SAFETY DATA SHEET

Issuing Date 01-05-2022 **Revision Date** 21-05-2020 **Revision Number** 1.01

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name DigitalABSPlus™ Component, RGD535

Other means of identification

Product Code(s) SDS-06112 CE D

PN (Part Number) OBJ-03253, OBJ-06268, OBJ-18002

UN number or ID number UN3082

Synonyms None

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

Initial Supplier Identifier
JMac Consulting Ltd.
19 Norway Maple Dr
Chatham, Ontario
N7L 5C8
Canada

Emergency telephone number

Emergency Telephone +1 215 207 0061 - Americas - Multi lingual response

E-mail address info@Stratasys.com

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1A
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2

Label elements

Signal word
Danger

Hazard statements

Harmful if swallowed
Causes skin irritation
Causes serious eye damage
May cause an allergic skin reaction
May cause respiratory irritation
May cause damage to organs through prolonged or repeated exposure

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Contaminated work clothing should not be allowed out of the workplace
Use only outdoors or in a well-ventilated area
Do not breathe vapor
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response
Get medical advice/attention if you feel unwell

Eyes
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

Skin
IF ON SKIN: Wash with plenty of water and soap
Take off contaminated clothing and wash it before reuse
If skin irritation or rash occurs: Get medical advice/attention

Inhalation
IF INHALED: Remove person to fresh air and keep comfortable for breathing
Call a POISON CENTER or doctor if you feel unwell

Ingestion
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
Rinse mouth

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 Information
Toxic to aquatic life Toxic to aquatic life with long lasting effects

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 (vapor)
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	*Hazardous Material Information Review Act registry number (HMIRA registry #)	**Date HMIRA filed	***Date exemption granted
Substituted-alkano(C=1~4)carbopolycyclic-diylbis(alkylene(C=1~4))bisacrylate	Proprietary	10-30	*	**	***
Substituted-alkenyl(C=1~4)-morpholine	Proprietary	10-30	*	**	***
reaction product of glycolether and Polyol and alicyclic diisocyanate and aliphatic acrylate	Proprietary	10-30	*	**	***
Trialkyl(C=1~3)bicarbomonocyclic acrylate	Proprietary	3-10	*	**	***
Alicyclic methacrylate	Proprietary	3-10	*	**	***
Tripropylene glycol diacrylate	42978-66-5	3-10	-	-	-
Caprolactone acrylate	110489-05-9	1-3	-	-	-
Alkanone(C=1~3), (phenyl-substituted-phosphine)bis(trialkyl(C=1~3)phenyl)-	Proprietary	1-3	*	**	***
Acrylic acid, 2-hydroxyethyl ester	818-61-1	0.1-0.3	-	-	-
2-Propenoic acid, 1,2-ethanediyl ester	2274-11-5	0.1-0.3	-	-	-

***Hazardous Material Information Review Act registry number (HMIRA registry #):**
03421362
****Date HMIRA filed:** 23-08-2021 *****Date exemption granted:** 23-08-2024

4. FIRST AID MEASURES

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. 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 physician.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.

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 physicians May cause sensitization in susceptible persons. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Use extinguishing agent suitable for type of surrounding fire. Class B fires: Use carbon dioxide (CO_2), regular dry chemical (sodium bicarbonate), regular foam (Aqueous Film Forming Foam-AFFF), or water spray to cool containers.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical Product is or contains a sensitizer. May cause sensitization by skin contact.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

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.

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 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 labeled containers.

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

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid breathing vapors 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.

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.

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.

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.

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. See section 8 for more information.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Ink cartridge
Color	green
Odor	Characteristic
Odor threshold	No information available

Property	**Values**	**Remarks • Method**
pH	N/A	
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash point	>= 100 - °C / 212 - 482 °F	
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	1.09	g/cm3
Water solubility	Insoluble in water	
Solubility in other solvents	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No information available.	
Oxidizing properties	No information available.	

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

10. STABILITY AND REACTIVITY

Reactivity	Heating may cause a fire.
Chemical stability	Decomposes on exposure to light. Unstable if heated.
Possibility of hazardous reactions	Uncured ink will polymerize on exposure to light.
Conditions to avoid	Avoid exposure to heat and light.
Incompatible materials	Not applicable under normal conditions of use and storage.
Hazardous decomposition products	Thermal Decomposition Products. Combustion: oxides of carbon.

11. TOXICOLOGICAL INFORMATION

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 sensitization 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).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. Itching. Rashes. Hives. May cause redness and tearing of the eyes.

