg</td>
<td>&gt; 5 g/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>Phosphoric acid</td>
<td>= 1530 mg/kg</td>
<td>= 2740 mg/kg (Rabbit)</td>
<td>&gt; 850 mg/m³ (Rat) 1 h</td>
</tr>
<tr>
<td>Acrylic acid</td>
<td>= 33500 µg/kg = 193 mg/kg</td>
<td>= 295 mg/kg (Rabbit) = 280 µL/kg (Rabbit)</td>
<td>= 3.6 mg/L (Rat) 4 h = 11.1 mg/L (Rat) 1 h</td>
</tr>
<tr>
<td>Heptane</td>
<td>-</td>
<td>= 3000 mg/kg (Rabbit)</td>
<td>= 103 g/m³ (Rat) 4 h</td>
</tr>
<tr>
<td>4-Methoxyphenol/ Mequinol</td>
<td>= 1600 mg/kg</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
</tbody>
</table>

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation**
Classification based on data available for ingredients. Irritating to skin.

**Serious eye damage/eye irritation**
Classification based on data available for ingredients. Causes burns. Risk of serious damage to eyes.

**Respiratory or skin sensitisiation**
May cause sensitisation by skin contact. Classification based on data available for ingredients.

**Germ cell mutagenicity**
No information available.

**Carcinogenicity**
No information available.

**Reproductive toxicity**
No information available.

**STOT - single exposure**
No information available.

**STOT - repeated exposure**
Classification based on data available for ingredients.

**Aspiration hazard**
No information available.

### Section 12: ECOLOGICAL INFORMATION

#### 12.1. Toxicity

**Ecotoxicity**
Toxic to aquatic life with long lasting effects
Unknown aquatic toxicity
Contains 0 % of components with unknown hazards to the aquatic environment.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary</td>
<td>(Pseudokirchneriella subcapitata) : 1.6 mg/l (Method: OECD Test Guideline 201)</td>
<td>(Fish) : 4.95 mg/l</td>
<td>-</td>
<td>(Daphnia magna Straus) : 2.36 mg/l (Method: OECD Test Guideline 202)</td>
</tr>
<tr>
<td>Proprietary</td>
<td>120 mg/l (algae)</td>
<td>-</td>
<td>-</td>
<td>120 mg/kg (daphnia)</td>
</tr>
<tr>
<td>Proprietary</td>
<td>1.98 mg/l Fresh water</td>
<td>0.704 mg/l Fresh water</td>
<td>-</td>
<td>0.524 mg/l Fresh water</td>
</tr>
<tr>
<td>Aliphatic methacrylate</td>
<td>2.28 mg/l</td>
<td>1.79 mg/l Zebra Fish</td>
<td>-</td>
<td>2.57 mg/l Water Flea</td>
</tr>
<tr>
<td>Tripropylene glycol diacrylate</td>
<td>28: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>4.5 - 10: 96 h Leuciscus idus mg/L LC50</td>
<td>-</td>
<td>88.7: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Proprietary</td>
<td>-</td>
<td>90: 96 h Danio rerio µg/L LC50 semi-static</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Acrylic acid, 2-hydroxyethyl ester</td>
<td>-</td>
<td>4.8: 96 h Pimephales promelas mg/L LC50 flow-through</td>
<td>-</td>
<td>0.78: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Camphene</td>
<td>1000: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>0.72: 96 h Brachydianio rerio mg/L LC50 flow-through 150: 96 h Brachydianio rerio mg/L LC50 static</td>
<td>-</td>
<td>22: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>2-methoxy-1-methylethyl acetate</td>
<td>-</td>
<td>161: 96 h Pimephales promelas mg/L LC50 static</td>
<td>-</td>
<td>500: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Phosphoric acid</td>
<td>-</td>
<td>3 - 3.5: 96 h Gambusia affinis mg/L LC50</td>
<td>-</td>
<td>4.6: 12 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Acrylic acid</td>
<td>0.17: 96 h Pseudokirchneriella subcapitata mg/L EC50 0.04: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>222: 96 h Brachydianio rerio mg/L LC50 semi-static</td>
<td>-</td>
<td>270: 24 h Daphnia magna mg/L LC50 Static 95: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Heptane</td>
<td>-</td>
<td>375.0: 96 h Cichlid fish mg/L LC50</td>
<td>-</td>
<td>10: 24 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>4-Methoxyphenol/ Mequinol</td>
<td>-</td>
<td>28.5: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 84.3: 96 h Pimephales promelas mg/L LC50 flow-through</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

Persistence and degradability
No information available.

