

**\*\*\*Section 1 - IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING\*\*\*****1.1 Product Identifier:****Material Name:** OBJET VEROCYAN RGD841**Chemical Family**

acrylic compounds

**Substance Registration Number(s)**

The components are either registered, pre-registered or not subject to REACH.

Substance Registration Number(s) : 01-0000016491-73-XXXX (CAS#, 5117-12-4)

**1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against Identified Uses**

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.

**Uses Advised Against**

None known.

**1.3 Details of the supplier of the safety data sheet**Stratasys GmbH  
Airport Boulevard B 210  
D-77836 Rheinmünster, Germany

Phone: +49 722 97 77 20

Emergency # +49 722 97772280

**Email Address**

objet-info@stratasys.com; www.stratasys.com

**1.4 Emergency Telephone Number**+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 language response)**\*\*\*Section 2 - HAZARDS IDENTIFICATION\*\*\*****2.1 Classification of the Substance or Mixture****Classification according to Regulation (EC) No 1272/2008**Acute Toxicity (Oral), Category 4  
Eye Damage / Irritation, Category 1  
Skin Corrosion / Irritation, Category 2  
Skin sensitizer, Category 1  
Specific Target Organ Toxicity - Single Exposure, Category 3 (respiratory system)  
Specific Target Organ Toxicity - Repeated Exposure, Category 2  
Hazardous to the Aquatic Environment - Chronic Hazard, Category 3

**Classification according to Directives 67/548/EEC and/or 1999/45/EC**

**R22** Harmful if swallowed.

**R36/37/38** Irritating to eyes, respiratory system and skin.

**R41** Risk of serious damage to eyes.

**R43** May cause sensitization by skin contact.

**R48/22** Harmful: danger of serious damage to health by prolonged exposure if swallowed.

**R52/53** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**2.2 Label Elements****Labeling according to Regulation (EC) 1272/2008/EC:****Symbol(s)****Signal Word**

DANGER

**Hazard Statement(s)**

**H302** Harmful if swallowed.

**H318** Causes serious eye damage

**H315** Causes skin irritation

**H317** May cause an allergic skin reaction

**H335** May cause respiratory irritation

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

**H412** Harmful to aquatic life with long lasting effects

**Precautionary Statement(s)****Prevention**

**P271** Use only outdoors or in a well-ventilated area. **P280** Wear protective gloves/protective clothing/eye protection/face protection.

**Response**

**P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. **P310** Immediately call a POISON CENTER or doctor/physician.

**Storage**

**P405** Store locked up.

**Disposal**

**P501** Dispose of contents/container in accordance with local/regional/national/international regulations.

**Labeling according to Directive 67/548/EEC and/or 1999/45/EC****Symbols**

**Xn**

**R22** Harmful if swallowed.

**R36/37/38** Irritating to eyes, respiratory system and skin.

**R41** Risk of serious damage to eyes.

**R43** May cause sensitization by skin contact.

**R48/22** Harmful: danger of serious damage to health by prolonged exposure if swallowed.

**R52/53** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S2** Keep out of the reach of children.

**S24** Avoid contact with skin.

**S26** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**S36/37/39** Wear suitable protective clothing, gloves and eye/face protection.

**S46** If swallowed, seek medical advice immediately and show this container or label.

**S60** This material and its container must be disposed of as hazardous waste.

**S61** Avoid release to the environment. Refer to special instructions/Safety data sheets.

## 2.3 Other Hazards

None known.

### \* \* \*Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS\* \* \*

CAS EC No Registration No	Component Synonyms	67/548 EEC (DSD)	1272/2008 (CLP)	Percent
--	Acrylic monomer	Xn; R:22-41-43-48/22	Acute Tox. 4 (Oral) Eye Dam. 1 Skin Sens. 1 STOT RE 2	<30
5888-33-5 227-561-6	Isobornyl acrylate	Xi N; R:36/37/38-51/53	Skin Irrit. 2 Eye Irrit. 2 STOT SE 3 Aquatic Chronic 2	<25
--	Acrylic oligomer	Xi; R:43	Skin Sens. 1	<15
--	Photo Initiator	Xi; R:43-53	Skin Sens. 1 Aquatic Chronic 4	<2
52408-84-1 500-114-5 --	Acrylic acid ester	Xi; R:36-43	Eye Irrit. 2 Skin Sens. 1	<0.3
13463-67-7 236-675-5 --	Titanium dioxide			<0.8

