

# SAFETY DATA SHEET

Issuing Date 07-Feb-2019 Revision Date 07-Feb-2019 Revision Number 2

# Section 1: Identification: Product identifier and chemical identity

**Product identifier** 

Product Name DurusWhite, RGD430

Product Code(s) SDS-06143 EN U

**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 manufacturer or importer

**Importer** 

Objective3D Pty Ltd 33-35 Yazaki Way Carrum Downs, 3201 Victoria, Australia Phone: +03 9785 2333 Local: +1300 559 454

Fax: +03 9785 2322

For further information, please contact

E-mail address info@Stratasys.com

Emergency telephone number

Emergency telephone number +61 2 8014 4558 - Australia - English Language response

# Section 2: Hazard(s) identification

# GHS Classification

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 1 - (H318)
Skin sensitisation	Category 1B - (H317)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Specific target organ toxicity (repeated exposure)	Category 2 - (H373)

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Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)

#### Label elements

Exclamation mark Health hazard Corrosion Environment



### Signal word

Danger

#### **Hazard statements**

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H335 - May cause respiratory irritation

H373 - May cause damage to organs through prolonged or repeated exposure

H410 - Very toxic to aquatic life with long lasting effects

### **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Contaminated work clothing should not be allowed out of the workplace

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapours/spray

Avoid release to the environment

### **Precautionary Statements - Response**

Get medical advice/attention if you feel unwell

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 CENTER or doctor/physician

IF ON SKIN: Wash with plenty of soap and water

Take off contaminated clothing and wash it before reuse

If skin irritation or rash occurs: Get medical advice/attention

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

Collect spillage

# **Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed

Store locked up

#### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Other hazards

May be harmful if swallowed.

# Section 3: Composition and information on ingredients, in accordance with Schedule 8

#### Substance

Not applicable

### <u>Mixture</u>

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Chemical name	CAS No	Weight-%
Proprietary	-	30-50
Ethoxylated Trimethylolpropane Triacrylate	28961-43-5	10-30
Proprietary	-	10-30
Proprietary	-	1-3
Proprietary	-	1-3
camphene	79-92-5	0.1-0.3
1,7,7-Trimethyltricyclo[2.2.1.02,6]heptane	508-32-7	0.1-0.3
Glycerol, propoxylated, esters with acrylic acid	52408-84-1	0.1-0.3
Non-hazardous ingredients	Proprietary	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. IF exposed or

concerned: Get medical advice/attention.

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

**Symptoms** Burning sensation. Itching. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

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

# Section 5: Firefighting measures

Suitable Extinguishing Media

dioxide (CO2), regular dry chemical (sodium bicarbonate), regular foam (Agueous Film

Forming Foam-AFFF), or water spray to cool containers.

**Unsuitable extinguishing media** No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

**e** Product is or contains a sensitiser. May cause sensitisation by skin contact.

chemical

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

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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.

**Environmental precautions** 

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

Methods and material for containment and cleaning up

Methods for containment Methods for containment.

**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, including how the chemical may be safely used

#### Precautions for safe handling

Advice on safe 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.

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** Strong acids. Strong bases. Strong oxidising agents.

# Section 8: Exposure controls and personal protection

**Control parameters** 

Exposure Limits

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#### **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.

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

**Hand Protection** Wear suitable gloves. Impervious gloves.

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

Physical state liquid

AppearanceInk cartridgeOdourCharacteristic.

Colour white

Odour threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH N/A

Melting point / freezing pointNo data availableNone knownBoiling point / boiling rangeNo data availableNone known

Flash point  $\Rightarrow$  100 - < 250 °C

Evaporation rateNo data availableNone knownFlammability (solid, gas)No data availableNone knownFlammability Limit in AirNone known

Upper flammability limit: No data available

Lower flammability limit No data available

Vapour pressureNo data availableNone knownVapour densityNo data availableNone knownRelative density1.07g/cm3

Water solubility Insoluble in water

Solubility(ies) No data available None known **Partition coefficient** No data available None known No data available **Autoignition temperature** None known **Decomposition temperature** No data available None known Kinematic viscosity No data available None known **Dynamic viscosity** No data available None known

Other Information

Softening point
Molecular weight
VOC Content (%)
Liquid Density
Bulk density
Particle Size
Particle Size
No information available

# Section 10: Stability and reactivity

#### Reactivity

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**Reactivity** No information available.

**Chemical stability** 

**Stability** Stable under normal conditions.

**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**None known based on information supplied.

**Incompatible materials** 

**Incompatible materials** Strong acids. Strong bases. Strong oxidising agents.

**Hazardous decomposition products** 

Hazardous decomposition products Thermal Decomposition Products. Combustion: oxides of carbon.

# 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 burns. 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)

Symptoms Redness. Burning. May cause blindness. Itching. Rashes. Hives. May cause redness and

tearing of the eyes.

#### 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)

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#### **Component Information**

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Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Proprietary	= 4890 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	-
Ethoxylated Trimethylolpropane	-	> 13 g/kg (Rabbit)	-
Triacrylate			
Proprietary	= 588 mg/kg (rat)	> 2000 mg/kg (rat)	= 5.28 mg/l (rat)
Proprietary	> 5,000 mg/kg (Rat) (OECD	> 2,000 mg/kg (Rat) (OECD	-
	Guideline 401)	Guideline 402)	
camphene	> 5 g/kg (Rat)	> 2500 mg/kg (Rabbit)	= 17100 mg/m <sup>3</sup> (Rat) 1 h

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.

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** No information available.

**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.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Proprietary	1.98 mg/l Fresh water	0.704 mg/l Fresh water	-	0.524 mg/l Fresh water
Proprietary	120 mg/l (algae)	-	-	120 mg/kg (daphnia)
Proprietary	> 2.01 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)	6.53 mg/l, Oryzias latipes (JIS K 0102-71, semistatic)	•	3.53 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)
camphene	1000: 72 h Desmodesmus subspicatus mg/L EC50	0.72: 96 h Brachydanio rerio mg/L LC50 flow-through 150: 96 h Brachydanio rerio mg/L LC50 static	-	22: 48 h Daphnia magna mg/L EC50

Persistence and degradability

Persistence and degradability No information available.

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Bioaccumulative potential

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

**Mobility** 

Mobility in soilNo information available.MobilityNo information available.

Other adverse effects

Other adverse effects No information available.

**Endocrine Disruptor Information** 

Chemical name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Endocrine disrupting potential
Proprietary	Group III Chemical	-	-

# 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

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** 179, 274, 331, 335, 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

<u>IMDG</u>

UN Number UN3082

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Transport hazard class(es)

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Packing group Ш

F-A, S-F **EmS-No Special Provisions** 274, 335, 969

Marine pollutant This product contains a chemical which is listed as a severe marine pollutant according to

IMDG/IMO

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

(Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate, camphene), 9, III, Marine pollutant

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

No information available



# **Section 15: Regulatory information**

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

### **National regulations**

See section 8 for national exposure control parameters

### **International Inventories**

**TSCA** Complies Complies DSL/NDSL **EINECS/ELINCS** Complies **ENCS** Complies **IECSC** Complies Complies **KECL** 

No information available **PICCS** 

**AICS** Complies

#### Legend:

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**

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

**Export Notification requirements** Not applicable

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# Section 16: Any other relevant information

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**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) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value \* Skin designation

C Carcinogen

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**End of Safety Data Sheet**