

SAFETY DATA SHEET

Issuing Date 28-Aug-2016

Revision Date 28-Aug-2016

Revision Number 1

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name HA FULLCURE 630 CLEAR

Product Code(s) SDS-06144

Other means of identification

Proper shipping name OTHER REGULATED SUBSTANCES, LIQUID, N.O.S.

UN Number UN3082

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

Stratasys GMBH
Airport Boulevard B 120
77836 Rheinmünster, Germany

For further information, please contact

Contact Point Product Safety Department

E-mail address info@Stratasys.com

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

Section 2: HAZARDS IDENTIFICATION

Dangerous Goods Class Hazard Class 9 Packing Group III

GHS Classification

Acute toxicity - Oral	Category 5 (HSNO - 6.1E)
Acute toxicity - Dermal	Category 5 (HSNO - 6.1E)
Skin corrosion/irritation	Category 2 (HSNO - 6.3A)
Serious eye damage/eye irritation	Category 2A (HSNO - 6.4A)

Acute aquatic toxicity	Category 1 (HSNO - 9.1A)
Chronic aquatic toxicity	Category 1 (HSNO - 9.1A)

Label elements**Signal word**

Warning

Hazard statements

H303 - May be harmful if swallowed
 H313 - May be harmful in contact with skin
 H315 - Causes skin irritation
 H319 - Causes serious eye irritation
 H317 - May cause an allergic skin reaction
 H361 - Suspected of damaging fertility or the unborn child
 H410 - Very toxic to aquatic life with long lasting effects
 H303 - May be harmful if swallowed
 H313 - May be harmful in contact with skin
 H315 - Causes skin irritation
 H319 - Causes serious eye irritation
 H317 - May cause an allergic skin reaction
 H361 - Suspected of damaging fertility or the unborn child
 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
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Avoid breathing dust/fume/gas/mist/vapours/spray
 Contaminated workplace clothing should not be allowed out of the workplace
 Wear protective gloves
 Avoid release to the environment
 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
 If eye irritation persists: Get medical advice/attention
 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
 Collect spillage
 Store locked up
 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
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Substance

Chemical name	CAS No	Weight-%
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	5888-33-5	51.6

Trade secret	-	0 - 10%
2, 4, 6 - trimethylbenzoyldiphenylphosphine oxide	75980-60-8	0.7

Non-hazardous ingredients
 Proprietary
 Balance

Additional information

This product requires tactile warnings if supplied to the general public

Section 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. 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 doctor. Wash off immediately with soap and plenty of water for at least 15 minutes.
- 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 Itching. Rashes. Hives. Burning sensation.

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

Suitable 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.

Specific hazards arising from the chemical

Specific hazards arising from the chemical Product is or contains a sensitiser. 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. 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.
For emergency responders	Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions	Prevent further leakage or spillage if safe to do so.
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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.
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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	Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Store locked up. 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 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.

Environmental exposure controls No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid
Appearance Ink cartridge
Odour Characteristic.
Colour clear
Odour threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	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 - 100 °C	
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	
Vapour pressure	No data available	None known
Vapour density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	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.	

Oxidising 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
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

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 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 sensitisation 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 diarrhoea.

Symptoms

Itching. Rashes. Hives. Redness. 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)	4,291.00 mg/kg
ATEmix (dermal)	3,094.00 mg/kg mg/l

Unknown acute toxicity 45.5 % 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]hept-2-yl acrylate	= 4890 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	-
Trade secret	rat (oral): > 2,500 mg/kg (OECD Guideline 423)	> 5,000 mg/kg (OECD Guideline 402)	> 1 mg/l 4 h (OECD Guideline 403)
2, 4, 6 - trimethylbenzoyldiphenylphosphine oxide	> 5,000 mg/kg (Rat) (OECD Guideline 401)	> 2,000 mg/kg (Rat) (OECD Guideline 402)	-

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. Irritating to eyes.

Sensitisation

No information available.

Respiratory or skin sensitisation May cause sensitisation by skin contact

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

No information available.

STOT - repeated exposure

No information available.

Aspiration hazard

No information available

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity**Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

Unknown aquatic toxicity

45.6 % of the mixture consists of component(s) of unknown hazards to the aquatic

environment.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	1.98 mg/l Fresh water	0.704 mg/l Fresh water	0.524 mg/l Fresh water
Trade secret	14.4 mg/l (growth rate), Desmodemus 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)
2, 4, 6 - trimethylbenzoyldiphenylphosphine oxide	> 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)

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation No information available.

Mobility

Mobility in soil No information available.

Mobility No information available.

Other adverse effects

Other adverse effects No information available.

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 OTHER REGULATED SUBSTANCES, LIQUID, N.O.S.
Hazard Class 9
Packing Group III
Environmental hazard Yes
Special Provisions 179, 274, 331, 335, AU01
Description UN3082, OTHER REGULATED SUBSTANCES, LIQUID, N.O.S., 9, III

IATA

UN/ID no UN3082

Hazard Class 9
Packing Group III
ERG Code 9L
Special Provisions A197
Description &UN3082, &, 9, III

IMDG

UN/ID no UN3082
Hazard Class 9
Packing Group III
EmS-No F-A, S-F
Special Provisions 274, 335
Description &UN3082, &, 9, III, <TWRP0001>

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

New Zealand

National Regulations See section 8 for national exposure control parameters

Chemical name	New Zealand HSNO Chemical Classification
Trade secret -	6.1E oral,6.4A,9.1D fish

International Inventories

TSCA Does not comply
DSL/NDSL Does not comply
EINECS/ELINCS Does not comply
ENCS Does not comply
IECSC Does not comply
KECL Does not comply
PICCS Does not comply
AICS Does not comply

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

Section 16: OTHER INFORMATION

Revision Date 28-Aug-2016

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		

Disclaimer

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End of Safety Data Sheet