108-65-6 203-603-9 --	Propylene glycol monomethyl ether acetate	R:10	Flam. Liq. 3	0.01-0.1
7664-38-2 231-633-2 --	Phosphoric acid	C; R:34	Skin Corr. 1B Note(s): B	0.0005-0.002

**Notes: B** Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 of Annex VI entries with Note B have a general designation of the following type: "nitric acid ...%". In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

#### Additional Information

The liquid within the cartridges is considered hazardous, and the MSDS has been prepared in case of exposure to the liquid.

TITANIUM DIOXIDE is present in a low concentration, dispersed in a liquid

### \*\* \*Section 4 - FIRST AID MEASURES\* \*\*

#### 4.1 Description of First Aid Measures

##### Inhalation

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.

##### Skin

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

##### 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/physician.

##### Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

#### 4.2 Most Important Symptoms and Effects, both Acute and Delayed

##### Acute

respiratory tract irritation, eye damage, skin irritation, allergic skin reaction

##### Delayed

allergic reactions

#### 4.3 Indication of any Immediate Medical Attention and Special Treatment Needed

##### Note to Physicians

No additional information.

**\*\*\*Section 5 - FIRE FIGHTING MEASURES\*\*\*****5.1 Extinguishing Media**

Use extinguishing agents appropriate for surrounding fire. Class B fires: Use carbon dioxide (CO<sub>2</sub>), regular dry chemical (sodium bicarbonate), regular form (Aqueous Film Forming Foam-AFFF), or water spray to cool containers.

**Unsuitable Extinguishing Media**

None known.

**5.2 Special Hazards Arising from the Substance or Mixture**

Slight fire hazard.

**Thermal Decomposition Products**

**Combustion:** oxides of carbon

**5.3 Advice for Firefighters****Fire Fighting Measures**

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Keep unnecessary people away, isolate hazard area and deny entry. Keep out of water supplies and sewers. Avoid inhalation of material or combustion by-products.

**Protective Equipment and Precautions for Firefighters**

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure. Avoid inhalation of material or combustion by-products.

**\*\*\*Section 6 - ACCIDENTAL RELEASE MEASURES\*\*\*****Occupational Spill / Release**

Intact cartridges do not pose a leak or spill hazard. Damaged cartridges may leak uncured ink. Stop leak if possible without personal risk. Reduce vapors with water spray. Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Keep out of water supplies and sewers.

**6.1 Personal Precautions, Protective Equipment and Emergency Procedures**

Wear personal protective clothing and equipment, see Section 8.

**6.2 Environmental Precautions**

Avoid release to the environment.

**6.3 Methods and Material for Containment and Cleaning up**

Collect spilled material. Collect spilled cartridge contents with an inert absorbent such as sand or vermiculite. Place in properly labeled closed container. Flush area with water to remove trace residue.

**6.4 Reference to Other Sections**

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations. See Section 13 for Disposal Considerations.

**\*\*\*Section 7 - HANDLING AND STORAGE\*\*\*****7.1 Precautions for Safe Handling**

Do not breathe vapor or mist. 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. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Avoid release to the environment.

**7.2 Conditions for Safe Storage, Including any Incompatibilities**

Store in accordance with all current regulations and standards. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Store between 15 °C and 25 °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. Store in a cool, dry place. Avoid direct sunlight. Keep in the dark. Keep separated from incompatible substances.

**\*\*\*Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION\*\*\*****8.1 Control Parameters****Component Exposure Limits****Titanium dioxide (13463-67-7)**

