

**\*\*\*Section 1 - IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING\*\*\*****1.1 Product Identifier:****Material Name:** OBJET SUPPORT SUP705**Chemical Family**

acrylic compounds

**Substance Registration Number(s)**

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

Substance Registration Number(s) : 01-2119456809-23-XXXX (CAS#, 57-55-6)

**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  
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Emergency # +49 722 97772280

**Email Address**

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**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**Skin Corrosion / Irritation, Category 2  
Eye Damage / Irritation, Category 2  
Skin sensitizer, Category 1**Classification according to Directives 67/548/EEC and/or 1999/45/EC****R36/38** Irritating to eyes and skin.**2.2 Label Elements**

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

WARNING

**Hazard Statement(s)****H315** Causes skin irritation.**H319** Causes serious eye irritation.**H317** May cause an allergic skin reaction**Precautionary Statement(s)****Prevention****P280** Wear protective gloves/protective clothing/eye protection/face protection.**Response****P302+P352** IF ON SKIN: Wash with plenty of soap and water. **P333+P313** If skin irritation or rash occurs: Get medical advice/attention. **P363** Wash contaminated clothing before reuse. **P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**P337+P313** If eye irritation persists: Get medical advice/attention.**Storage**

None needed according to classification criteria.

**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****Xi****R36/38** Irritating to eyes and skin.**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.**S37** Wear suitable gloves.**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.

In Compliance with Regulation (EC) 1907/2006 (REACH) as Amended

CONTAINS: ACRYLIC ACID ESTER and PHOSPHINE OXIDE, DIPHENYL(2,4,6-TRIMETHYLBENZOYL)- May cause allergic reactions.

## 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 Oligomer	Xi; R:36/38	Skin Irrit. 2 Eye Irrit. 2	<50
57-55-6 200-338-0	1,2-Propylene glycol			<35
25322-68-3 500-038-2 --	Polyethylene glycol			<30
56-81-5 200-289-5	Glycerin			<25
--	Photo Initiator	Xi; R:43-53	Skin Sens. 1 Aquatic Chronic 4	<0.5
52408-84-1 500-114-5	Acrylic acid ester	Xi; Xi; R:36-43	Eye Irrit. 2 Skin Sens. 1	<0.3

## Additional Information

Under normal conditions of use, the substance is released from a cartridge only inside an appropriate printing system, and therefore, exposure is limited. The liquid within the cartridges is considered hazardous, and the MSDS has been prepared in case of exposure to the liquid.

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

## 4.1 Description of First Aid Measures

### Inhalation

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

### Skin

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

### Eyes

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.

**Ingestion**

If swallowed, get medical attention.

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

skin irritation, eye irritation, allergic skin reaction

**Delayed**

allergic skin reaction

**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.

<b>***Section 7 - HANDLING AND STORAGE***</b>
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### 7.1 Precautions for Safe Handling

Avoid breathing vapor or mist. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling.

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

Store in accordance with all current regulations and standards. 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****1,2-Propylene glycol (57-55-6)**

**Ireland:** 150 ppm TWA (total vapour and particulates); 470 mg/m<sup>3</sup> TWA (total vapour and particulates); 10 mg/m<sup>3</sup> TWA (particulate)

**Latvia:** 7 mg/m<sup>3</sup> TWA

**Lithuania:** 7 mg/m<sup>3</sup> TWA

**United Kingdom:** 150 ppm TWA (total particulate and vapour); 474 mg/m<sup>3</sup> TWA (total particulate and vapour); 10 mg/m<sup>3</sup> TWA (particulate)  
450 ppm STEL (calculated, total particulate and vapour); 1422 mg/m<sup>3</sup> STEL (calculated, total particulate and vapour); 30 mg/m<sup>3</sup> STEL (calculated, particulate)

**Polyethylene glycol (25322-68-3)**

**Austria:** 1000 mg/m<sup>3</sup> TWA (average molecular weight 200-400, inhalable fraction)  
4000 mg/m<sup>3</sup> STEL (average molecular weight 200-400, inhalable fraction, 4 X 15 min)

**Germany (TRGS):** 1000 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, average molecular weight 200-400, inhalable fraction, exposure factor 8)

**Germany (DFG):** 1000 mg/m<sup>3</sup> TWA MAK (average molecular weight 200-600, inhalable fraction)  
8000 mg/m<sup>3</sup> Peak (average molecular weight 200-600, inhalable fraction)

**Slovak Republic:** 8000 mg/m<sup>3</sup> Ceiling  
1000 mg/m<sup>3</sup> TWA

**Slovenia:** 4000 mg/m<sup>3</sup> STEL (MW 200-400, inhalable fraction)  
1000 mg/m<sup>3</sup> TWA (inhalable fraction, MW 200-400)

