

SAFETY DATA SHEET

Issuing Date 07-Feb-2017

Revision Date 07-Feb-2017

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

Product identifier		
Product Name	FLX985, Agilus30 Black / FLX985-L, Agilus30 Black-L	
Other means of identification		
Product Code(s)	SDS-06174 EN A	
UN/ID no	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_	
Manufacturer Address Stratasys Corporate headquarters Uni 9600 West 76th Street Suite #108 Eden Prairie, MN 55344 United States Local: +1 952-294-3900 Phone: +1 952-937-3000	ted States	
Emergency telephone number		
Emergency Telephone	 +49 722 97772280 - Europe - Multi lingual response +49 722 97772281 - Global – English Language response +1 978 495 5580 - USA – Multi-lingual response +85 2 975 70887 - Asia Pacific - Multi lingual response +61 2 8011 4763 - Australia - Multi lingual response +86 15626070595 - China - Chinese response 	
E-mail address	info@Stratasys.com	
	2. HAZARDS IDENTIFICATION	
Classification		

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1A

Category 3

Specific target organ toxicity (single exposure)

Label elements

Warning		
Hazard statements Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction May cause respiratory irritation		
Appearance Ink cartridge	Physical state liquid	Odor Characteristic

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Avoid breathing dust/fume/gas/mist/vapors/spray Contaminated work clothing must not be allowed out of the workplace Use only outdoors or in a well-ventilated area Wear protective gloves/eye protection/face protection

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention 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 IF INHALED: Remove person to fresh air and keep comfortable for breathing Call a POISON CENTER or doctor if you feel unwell

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

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

May be harmful if swallowed. May be harmful in contact with skin. Very toxic to aquatic life with long lasting effects. Toxic to aquatic life.

Unknown acute toxicity

73.7008249 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

SDS-06174 - FLX985, Agilus30 Black / FLX985-L, Agilus30 Black-L

Chemical name	CAS No.	Weight-%	Proprietary
Proprietary	Proprietary	50 - 60	*
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	5888-33-5	20 - 30	*
Proprietary	Proprietary	10 - 20	*
Proprietary	Proprietary	1 - 5	*
Proprietary	Proprietary	0.1 - 1	*
Proprietary	Proprietary	0.1 - 1	*
Proprietary	-	0.1 - 1	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Do not rub affected area.
Skin contact	May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician. Wash off immediately with soap and plenty of water for at least 15 minutes.
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 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 effe	cts, both acute and delayed
Symptoms	Itching. Rashes. Hives. Burning sensation.
Indication of any immediate medica	attention and special treatment needed
Note to physicians	May cause sensitization in susceptible persons. Treat symptomatically.
	May cause sensitization in susceptible persons. Treat symptomatically.
Note to physicians	May cause sensitization in susceptible persons. Treat symptomatically. 5. FIRE-FIGHTING MEASURES 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
Note to physicians	May cause sensitization in susceptible persons. Treat symptomatically. 5. FIRE-FIGHTING MEASURES 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.

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. Ensure adequate ventilation. Use personal protective equipment as required. 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 ConditionsStore 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	The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.	
Appropriate engineering controls		
Engineering controls	Showers Eyewash stations Ventilation systems.	
Individual protection measures, such as personal protective equipment		
Eye/face protection	Wear safety glasses with side shields (or goggles). If splashes are likely to occur, wear safety glasses with side-shields.	
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	Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Information on basic physical and	chemical properties		
Physical state	liquid		
Appearance	Ink cartridge		
Odor	Characteristic		
Color	black		
Odor threshold	No information available		
Property	<u>Values</u>	Remarks • Method	
рН	No data available	None known	
Melting point / freezing point	No data available	None known	
Boiling point / boiling range	No data available	None known	
Flash point	> 100 - < 250 °C	Hyphen - °C /	212
Hyphen -		Flash point °F - 482 °F VALUE 2	
		Evaporation rate	No data available
None known		Flammability (solid,	No data available
		gas)	
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	No data available
None known		Water solubility	Insoluble in water
		Solubility in other	No data available