<b>Austria:</b>	5 mg/m3 TWA (alveolar dust, respirable fraction) 10 mg/m3 STEL (alveolar dust, respirable fraction, 2 X 60 min)
<b>Belgium:</b>	10 mg/m3 TWA
<b>Bulgaria:</b>	10.0 mg/m3 TWA (respirable dust)
<b>Denmark:</b>	6 mg/m3 TWA (as Ti)
<b>Estonia:</b>	5 mg/m3 TWA
<b>France:</b>	10 mg/m3 TWA (as Ti)
<b>Greece:</b>	10 mg/m3 TWA (inhalable fraction); 5 mg/m3 TWA (respirable fraction)
<b>Ireland:</b>	10 mg/m3 TWA (total inhalable dust); 4 mg/m3 TWA (respirable dust)
<b>Latvia:</b>	10 mg/m3 TWA
<b>Lithuania:</b>	5 mg/m3 TWA
<b>Poland:</b>	10.0 mg/m3 TWA (<2% free crystalline silica and containing no asbestos, total inhalable dust)
<b>Portugal:</b>	10 mg/m3 TWA [VLE-MP]
<b>Romania:</b>	15 mg/m3 STEL 10 mg/m3 TWA
<b>Spain:</b>	10 mg/m3 TWA [VLA-ED]
<b>Sweden:</b>	5 mg/m3 LLV (total dust)
<b>United Kingdom:</b>	10 mg/m3 TWA (total inhalable); 4 mg/m3 TWA (respirable) 30 mg/m3 STEL (calculated, total inhalable); 12 mg/m3 STEL (calculated, respirable) 10 mg/m3 TWA

**Propylene glycol monomethyl ether acetate (108-65-6)**

<b>EU (IOELV):</b>	50 ppm TWA; 275 mg/m3 TWA 100 ppm STEL; 550 mg/m3 STEL Possibility of significant uptake through the skin
<b>Austria:</b>	50 ppm TWA; 275 mg/m3 TWA 100 ppm STEL (8 X 5 min); 550 mg/m3 STEL (8 X 5 min) skin notation
<b>Belgium:</b>	50 ppm TWA; 275 mg/m3 TWA 100 ppm STEL; 550 mg/m3 STEL Skin
<b>Bulgaria:</b>	Skin notation 550.0 mg/m3 STEL; 100 ppm STEL 275.0 mg/m3 TWA; 50 ppm TWA
<b>Czech Republic:</b>	550 mg/m3 Ceiling Potential for cutaneous absorption
<b>Cyprus:</b>	Skin-potential for cutaneous absorption 100 ppm STEL; 550 mg/m3 STEL 50 ppm TWA; 275 mg/m3 TWA
<b>Denmark:</b>	Present Potential for cutaneous absorption 50 ppm TWA; 275 mg/m3 TWA
<b>Estonia:</b>	Sensitizer

	Skin notation
	100 ppm STEL; 550 mg/m <sup>3</sup> STEL
	50 ppm TWA; 275 mg/m <sup>3</sup> TWA
<b>Finland:</b>	50 ppm TWA; 270 mg/m <sup>3</sup> TWA
	100 ppm STEL; 550 mg/m <sup>3</sup> STEL
	Potential for cutaneous absorption
<b>France:</b>	50 ppm TWA (restrictive limit); 275 mg/m <sup>3</sup> TWA (restrictive limit)
	100 ppm STEL [VLCT] (restrictive limit); 550 mg/m <sup>3</sup> STEL [VLCT] (restrictive limit)
	Risk of cutaneous absorption
<b>Germany (TRGS):</b>	50 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 1); 270 mg/m <sup>3</sup> TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 1)
<b>Germany (DFG):</b>	50 ppm TWA MAK; 270 mg/m <sup>3</sup> TWA MAK
	50 ppm Peak; 270 mg/m <sup>3</sup> Peak
<b>Gibraltar:</b>	Skin notation
	100 ppm STEL; 550 mg/m <sup>3</sup> STEL
	50 ppm TWA; 275 mg/m <sup>3</sup> TWA
<b>Greece:</b>	50 ppm TWA; 275 mg/m <sup>3</sup> TWA
	100 ppm STEL; 550 mg/m <sup>3</sup> STEL
	skin - potential for cutaneous absorption
<b>Hungary:</b>	550 mg/m <sup>3</sup> STEL [CK]
	275 mg/m <sup>3</sup> TWA [AK]
<b>Ireland:</b>	50 ppm TWA; 275 mg/m <sup>3</sup> TWA
	100 ppm STEL; 550 mg/m <sup>3</sup> STEL
	Potential for cutaneous absorption
<b>Italy:</b>	50 ppm TWA; 275 mg/m <sup>3</sup> TWA
	100 ppm STEL; 550 mg/m <sup>3</sup> STEL
	skin - potential for cutaneous absorption
<b>Latvia:</b>	skin - potential for cutaneous exposure
	100 ppm STEL; 550 mg/m <sup>3</sup> STEL
	50 ppm TWA; 275 mg/m <sup>3</sup> TWA
<b>Lithuania:</b>	Skin notation
	75 ppm STEL; 400 mg/m <sup>3</sup> STEL
	50 ppm TWA; 250 mg/m <sup>3</sup> TWA
<b>Luxembourg:</b>	Possibility of significant uptake through the skin
	100 ppm STEL; 550 mg/m <sup>3</sup> STEL
	50 ppm TWA; 275 mg/m <sup>3</sup> TWA
<b>Malta:</b>	possibility of significant uptake through the skin
	100 ppm STEL; 550 mg/m <sup>3</sup> STEL
	50 ppm TWA; 275 mg/m <sup>3</sup> TWA
<b>Netherlands:</b>	550 mg/m <sup>3</sup> TWA
<b>Poland:</b>	520 mg/m <sup>3</sup> STEL [NDSCh]
	260 mg/m <sup>3</sup> TWA
<b>Romania:</b>	Skin notation
	100 ppm STEL; 550 mg/m <sup>3</sup> STEL
	50 ppm TWA; 275 mg/m <sup>3</sup> TWA
<b>Slovak Republic:</b>	550 mg/m <sup>3</sup> Ceiling