**Glycerin (56-81-5)**

**Belgium:** 10 mg/m<sup>3</sup> TWA (mist)

**Czech Republic:** 15 mg/m<sup>3</sup> Ceiling

**Estonia:** 10 mg/m<sup>3</sup> TWA

**Finland:** 20 mg/m<sup>3</sup> TWA

**France:** 10 mg/m<sup>3</sup> TWA (aerosol)

**Germany (DFG):** 50 mg/m<sup>3</sup> TWA MAK (inhalable fraction)  
100 mg/m<sup>3</sup> Peak (inhalable fraction)

**Greece:** 10 mg/m<sup>3</sup> TWA **Ireland:**  
10 mg/m<sup>3</sup> TWA (mist)

**Poland:** 10 mg/m<sup>3</sup> TWA (aerosol)

**Portugal:** 10 mg/m<sup>3</sup> TWA [VLE-MP] (mist)

**Spain:** 10 mg/m<sup>3</sup> TWA [VLA-ED] (mist)

**United Kingdom:** 10 mg/m<sup>3</sup> TWA (mist)  
30 mg/m<sup>3</sup> STEL (calculated, mist)  
10 mg/m<sup>3</sup> TWA (mist)

**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 yellowish liquid ink
<b>Color:</b>	yellowish	<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>	94 °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

<b>***Section 11 - TOXICOLOGICAL INFORMATION***</b>
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## 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:

#### 1,2-Propylene glycol (57-55-6)

Oral LD50 Rat 20000 mg/kg; Dermal LD50 Rabbit 20800 mg/kg

#### Polyethylene glycol (25322-68-3)

Oral LD50 Rat 28 g/kg; Dermal LD50 Rabbit >20 g/kg

#### Glycerin (56-81-5)

Oral LD50 Rat 12600 mg/kg; Dermal LD50 Rat >21900 mg/kg

### Irritation / Corrosivity

Contact with uncured ink may cause skin and eye 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

None of this product's components are listed by IARC or DFG.

### Reproductive Toxicity

No data available for the mixture.

### Specific Target Organ Toxicity - Single Exposure

No data available.

### Specific Target Organ Toxicity - Repeated Exposure

No data available.

### Aspiration Hazard

No data available for the mixture.



**\*\*\*Section 12 - ECOLOGICAL INFORMATION\*\*\*****12.1 Toxicity****Component Analysis - Aquatic Toxicity**

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

**1,2-Propylene glycol (57-55-6)**

**Fish:** 96 Hr LC50 Oncorhynchus mykiss: 51600 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 41 - 47 mL/L [static]; 96 Hr LC50 Pimephales promelas: 51400 mg/L [static]; 96 Hr LC50 Pimephales promelas: 710 mg/L

**Algae:** 96 Hr EC50 Pseudokirchneriella subcapitata: 19000 mg/L

**Invertebrate:** 24 Hr EC50 Daphnia magna: >10000 mg/L; 48 Hr EC50 Daphnia magna: >1000 mg/L [Static]

**Polyethylene glycol (25322-68-3)**

**Fish:** 24 Hr LC50 Carassius auratus: >5000 mg/L (PEG 200, 400, 800)

**Glycerin (56-81-5)**

**Fish:** 96 Hr LC50 Oncorhynchus mykiss: 51 - 57 mL/L [static]

**Invertebrate:** 24 Hr EC50 Daphnia magna: >500 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 17\*

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.

**1,2-Propylene glycol (57-55-6)**

**IBC Code:** Category Z

**Polyethylene glycol (25322-68-3)**

**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****1,2-Propylene glycol (57-55-6)**

ID Number 280, hazard class 1 - low hazard to waters

**Polyethylene glycol (25322-68-3)**

ID Number 279, hazard class 1 - low hazard to waters (footnote 11, &gt;=4 EO)

**Glycerin (56-81-5)**

ID Number 116, hazard class 1 - low hazard to waters

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

ID Number 2126, 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 Oligomer	--	No
1,2-Propylene glycol	57-55-6	EIN
Polyethylene glycol	25322-68-3	NLP
Glycerin	56-81-5	EIN
Photo Initiator	--	ELN
	--	
Acrylic acid ester	52408-84-1	NLP

**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: 1/10/2013

**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

In Compliance with Regulation (EC) 1907/2006 (REACH) as Amended

**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****R36** Irritating to eyes.**R38** Irritating to skin.**R43** May cause sensitization by skin contact.**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.

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