Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: DurusWhite™, RGD430

Product Code(s): SDS-06143 EN Z

PN (Part Number): OBJ-02265, OBJ-03310, OBJ-04041

Other means of identification:

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate, camphene)

UN Number: UN3082

Pure substance/mixture: Mixture

Recommended use of the chemical and restrictions on use:

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

Details of the supplier of the safety data sheet:

Importer: Objective3D Ltd
BDO Taranaki Limited
10 Young Street
New Plymouth, New Plymouth 4310
New Zealand
Phone: +64 9 801 0380

For further information, please contact:

Contact Point: Product Safety Department
E-mail address: info@Stratasys.com

Emergency telephone number:

Emergency Telephone: +64 9 929 1483 - New Zealand - English Language response

Section 2: HAZARDS IDENTIFICATION

ERMA New Zealand HSNO approval code or group standard: HSR002670

GHS Classification:

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Category 5 (HSNO - 6.1E)</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2 (HSNO - 6.3A)</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1 (HSNO - 8.3A)</td>
</tr>
</tbody>
</table>
Skin sensitisation  
Category 1B  (HSNO - 6.5B)

Reproductive toxicity  
Category 2  (HSNO - 6.8B)  (HSNO - 6.1E)

Specific target organ toxicity (repeated exposure)  
Category 2  (HSNO - 6.9B)

Acute aquatic toxicity  
Category 1  (HSNO - 9.1A)

Chronic aquatic toxicity  
Category 1  (HSNO - 9.1A)

Signal word
Danger

Hazard statements
H303 - May be harmful if swallowed
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H335 - May cause respiratory irritation
H361 - Suspected of damaging fertility or the unborn child
H373 - May cause damage to organs through prolonged or repeated exposure
H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
Wash face, hands and any exposed skin thoroughly after handling
Contaminated work clothing should not be allowed out of the workplace
Do not breathe dust/fume/gas/mist/vapours/spray
Avoid release to the environment

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTRE or doctor
IF ON SKIN: Wash with plenty of water and soap
Take off all contaminated clothing and wash it before reuse
If skin irritation or rash occurs: Get medical advice/attention
Collect spillage

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other hazards
May cause respiratory irritation
No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance
Not applicable

### Mixture

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary</td>
<td>-</td>
<td>30-50</td>
</tr>
<tr>
<td>Ethoxylated Trimethylolpropane Triacrylate</td>
<td>28961-43-5</td>
<td>10-30</td>
</tr>
<tr>
<td>Proprietary</td>
<td>-</td>
<td>10-30</td>
</tr>
<tr>
<td>Proprietary</td>
<td>-</td>
<td>1-3</td>
</tr>
<tr>
<td>camphene</td>
<td>79-92-5</td>
<td>0.1-0.3</td>
</tr>
<tr>
<td>1,7,7-Trimethyltricyclo[2.2.1.0₂,6]heptane</td>
<td>508-32-7</td>
<td>0.1-0.3</td>
</tr>
<tr>
<td>Glycerol, propoxylated, esters with acrylic acid</td>
<td>52408-84-1</td>
<td>0.1-0.3</td>
</tr>
</tbody>
</table>

| Non-hazardous ingredients                               |             | Balance  |

### Section 4: FIRST AID MEASURES

#### Description of first aid measures

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

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

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

**Most important symptoms and effects, both acute and delayed**

**Indication of any immediate medical attention and special treatment needed**
May cause sensitisation in susceptible persons. Treat symptomatically.

### Section 5: FIRE-FIGHTING MEASURES

#### 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.

**Specific hazards arising from the chemical**
Product is or contains a sensitisier. May cause sensitisation by skin contact.
Special protective actions for fire-fighters

Special protective equipment for fire-fighters
Cool containers with flooding quantities of water until well after fire is out. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Move containers from fire area if you can do it without risk. Use personal protection equipment. 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.

Section 6: ACCIDENTAL RELEASE MEASURES

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.

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

For emergency responders
Use personal protection recommended in Section 8.

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

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
Pick up and transfer to properly labelled containers.

Precautions to prevent secondary hazards

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

Section 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
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. Do not eat, drink or smoke when using this product. Heating may cause a fire.

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. Wash hands before breaks and immediately after handling the product.

Conditions for safe storage, including any incompatibilities

Storage Conditions
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.

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

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
Control parameters

Exposure Limits
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits
Not applicable.

Appropriate engineering controls

Engineering controls
- Showers
- Eyewash stations
- Ventilation systems.

Individual protection measures, such as 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.

Environmental exposure controls
No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

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>white</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></td>
</tr>
<tr>
<td>Lower flammability limit:</td>
<td>No data available</td>
<td></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>1.07</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>
Other information
Softening point No information available
Molecular weight No information available
VOC Content (%) No information available
Liquid Density No information available
Bulk density No information available
Particle Size No information available
Particle Size Distribution No information available

Section 10: STABILITY AND REACTIVITY

Reactivity
Reactivity Heating may cause a fire.

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

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

Possibility of hazardous reactions
Possibility of hazardous reactions None under normal processing.

Conditions to avoid
Conditions to avoid Avoid exposure to heat and light. Uncured ink will polymerize on exposure to light.

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

Hazardous decomposition products

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity
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. (based on components).