Potential for cutaneous absorption  
50 ppm TWA; 275 mg/m<sup>3</sup> TWA

**Slovenia:** Potential for cutaneous absorption  
100 ppm STEL; 550 mg/m<sup>3</sup> STEL  
50 ppm TWA; 275 mg/m<sup>3</sup> TWA

**Spain:** 50 ppm TWA [VLA-ED] (indicative limit value); 275 mg/m<sup>3</sup> TWA [VLA-ED] (indicative limit value)  
100 ppm STEL [VLA-EC]; 550 mg/m<sup>3</sup> STEL [VLA-EC]  
skin - potential for cutaneous exposure

**Sweden:** 50 ppm LLV; 250 mg/m<sup>3</sup> LLV  
75 ppm STV; 400 mg/m<sup>3</sup> STV  
Skin notation

**United Kingdom:** 50 ppm TWA; 274 mg/m<sup>3</sup> TWA  
100 ppm STEL; 548 mg/m<sup>3</sup> STEL  
Potential for cutaneous absorption

**Phosphoric acid (7664-38-2)**

**EU (IOELV):** 1 mg/m<sup>3</sup> TWA  
2 mg/m<sup>3</sup> STEL

**Austria:** 1 mg/m<sup>3</sup> TWA  
2 mg/m<sup>3</sup> STEL (4 X 15 min)

**Belgium:** 1 mg/m<sup>3</sup> TWA  
2 mg/m<sup>3</sup> STEL

**Bulgaria:** 2.0 mg/m<sup>3</sup> STEL  
1.0 mg/m<sup>3</sup> TWA

**Czech Republic:** 2 mg/m<sup>3</sup> Ceiling

**Cyprus:** 2.0 mg/m<sup>3</sup> STEL  
1 mg/m<sup>3</sup> TWA

**Denmark:** 1 mg/m<sup>3</sup> TWA

**Estonia:** 2 mg/m<sup>3</sup> STEL (vapor)  
1 mg/m<sup>3</sup> TWA (vapor)

**Finland:** 1 mg/m<sup>3</sup> TWA  
2 mg/m<sup>3</sup> STEL

**France:** 0.2 ppm TWA (indicative limit); 1 mg/m<sup>3</sup> TWA (indicative limit)  
0.5 ppm STEL [VLCT] (indicative limit); 2 mg/m<sup>3</sup> STEL [VLCT] (indicative limit)

**Germany (TRGS):** 2 mg/m<sup>3</sup> TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, inhalable fraction, exposure factor 2)

