



In accordance with Regulation (EC) No. 1907/2006

<b>Classification</b>
-----------------------

Xn



(Bad file name or number)



Issuing date 04/04/2011

<b>1. PRODUCT AND COMPANY IDENTIFICATION</b>
----------------------------------------------

**Identification of the substance/preparation**

<b>Product Code</b>	8045367
<b>Product name</b>	6997 X-50 RED
<b>Recommended use</b>	Printing ink

**Company/Undertaking Identification****Company**

Markem-Image S.A.S.  
9, rue Gaspard Monge - BP 110  
26501 Bourg-lès-Valence cedex  
France

e-mail: sds@markem-image.com  
Tel: (33) 4 75 75 55 00  
Fax: (33) 4 75 82 98 10

Emergency Telephone Numbers:  
Markem-Image S.A.S.: (33) 4 75 75 55 00  
INRS\* (Orfila): (33) 1 45 42 59 59

**Emergency telephone number**

Markem-Image S.A.S.: (33) 4 75 75 55 00  
INRS (Orfila): (33) 1 45 42 59 59

**Supplier Address**

<b>2. HAZARDS IDENTIFICATION</b>
----------------------------------

The preparation is classified as dangerous in accordance with Directive 1999/45/EC

Harmful if swallowed  
Irritating to eyes

<b>3. COMPOSITION / INFORMATION ON INGREDIENTS</b>
----------------------------------------------------

**Chemical nature of the preparation**

Aliphatic urethane methacrylate based gel with salts and additives

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### Hazardous components

Chemical Name	CAS-No	EC-No	Weight %	Classification
Ethylene glycol monophenyl ether	122-99-6	204-589-7	60 - 70	Xn; R22 Xi; R36
Silica, amorphous	7631-86-9	231-545-4 418-260-2	5 - 10	-
Diethylene glycol monophenyl ether	104-68-7	203-227-5	5 - 10	Xn;R22

### 4. FIRST AID MEASURES

#### General advice

If symptoms persist, call a physician Do not breathe dust or mist Do not get in eyes, on skin, or on clothing

#### Inhalation

Move to fresh air. Consult a physician. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapours. If symptoms persist, call a physician.

#### Eye contact

Immediately flush with plenty of water. Keep eye wide open while rinsing. If symptoms persist, call a physician. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### Ingestion

Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam, water spray.

#### Extinguishing media which must not be used for safety reasons

Do not use a solid water stream as it may scatter and spread fire.

#### Method

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

#### Protective equipment and precautions for firefighters

Wear self-contained breathing apparatus and protective suit. Fire or intense heat may cause violent rupture of packages. Keep containers and surroundings cool with water spray.

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

#### Environmental precautions

SEE PART A & PART B MSDS'S FOR HAZARD WARNING & OTHER INFORMATION.

#### Methods for cleaning up

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Use personal protective equipment. Dam up. Cover liquid spill with sand, earth or other noncombustible absorbent material. Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

### 7. HANDLING AND STORAGE

#### Handling

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Remove and wash contaminated clothing before re-use. Do not breathe vapours or spray mist. Do not eat, drink or smoke when using this product. Use only in area provided with appropriate exhaust ventilation.

#### Storage

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labelled containers.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Engineering measures

Ensure adequate ventilation Ensure that eyewash stations and safety showers are close to the workstation location

### Exposure limits

Chemical Name	EU	The United Kingdom	France	Spain	Germany
Ethylene glycol monophenyl ether					MAK: 20 ppm MAK: 110 mg/m <sup>3</sup> Ceiling / Peak: 40 ppm Ceiling / Peak: 220 mg/m <sup>3</sup> Skin TWA: 20 ppm TWA: 110 mg/m <sup>3</sup>
Silica, amorphous		STEL: 18 mg/m <sup>3</sup> STEL: 7.2 mg/m <sup>3</sup> STEL: 18 mg/m <sup>3</sup> TWA: 6 mg/m <sup>3</sup> TWA: 2.4 mg/m <sup>3</sup>			MAK: 4 mg/m <sup>3</sup> TWA: 4 mg/m <sup>3</sup>

Chemical Name	Italy	Portugal	The Netherlands	Finland	Austria
Ethylene glycol monophenyl ether				TWA: 20 ppm TWA: 110 mg/m <sup>3</sup> STEL: 50 ppm STEL: 290 mg/m <sup>3</sup> Skin	Skin STEL 20 ppm STEL 110 mg/m <sup>3</sup> MAK: 20 ppm MAK: 110 mg/m <sup>3</sup> Ceiling 20 ppm Ceiling 110 mg/m <sup>3</sup>
Silica, amorphous					MAK: 4 mg/m <sup>3</sup>

Chemical Name	Switzerland	Poland	Norway	Ireland	Denmark
Ethylene glycol monophenyl ether	Skin STEL: 40 ppm STEL: 220 mg/m <sup>3</sup> MAK: 20 ppm MAK: 110 mg/m <sup>3</sup>	NDS: 230 mg/m <sup>3</sup>			
Silica, amorphous	MAK: 4 mg/m <sup>3</sup> MAK: 0.3 mg/m <sup>3</sup> MAK: 4 mg/m <sup>3</sup>		TWA: 1.5 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>	TWA: 6 mg/m <sup>3</sup> TWA: 2.4 mg/m <sup>3</sup> TWA: 6 mg/m <sup>3</sup>	

### Personal protective equipment

#### Respiratory protection

not required under normal use. In case of insufficient ventilation, wear suitable respiratory equipment.