None known None known		solvents Partition coefficient Autoignition	No data available No data available
None known		temperature 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		
Density VALUE	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	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. Irritating to eyes. (based on components). Causes serious eye irritation.
Skin contact	May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes skin irritation.
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Information on toxicological effects	<u>s</u>
Symptoms	Itching. Rashes. Hives. Redness. 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)	4,393.00	mg/kg
ATEmix (dermal)	3,378.00	mg/kg

Unknown acute toxicity

73.7008249 % of the mixture consists of ingredient(s) of unknown toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Exo-1,7,7-trimethylbicyclo[2.2.1]	= 4890 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	-
hept-2-yl acrylate			
5888-33-5			
Proprietary	rat (oral): > 2,500 mg/kg (OECD	> 5,000 mg/kg (OECD Guideline	> 1 mg/l 4 h (OECD Guideline
	Guideline 423)	402)	403)

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. Irritating to eyes.
Respiratory or skin sensitization	May cause sensitization by skin contact.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	May cause respiratory irritation.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

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12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Exo-1,7,7-trimethylbicyclo [2.2.1]hept-2-yl acrylate 5888-33-5	1.98 mg/l Fresh water	0.704 mg/l Fresh water	-	0.524 mg/l Fresh water
Proprietary	14.4 mg/l (growth rate), Desmodesmus subspicatus (OECD Guideline 201, static)	24 mg/l, Brachydanio rerio (Directive 92/69/EEC, C.1, static)	-	53.9 mg/l, Daphnia magna (OECD Guideline 202, part 1, semistatic)
Persistence and degradability No information		on available.		
Bioaccumulation There is no da		lata for this product.		
Other adverse effects No information		on available.		

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.
US EPA Waste Number	U239

14. TRANSPORT INFORMATION

Additional information	The environmentally hazardous substance mark is not required when transported in sizes of \leq 5L or \leq 5kg The marine pollutant mark is not required when transported in sizes of \leq 5L or \leq 5kg		
DOT UN/ID no Proper Shipping Name Hazard Class Packing group Special Provisions Description Emergency Response Guide Number	UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. 9 III 8, 146, 173, 335, IB3, T4, TP1, TP29 UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, Marine pollutant 171		
<u>TDG</u> UN/ID no Proper Shipping Name Hazard Class Packing group Description	UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. 9 III UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III		
<u>MEX</u> UN/ID no Proper Shipping Name Hazard Class Special Provisions Packing group Description	UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. 9 274, 331, 335 III UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III		
ICAO (air) UN/ID no Proper Shipping Name Hazard Class Packing group Special Provisions Description	UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. 9 III A97, A158, A197 UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III		

IATA_ UN/ID no. Hazard Class Packing group ERG Code Special Provisions Description	UN3082 9 III 9L A197 UN3082, Environmentally hazardous substance, liquid, n.o.s., 9, III
IMDG UN/ID no. Hazard Class Packing group EmS No. Special Provisions Description	UN3082 9 III F-A, S-F 274, 335, 969 UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, Marine pollutant
<u>RID</u> UN/ID no Proper Shipping Name Hazard Class Packing group Classification code Description	UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. 9 III M6 UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III
ADR UN/ID no Proper Shipping Name Hazard Class Packing group Classification code Tunnel restriction code Special Provisions Description ADR/RID-Labels	UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. 9 III M6 (E) 274, 335, 601, 375 UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III 9
ADN Proper Shipping Name Hazard Class Packing group Classification code Special Provisions Description First Subsidiary Hazard Label Limited quantity	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. 9 III M6 274, 335, 375, 601 UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III 9 5 L



15. REGULATORY INFORMATION

International Inventories

TSCA	Not Listed
DSL/NDSL	Not Listed
EINECS/ELINCS	Not Listed
ENCS	Not Listed
IECSC	Not Listed
KECL	Not Listed
PICCS	Not Listed
AICS	Not Listed

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

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:.

Chemical name	California Proposition 65	
Proprietary -	Carcinogen	

U.S. State Right-to-Know Regulations

US State Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania

Proprietary	Х	Х	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

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

NFPA	Health hazards 2	Flammability 1	Instability 0	Physical and chemical properties -
<u>HMIS</u> Revision Date	Health hazards 2 07-Feb-20 ⁴	Flammability 1	Physical hazards 0	Personal protection X
Revision Note	No informa			

Disclaimer

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End of Safety Data Sheet