**Germany (DFG):** 2 mg/m<sup>3</sup> TWA MAK (inhalable fraction)  
4 mg/m<sup>3</sup> Peak (inhalable fraction)

**Gibraltar:** 2 mg/m<sup>3</sup> STEL  
1 mg/m<sup>3</sup> TWA

**Greece:** 1 mg/m<sup>3</sup> TWA  
3 mg/m<sup>3</sup> STEL

**Hungary:** 2 mg/m<sup>3</sup> STEL [CK]  
1 mg/m<sup>3</sup> TWA [AK]

**Ireland:** 1 mg/m<sup>3</sup> TWA  
2 mg/m<sup>3</sup> STEL

**Italy:** 1 mg/m<sup>3</sup> TWA  
2 mg/m<sup>3</sup> STEL

<b>Latvia:</b>	2 mg/m <sup>3</sup> STEL 1 mg/m <sup>3</sup> TWA
<b>Lithuania:</b>	2 mg/m <sup>3</sup> STEL 1 mg/m <sup>3</sup> TWA
<b>Luxembourg:</b>	2 mg/m <sup>3</sup> STEL 1 mg/m <sup>3</sup> TWA
<b>Malta:</b>	2 mg/m <sup>3</sup> STEL 1 mg/m <sup>3</sup> TWA
<b>Netherlands:</b>	1 mg/m <sup>3</sup> TWA 2 mg/m <sup>3</sup> STEL
<b>Poland:</b>	Corrosive substance 2 mg/m <sup>3</sup> STEL [NDSch] 1 mg/m <sup>3</sup> TWA
<b>Portugal:</b>	1 mg/m <sup>3</sup> TWA [VLE-MP] 3 mg/m <sup>3</sup> STEL [VLE-CD]
<b>Romania:</b>	2 mg/m <sup>3</sup> STEL 1 mg/m <sup>3</sup> TWA
<b>Slovak Republic:</b>	2 mg/m <sup>3</sup> Ceiling 1 mg/m <sup>3</sup> TWA
<b>Slovenia:</b>	2 mg/m <sup>3</sup> STEL 1 mg/m <sup>3</sup> TWA
<b>Spain:</b>	1 mg/m <sup>3</sup> TWA [VLA-ED] (indicative limit value; it is prohibited the partial or complete commercialization or use of this substance as a phytosanitary or biocide compound) 2 mg/m <sup>3</sup> STEL [VLA-EC]
<b>Sweden:</b>	1 mg/m <sup>3</sup> LLV 3 mg/m <sup>3</sup> STV
<b>United Kingdom:</b>	1 mg/m <sup>3</sup> TWA 2 mg/m <sup>3</sup> STEL 1 mg/m <sup>3</sup> TWA 3 mg/m <sup>3</sup> STEL

**EU - Interim Strategy for Management of PBT and vPvB Substances (PBT Assessments)**

No components of this material are listed.

**Biological Limit Value****Component Analysis**

There are no biological limit values for any of this product's components.

**Derived No Effect Levels (DNELs)**

No DNELs available.

**Predicted No Effect Concentrations (PNECs)**

No PNECs available.

**Ventilation**

Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

**8.2 Exposure Controls****Appropriate Engineering Controls****Eye / Face Protection**

Eye protection not required under normal conditions. Chemical goggles or safety glasses with side shields should be worn when handling a damaged cartridge.

**Skin Protection**

Protective clothing is not required under normal conditions. Wear neoprene or nitrile impervious gloves when handling damaged cartridge. Wash contaminated clothing before reuse.

**Glove Recommendations**

Wear neoprene or nitrile impervious gloves when handling damaged cartridge.

**Respiratory Protection**

Respiratory protection is not generally needed when using this product.

<b>***Section 9 - PHYSICAL AND CHEMICAL PROPERTIES***</b>
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**9.1 Information on Basic Physical and Chemical Properties**

<b>Physical State:</b>	Liquid	<b>Appearance:</b>	ink cartridge containing blue liquid ink
<b>Color:</b>	blue	<b>Physical Form:</b>	liquid
<b>Odor:</b>	characteristic odor	<b>Odor Threshold:</b>	Not available
<b>pH:</b>	Not applicable	<b>Melting Point:</b>	Not available
<b>Boiling Point:</b>	Not available	<b>Decomposition:</b>	Not available
<b>Flash Point:</b>	>100 °C	<b>Evaporation Rate:</b>	Not available
<b>LEL:</b>	Not available	<b>UEL:</b>	Not available
<b>Vapor Pressure:</b>	Not available	<b>Vapor Density (air = 1):</b>	Not available
<b>Density:</b>	Not available	<b>Specific Gravity (water = 1):</b>	Not available
<b>Water Solubility:</b>	Not available	<b>Coeff. Water/Oil Dist:</b>	Not available
<b>Auto Ignition:</b>	Not available	<b>Viscosity:</b>	Not available
<b>Volatility:</b>	Not available		

<b>***Section 10 - STABILITY AND REACTIVITY***</b>
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**10.1 Reactivity**

Heating may cause a fire

**10.2 Chemical Stability**

Unstable on exposure to light. Unstable on exposure to heat.