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

**ATEmix (oral)**

- **4,149.90 mg/kg**

**Unknown acute toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour)

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>4890 mg/kg</td>
<td>&gt; 3000 mg/kg (Rat)</td>
<td>-</td>
</tr>
<tr>
<td>Ethoxylated Trimethylolpropane Triacrylate</td>
<td>-</td>
<td>13 g/kg (Rabbit)</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>&gt; 5,000 mg/kg (Rat) (OECD Guideline 401)</td>
<td>&gt; 2,000 mg/kg (Rat) (OECD Guideline 402)</td>
<td>-</td>
</tr>
<tr>
<td>camphene</td>
<td>&gt; 5 g/kg</td>
<td>&gt; 2500 mg/kg (Rabbit)</td>
<td>17100 mg/m³ (Rat) 1 h</td>
</tr>
</tbody>
</table>

See section 16 for terms and abbreviations

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.

Sensitisation

Respiratory or skin sensitisation 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 Classification based on data available for ingredients. Contains a known or suspected reproductive toxin. The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

STOT - single exposure Classification based on data available for ingredients.

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

Aspiration hazard No information available

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity Very toxic to aquatic life with long lasting effects

Unknown aquatic toxicity 0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.
### Persistence and degradability

**Persistence and degradability**
No information available.

### Bioaccumulative potential

**Bioaccumulation**
There is no data for this product.

### Mobility

**Mobility in soil**
No information available.

**Mobility**
No information available.

### Other adverse effects

**Other adverse effects**
No information available.

### Endocrine Disruptor Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>EU - Endocrine Disrupters Candidate List</th>
<th>EU - Endocrine Disruptors - Evaluated Substances</th>
<th>Endocrine disrupting potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary</td>
<td>Group III Chemical</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Section 13: DISPOSAL CONSIDERATIONS

**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.

### 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.

**Road transport**

**ADG**

**UN Number**
UN3082

**Proper Shipping Name**
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

**Hazard Class**
9

**Packing group**
III
Environmental Hazard: Yes
Special Provisions: 274, 331, 335, 375, AU01
Description: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate, camphene), 9, III

IATA
UN Number: UN3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es): 9
Packing group: III
ERG Code: 9L
Special Provisions: A97, A158, A197
Description: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate, camphene), 9, III

IMDG
UN number: UN3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es): 9
Packing group: III
EmS-No: F-A, S-F
Special Provisions: 274, 335, 969
Marine pollutant: This product contains a chemical which is listed as a severe marine pollutant according to IMDG/IMO
Description: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate, camphene), 9, III, Marine pollutant

Section 15: REGULATORY INFORMATION

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

National regulations
New Zealand

Exposure Limits: See Section 8 for any applicable Tolerable Exposure or Environmental Exposure Limits

Certified handlers, tracking and controlled substance licence requirements
• Certified handlers are required for some substances. This includes for substances requiring a controlled substance licence, including Class 1 explosives, vertebrate toxic agents (9.3A, B, C), and certain fumigants. Class 6.1A and 6.1B substances such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information.
• Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information.
• Controlled substance licences are required to possess certain class 1 (explosive) and class 6 (vertebrate toxic agents or fumigants) substances. See Part 7 of the Health and Safety at Work Regulation 2017 for more information.
ERMA New Zealand HSNO approval  HSR002670

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>New Zealand HSNO Chemical Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethoxylated Trimethylolpropane Triacrylate - 28961-43-5</td>
<td>6.1E (I), 6.3A, 6.5B, 8.3A, 9.1B (All), 9.1B (F), 9.1D (A), 9.1D (C)</td>
</tr>
<tr>
<td></td>
<td>6.3A, 6.4A</td>
</tr>
<tr>
<td>Proprietary -</td>
<td>6.3A, 6.4A</td>
</tr>
<tr>
<td>camphene - 79-92-5</td>
<td>4.1.1B, 8.3A, 9.1A (All), 9.1A (F), 9.1C (C)</td>
</tr>
<tr>
<td>Glycerol, propoxylated, esters with acrylic acid - 52408-84-1</td>
<td>6.1E (All), 6.1E (I), 6.3A, 6.4A</td>
</tr>
<tr>
<td></td>
<td>6.3A, 6.4A</td>
</tr>
</tbody>
</table>

**International Inventories**

- NZIoC: No information available
- TSCA: Complies
- DSL/NDSL: Complies
- EINECS/ELINCS: Complies
- ENCS: Complies
- IECSC: No information available
- KECL: No information available
- PICCS: No information available
- AICS: No information available

**Legend:**

- NZIoC - New Zealand Inventory of Chemicals
- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances

**International Regulations**

- The Montreal Protocol on Substances that Deplete the Ozone Layer: Not applicable
- The Stockholm Convention on Persistent Organic Pollutants: Not applicable
- The Rotterdam Convention: Not applicable

**Section 16: OTHER INFORMATION**

**Revision Date** 21-May-2020

**Revision Note**
The symbol (*) in the margin of this SDS indicates that this line has been revised.

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

- **Legend** Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
  - TWA: TWA (time-weighted average)
  - Ceiling: Maximum limit value
  - C: Carcinogen
  - STEL: STEL (Short Term Exposure Limit)
  - Skin designation

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End of Safety Data Sheet