12.3. Bioaccumulative potential

Bioaccumulation
There is no data for this product.

Component Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tripropylene glycol diacrylate</td>
<td>2.77</td>
</tr>
<tr>
<td>Acrylic acid, 2-hydroxyethyl ester</td>
<td>0.21</td>
</tr>
<tr>
<td>2-methoxy-1-methylethyl acetate</td>
<td>0.43</td>
</tr>
<tr>
<td>Acrylic acid</td>
<td>0.46</td>
</tr>
<tr>
<td>Heptane</td>
<td>4.66</td>
</tr>
<tr>
<td>4-Methoxyphenol/ Mequinol</td>
<td>1.3</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil
Mobility in soil

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

No information available.

12.6. Other adverse effects

Other adverse effects

No information available.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Do not reuse empty containers.

Waste codes / waste designations according to EWC / AVV

08 03 12* Waste ink containing dangerous substances.

Section 14: TRANSPORT INFORMATION

Additional information

The environmentally hazardous substance mark is not required when transported in sizes of ≤5L or ≤5kg

The marine pollutant mark is not required when transported in sizes of ≤5L or ≤5kg

IMDG

14.1 UN number

UN3082

14.2 UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3 Transport hazard class(es)

9

14.4 Packing group

Description

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

((Octahydro-4,7-methano-1H-indenediyl)bis(methylene)diacrylate, Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate), 9, III, Marine pollutant

14.5 Marine pollutant

This product contains a chemical which is listed as a severe marine pollutant according to IMDG/IMO

Environmental Hazard

Yes

14.6 Special Provisions

EmS-No

274, 335, 969

F-A, S-F

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available

RID

14.1 UN Number

UN3082

14.2 UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3 Transport hazard class(es)

9

Labels

9

14.4 Packing group

Description

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

((Octahydro-4,7-methano-1H-indenediyl)bis(methylene)diacrylate, Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate), 9, III

14.5 Environmental Hazard

Yes

14.6 Special Provisions

Classification code

274, 335, 375, 601

M6
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations
France
Occupational Illnesses (R-463-3, France)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>French RG number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylic acid, 2-hydroxyethyl ester</td>
<td>RG 65</td>
<td></td>
</tr>
<tr>
<td>2-methoxy-1-methylethyl acetate</td>
<td>RG 84</td>
<td></td>
</tr>
<tr>
<td>Heptane</td>
<td>RG 84</td>
<td></td>
</tr>
<tr>
<td>4-Methoxyphenol/ Mequinol</td>
<td>RG 65</td>
<td></td>
</tr>
</tbody>
</table>

Germany
Water hazard class (WGK) hazardous to water (WGK 2)

European Union
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work
Authorisations and/or restrictions on use:
This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants
Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)
E2 - Hazardous to the Aquatic Environment in Category Chronic 2

Ozone-depleting substances (ODS) regulation (EC) 1005/2009  Not applicable

15.2. Chemical safety assessment

Chemical Safety Report  No information available

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3
H225 - Highly flammable liquid and vapour
H226 - Flammable liquid and vapour
H228 - Flammable solid
H302 - Harmful if swallowed
H304 - May be fatal if swallowed and enters airways
H311 - Toxic in contact with skin
H312 - Harmful in contact with skin
H314 - Causes severe skin burns and eye damage
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness
H361d - Suspected of damaging the unborn child
H373 - May cause damage to organs through prolonged or repeated exposure
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H411 - Toxic to aquatic life with long lasting effects
H412 - Harmful to aquatic life with long lasting effects
H413 - May cause long lasting harmful effects to aquatic life

Legend
SVHC: Substances of Very High Concern for Authorisation:

Legend  Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA  TWA (time-weighted average)  STEL  STEL (Short Term Exposure Limit)
Ceiling  Maximum limit value  *  Skin designation

Classification procedure

<table>
<thead>
<tr>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
<th>Method Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute oral toxicity</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Acute dermal toxicity</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Acute inhalation toxicity - gas</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Acute inhalation toxicity - Vapor</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Acute inhalation toxicity - dust/mist</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>
Skin corrosion/irritation | Calculation method
Serious eye damage/eye irritation | Calculation method
Respiratory sensitisation | Calculation method
Mutagenicity | Calculation method
Carcinogenicity | Calculation method
Reproductive toxicity | Calculation method
STOT - single exposure | Calculation method
Acute aquatic toxicity | Calculation method
Chronic aquatic toxicity | Calculation method
Aspiration toxicity | Calculation method
Ozone | Calculation method

Revision Date 21-May-2020

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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