**10.3 Possibility of Hazardous Reactions**

Uncured ink will polymerize on exposure to light.

**10.4 Conditions to Avoid**

Avoid exposure to heat and light.

**10.5 Incompatible Materials**

Not applicable under normal conditions of use and storage.

**10.6 Hazardous Decomposition Products**
**Thermal Decomposition Products**

**Combustion:** oxides of carbon

**\*\*\*Section 11 - TOXICOLOGICAL INFORMATION\*\*\*****11.1 Information on Toxicological Effects****Acute and Chronic Toxicity**

No hazard is expected from the normal use of this product. While unlikely, uncured ink may leak from damaged ink cartridges and cause skin and eye irritation. After skin contact: tingling or irritation of the skin. After eye contact: irritation, inflammation or damage of the eye tissue.

**Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

**Titanium dioxide (13463-67-7)**

Oral LD50 Rat >10000 mg/kg

**Propylene glycol monomethyl ether acetate (108-65-6)**

Oral LD50 Rat 8532 mg/kg; Dermal LD50 Rabbit >5000 mg/kg

**Phosphoric acid (7664-38-2)**

Oral LD50 Rat 1530 mg/kg; Dermal LD50 Rabbit 2730 mg/kg

**Irritation / Corrosivity**

Contact with uncured ink may cause eye and skin irritation. Inhalation may cause respiratory tract irritation.

**Respiratory Sensitization**

No data available for the mixture.

**Skin Sensitization**

Component data indicate the substance is sensitizing. Uncured ink may cause an allergic response in sensitized individuals.

**Germ Cell Mutagenicity**

No data available for the mixture.

**Carcinogenicity****Component Carcinogenicity****Titanium dioxide (13463-67-7)**

**IARC:** Monograph 93 [2010]; Monograph 47 [1989] (Group 2B (possibly carcinogenic to humans))

**DFG:** Category 3A (could be carcinogenic for man, inhalable fraction with the exception of ultra small particles)

**Reproductive Toxicity**

No data available for the mixture.

**Specific Target Organ Toxicity - Single Exposure**

respiratory system

**Specific Target Organ Toxicity - Repeated Exposure**

May cause damage to organs through prolonged or repeated exposure

**Aspiration Hazard**

No data available for the mixture.

**\*\*\*Section 12 - ECOLOGICAL INFORMATION\*\*\*****12.1 Toxicity**

Harmful to aquatic life with long lasting effects.

**Component Analysis - Aquatic Toxicity**

Data may be available for the product or its components (if applicable, see below).

**Propylene glycol monomethyl ether acetate (108-65-6)**

**Fish:** 96 Hr LC50 Pimephales promelas: 161 mg/L [static]

**Invertebrate:** 48 Hr EC50 Daphnia magna: >500 mg/L

**Phosphoric acid (7664-38-2)**

**Fish:** 96 Hr LC50 Gambusia affinis: 3 - 3.5 mg/L

**Invertebrate:** 12 Hr EC50 Daphnia magna: 4.6 mg/L

**12.2 Persistence and Degradability**

No data available for the mixture.

**12.3 Bioaccumulative Potential**

No data available for the mixture.

**12.4 Mobility in Soil**

No data available for the mixture.

**12.5 Results of PBT and vPvB Assessment**

No information available.

**EU - Interim Strategy for Management of PBT and vPvB Substances (PBT Assessments)**

No components of this material are listed.

**12.6 Other Adverse Effects**

No information available.

**\*\*\*Section 13 - DISPOSAL CONSIDERATIONS\*\*\*****13.1 Waste Treatment Methods**

Dispose in accordance with all applicable regulations. Hazardous Waste Number(s): 08 03 12\*

Refer to manufacturer/supplier for information on recovery/recycling. Do not landfill. Avoid discharge into drains or surface water. See Section 7 for handling procedures. See Section 8 for personal protection information.