#### Hand protection

Impervious gloves made from , Neoprene, Butyl rubber, nitrile rubber

#### Eye protection

No information available

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General Information

<b>Form</b>	liquid
<b>Colour</b>	red
<b>Odour</b>	characteristic
<b>pH</b>	NA

### Important Health Safety and Environmental Information

**Flash point** 121°C250°F

#### Explosion limits

**Melting point/range** °CND°F

**Boiling point/range** 242°C468°F

**Autoignition temperature** 495°C923°F

**Water solubility** Insoluble in water  
**Partition coefficient: n-octanol/water** no data available

**VOC Content(%) European Union** no data available

## 10. STABILITY AND REACTIVITY

<b><u>Stability</u></b>	Stable under normal conditions.
<b><u>Hazardous reactions</u></b>	Hazardous polymerisation does not occur
<b><u>Hazardous Decomposition Products</u></b>	Carbon dioxide (CO <sub>2</sub> ). Carbon monoxide. Smoke.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

<b><i>Inhalation</i></b>	Irritating to respiratory system. May cause irritation of respiratory tract. May be harmful if inhaled.
<b><i>Skin contact</i></b>	Substance may cause slight skin irritation. Harmful by skin absorption.
<b><i>Eye contact</i></b>	Mild eye irritation.
<b><i>Ingestion</i></b>	Harmful if swallowed. Ingestion may cause irritation to mucous membranes.

### Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethylene glycol monophenyl ether	1260 mg/kg ( Rat )	14422 mg/kg ( Rat ) 5 mL/kg ( Rabbit )	
Silica, amorphous	5000 mg/kg ( Rat )	2000 mg/kg ( Rabbit )	>2.2 mg/L ( Rat ) 4 h
Diethylene glycol monophenyl ether	2140 mg/kg ( Rat )	2120 µL/kg ( Rabbit )	

<b>Chemical Name</b>	<b>IARC</b>	<b>UK</b>
Silica, amorphous	Group 3	

**Chronic toxicity**

Avoid repeated exposure. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects.

## 12. ECOLOGICAL INFORMATION

**Mobility**

The product is insoluble and sinks in water.

**Biodegradation**

Some ingredients of this material have some potential to biodegrade, but most ingredients have a limited potential to biodegrade or have not been tested.

Chemical Name	CAS-No	log Pow	Toxicity to algae	Toxicity to microorganisms	German Water Class (VwVwS) Annex 2
Ethylene glycol monophenyl ether	122-99-6	1.13	500: 72 h Desmodesmus subspicatus mg/L EC50		1650
Silica, amorphous	7631-86-9		440: 72 h Pseudokirchneriella subcapitata mg/L EC50		

Chemical Name	CAS-No	Daphnia magna (Water flea)	LC50/96h/Fathead minnows =	GHS Aquatic Toxicity Classified
Ethylene glycol monophenyl ether	122-99-6	500: 48 h Daphnia magna mg/L EC50	220	
Silica, amorphous	7631-86-9	7600: 48 h Ceriodaphnia dubia mg/L EC50	5000	

## 13. DISPOSAL CONSIDERATIONS

**Waste disposal methods  
Contaminated packaging**

Dispose of in accordance with local regulations  
Empty containers should be taken for local recycling, recovery or waste disposal.

## 14. TRANSPORT INFORMATION

**ADR**

Proper shipping name	Not applicable
UN-No	Not applicable
Hazard Class	Not applicable
Packing group	Not applicable
Classification Code	Not applicable

**IMDG/IMO**

Proper shipping name	Not applicable
UN-No	Not applicable
Hazard Class	Not applicable
Packing group	Not applicable
EmS	Not applicable

**IATA**

Proper shipping name	NOT RESTRICTED
UN-No	Not applicable
Hazard Class	Not applicable

## 14. TRANSPORT INFORMATION

Packing group  
ERG Code

Not applicable  
Not applicable

## 15. REGULATORY INFORMATION

In accordance with local and national regulations: The preparation is classified as dangerous in accordance with Directive 1999/45/EC.

### Labelling

Xn - Harmful

Xn



### R-phrases(s)

R22 - Harmful if swallowed  
R36 - Irritating to eyes

### S-phrases(s)

No information available

## 16. OTHER INFORMATION

### Full text of R-phrases referred to under sections 2 and 3

- R21 - Harmful in contact with skin
- R20 - Harmful by inhalation
- R36 - Irritating to eyes
- R22 - Harmful if swallowed