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

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 (vapor)
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Substituted-alkano(C=1~4)carbopolycyclic-diylbis(alkylene(C=1~4))bisacrylate	= 2.000 mg/kg (Rat) (Method: OECD Test Guideline 423)	= 2.000 mg/kg (Rat)(Method: OECD Test Guideline 402)	-
Substituted-alkenyl(C=1~4)-morpholine	= 588 mg/kg (rat)	> 2000 mg/kg (rat)	= 5.28 mg/l (rat)
Trialkyl(C=1~3)bicarbomonocyclic acrylate	= 4890 mg/kg = 4890 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	-
Alicyclic methacrylate	> 2000 mg/kg (rat)	-	-
Tripropylene glycol diacrylate 42978-66-5	= 6200 mg/kg = 6200 mg/kg (Rat)	> 2 g/kg (Rabbit)	-
Alkanone(C=1~3), (phenyl-substituted-phosphine)bis(trialkyl(C=1~3)phenyl)-	> 2000 mg/kg > 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Acrylic acid, 2-hydroxyethyl ester 818-61-1	= 548 mg/kg = 548 mg/kg (Rat)	> 1000 mg/kg (Rat)	-
2-Propenoic acid, 1,2-ethanediyl ester 2274-11-5	= 300 mg/kg = 300 mg/kg (Rat)	-	-

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 sensitization May cause sensitization 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.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Substituted-alkano(C=1~4)carbopolycyclic-diylbis(alkylene(C=1~4))bisacrylate	(Pseudokirchneriella subcapitata) : 1,6 mg/l (Method: OECD Test Guideline 201)	(Fish) : 4,95 mg/l	-	(Daphnia magna Straus) : 2,36 mg/l (Method: OECD Test Guideline 202)
Substituted-alkenyl(C=1~4)-morpholine	120 mg/l (algae)	-	-	120 mg/kg (daphnia)
Trialkyl(C=1~3)bicarbomonocyclic acrylate	1.98 mg/l Fresh water	0.704 mg/l Fresh water	-	0.524 mg/l Fresh water
Alicyclic methacrylate	2.28 mg/l	1.79 mg/l Zebra Fish	-	2.57 mg/l Water Flea
Tripropylene glycol diacrylate 42978-66-5	28: 72 h Desmodesmus subspicatus mg/L EC50	-	-	88.7: 48 h Daphnia magna mg/L EC50
Alkanone(C=1~3), (phenyl-substituted-phosphine)bis(trialkyl(C=1~3)phenyl)-	-	90: 96 h Danio rerio µg/L LC50 semi-static	-	-
Acrylic acid, 2-hydroxyethyl ester 818-61-1	-	4.8: 96 h Pimephales promelas mg/L LC50 flow-through	-	0.78: 48 h Daphnia magna mg/L EC50

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
Tripropylene glycol diacrylate	2.77

42978-66-5	
Acrylic acid, 2-hydroxyethyl ester 818-61-1	0.21

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Disposal 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.

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.

TDG

UN number or ID number UN3082
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es) 9
Packing group III
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

DOT

UN number or ID number UN3082
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es) 9
Packing group III
Special Provisions 8, 146, 173, 335, IB3, T4, TP1, TP29
Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, Marine pollutant
Emergency Response Guide Number 171

MEX

UN number or ID number UN3082
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es) 9
Special Provisions 274, 331, 335
Packing group III
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

ICAO (air)

UN number or ID number UN3082
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es) 9
Packing group III
Special Provisions A97, A158, A197, A215
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

IATA

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

IMDG

UN number or ID 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. ((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

RID

UN number or ID number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es)	9
Packing group	III
Classification code	M6
Special Provisions	274, 335, 375, 601
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
Labels	9

ADR

UN number or ID number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es)	9
Packing group	III
Classification code	M6
Tunnel restriction code	(-)
Special Provisions	274, 335, 601, 375
Description	3082, 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
Labels	9

ADN

UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es)	9
Packing group	III
Classification code	M6
Special Provisions	274, 335, 375, 601
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
Hazard label(s)	9

Limited quantity (LQ) 5 L

15. REGULATORY INFORMATION

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

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

International Inventories

TSCA	No information available
DSL/NDSL	No information available
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	No information available
AIIC	No information available

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
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
AIIC - Australian Inventory of Industrial Chemicals

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	**Health hazards** 3	**Flammability** 1	**Instability** 0	**Physical and chemical properties** -
HMIS	**Health hazards** 3 *	**Flammability** 1	**Physical hazards** 0	**Personal protection** X

Chronic Hazard Star Legend ** = Chronic Health Hazard*

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Revision Date 21-05-2020

Revision Note No information available.

Disclaimer

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