**\*\*\*Section 14 - TRANSPORT INFORMATION\*\*\*****Transportation**

Not regulated as a hazardous material.

**International Bulk Chemical Code**

This material contains one or more of the following chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

**Titanium dioxide (13463-67-7)**

**IBC Code:** Category Z (slurry)

**Propylene glycol monomethyl ether acetate (108-65-6)**

**IBC Code:** Category Z

**Phosphoric acid (7664-38-2)**

**IBC Code:** Category Z

**\*\*\*Section 15 - REGULATORY INFORMATION\*\*\*****15.1 Safety, Health and Environmental Regulations / Legislation Specific for the Substance or Mixture****EU - REACH (1907/2006) - Annex XIV List of Substances Subject to Authorisation**

No components of this material are listed.

**EU - REACH (1907/2006) - Article 59(1) Candidate List of Substances for Eventual Inclusion in Annex XIV**

No components of this material are listed.

**EU - REACH (1907/2006) - Annex XVII Restrictions of Certain Dangerous Substances, Mixtures and Articles**

No components of this material are listed.

**Germany Regulations**
**Germany Water Classification**
**Acrylic monomer (5117-12-4)**

ID Number 6697, hazard class 2 - hazard to waters

**Isobornyl acrylate (5888-33-5)**

ID Number 2247, hazard class 2 - hazard to waters

**Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)- (162881-26-7)**

ID Number 2126, hazard class 1 - low hazard to waters

**Titanium dioxide (13463-67-7)**

ID Number 1345, not considered hazardous to water

**Propylene glycol monomethyl ether acetate (108-65-6)**

ID Number 5033, hazard class 1 - low hazard to waters

**Phosphoric acid (7664-38-2)**

ID Number 392, hazard class 1 - low hazard to waters

**Denmark Regulations**
**Environmental Protection Agency List of Undesirable Substances**

No components of this material are listed.

**EU Inventory**
**Substance Analysis - Inventory**

Component	CAS	EEC
Acrylic monomer	--	ELN
Isobornyl acrylate	5888-33-5	EIN
Acrylic oligomer	--	NLP
Photo Initiator	--	ELN
Acrylic acid ester	52408-84-1	NLP
Titanium dioxide	13463-67-7	EIN
Propylene glycol monomethyl ether acetate	108-65-6	EIN
Phosphoric acid	7664-38-2	EIN

**15.2 Chemical Safety Assessment**

No chemical safety assessment has been carried out for the substance/mixture.

**\*\*\*Section 16 - OTHER INFORMATION\*\*\***

**16.1 Indication of changes**

New MSDS: October 23, 2012

**16.2 Key / Legend**

ADR - European Road Transport; EEC - European Economic Community; EIN (EINECS) - European Inventory of Existing Commercial Chemical Substances; ELN (ELINCS) - European List of Notified Chemical Substances; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; Kow - Octanol/water partition coefficient; LEL - Lower Explosive Limit; RID - European Rail Transport; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TWA - Time Weighted Average; UEL - Upper Explosive Limit

**16.3 Key literature references and sources for data**

Available upon request

**16.4 Methods used for classification of mixture according to Regulation (EC) No 1272/2008**

Available upon request

**16.5 Full Text of R Phrases in Section 3**

**R10** Flammable.

**R22** Harmful if swallowed.

**R34** Causes burns.

**R36/37/38** Irritating to eyes, respiratory system and skin.

**R41** Risk of serious damage to eyes.

**R43** May cause sensitization by skin contact.

**R48/22** Harmful: danger of serious damage to health by prolonged exposure if swallowed.

**R51/53** Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**R53** May cause long-term adverse effects in the aquatic environment.

**16.6 Training Advice**

Read the Safety Data Sheet before handling product.

**16.7 Other Information**

The information in this safety data sheet is based on data and samples provided to a third party SDS author. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned in this safety data sheet. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question.

Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. Stratasys does not guarantee the accuracy or exhaustiveness of the information provided. Use of this safety data sheet is subject to the license and liability limiting conditions as stated in your license agreement. All intellectual property rights to this sheet are the property of Stratasys and its distribution and reproduction are limited.

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