



# SAFETY DATA SHEET

Issuing Date 27-Mar-2018

Revision Date 27-Mar-2018

Revision Number 3

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

### Product identifier

**Product Name** 6990 X-50 BLACK (4 ounce)

### Other means of identification

**Product Code(s)** 80452640432S

**Synonyms** No information available

### Recommended use of the chemical and restrictions on use

**Recommended Use** Printing ink.

**Uses advised against** No information available

MARKEM-IMAJE USA  
100 Chastain Center Blvd  
Suite 165  
<br />Kennesaw, GA 30144 - USA  
Phone: 770-421-7700  
Fax: 770-421-7702

### Details of the supplier of the safety data sheet

#### Supplier Address

Markem-Imaje  
150 Congress St. PO Box 2100  
Keene, NH 03431  
(603) 352-1130

### Emergency telephone number

**Chemical Emergency Phone Number** Chemtrec: 1-800-424-9300 for US/ 703-527-3887 outside US

**Emergency Telephone Number** In case of emergency call CHEMTREC 1-800-424-9300 Outside the US call CHEMTREC at 1-703-527-3887 (collect)

## 2. HAZARDS IDENTIFICATION

### Classification

#### OSHA Regulatory Status

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

|                                   |            |
|-----------------------------------|------------|
| Acute toxicity - Oral             | Category 4 |
| Serious eye damage/eye irritation | Category 2 |
| Skin sensitization                | Category 1 |
| Reproductive toxicity             | Category 2 |

### GHS Label elements, including precautionary statements

#### Emergency Overview

**Warning****Hazard statements**

Harmful if swallowed  
 Causes serious eye irritation  
 May cause an allergic skin reaction  
 Suspected of damaging fertility or the unborn child

**Color** Black**Physical State** Liquid**Odor** Characteristic**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  
 Do not eat, drink or smoke when using this product  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Contaminated work clothing should not be allowed out of the workplace  
 Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
 Specific treatment (see .? on this label)  
 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  
 If skin irritation or rash occurs: Get medical advice/attention  
 Wash contaminated clothing before reuse  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

No information available

**Other information**

- May be harmful in contact with skin
- Harmful to aquatic life with long lasting effects
- Harmful to aquatic life

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical Nature of the Preparation** Mixture of solvents, polymers, colorants and additives.

| Chemical Name                    | CAS-No   | Weight % |
|----------------------------------|----------|----------|
| Ethylene glycol monophenyl ether | 122-99-6 | 60 - 70  |

|                                    |          |        |
|------------------------------------|----------|--------|
| Diethylene glycol monophenyl ether | 104-68-7 | 5 - 10 |
| Bisphenol A                        | 80-05-7  | 1 - 5  |

#### 4. FIRST AID MEASURES

##### First aid measures

##### **General Advice**

Immediate medical attention is required. If symptoms persist, call a physician.

##### **Eye Contact**

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

##### **Skin Contact**

Immediate medical attention is required. Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Immediate medical attention is not required. If skin irritation persists, call a physician.

##### **Inhalation**

Immediate medical attention is required. Move to fresh air. If not breathing, give artificial respiration. Avoid direct contact with skin. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

##### **Ingestion**

Do NOT induce vomiting. Call a physician or Poison Control Center immediately. Never give anything by mouth to an unconscious person. Drink plenty of water. Clean mouth with water and afterwards drink plenty of water. Consult a physician.

##### **Protection of First-aiders**

Use personal protective equipment. Avoid contact with skin, eyes and clothing.

##### **Most important symptoms and effects, both acute and delayed**

**Most Important Symptoms/Effects** No information available

##### **Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### **Suitable Extinguishing Media**

Carbon dioxide (CO<sub>2</sub>). Dry chemical. Alcohol-resistant foam. Water spray.

##### **Unsuitable Extinguishing Media**

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

##### **Specific Hazards Arising from the Chemical**

Non-combustible but may burn if exposed to flame or other ignition source. Burning produces obnoxious and toxic fumes. Runoff may pollute waterways. Fire or intense heat may cause violent rupture of packages. This material creates a fire hazard because it floats on water.

##### **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, protective equipment and emergency procedures**

##### **Personal Precautions**

Use personal protective equipment. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

##### **Environmental precautions**

##### **Environmental Precautions**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Beware of vapors accumulating to form explosive concentrations.

**Methods and material for containment and cleaning up****Methods for Containment**

Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

**Methods for Cleaning Up**

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 labeled containers.

## 7. HANDLING AND STORAGE

**Precautions for safe handling****Handling**

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

**Conditions for safe storage, including any incompatibilities****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 labeled containers.

**Incompatible Products**

Incompatible with oxidizing agents. Incompatible with strong acids and bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines**

| Chemical Name                  | ACGIH TLV | OSHA PEL   | NIOSH IDLH   |
|--------------------------------|-----------|--|--|
| Silica, amorphous<br>7631-86-9 | -         | (vacated) TWA: 6 mg/m <sup>3</sup> <1%<br>Crystalline silica<br>TWA: 20 mppcf<br>: (80)/(%) SiO <sub>2</sub> mg/m <sup>3</sup> TWA | IDLH: 3000 mg/m <sup>3</sup><br>TWA: 6 mg/m <sup>3</sup> |

NIOSH IDLH: Immediately Dangerous to Life or Health.

S\*: Skin Notation

**Other Exposure Guidelines**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v.

**Engineering Measures**

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

**Personal Protective Equipment****Eye/Face Protection**

Tightly fitting safety goggles. Face-shield.

**Skin and Body Protection**

Impervious gloves. Impervious clothing. Long sleeved clothing. Apron.

**Respiratory Protection**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn

**Hygiene Measures**

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs.



Glasses



Gloves



Face Mask

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

|                                   |                |                            |                 |
|-----------------------------------|----------------|----------------------------|-----------------|
| <b>Color</b>                      | Black .        | <b>Odor</b>                | Characteristic. |
| <b>Physical State</b>             | Liquid         | <b>pH</b>                  | NA              |
| <b>Flash Point</b>                | 250°F / 121°C  | <b>Boiling Point/Range</b> | 242°C / 468°F   |
| <b>Autoignition Temperature</b>   | 495°C / 923°F  | <b>Melting Point/Range</b> | Not determined  |
| <b>Flammability Limits in Air</b> |                | <b>Explosion Limits</b>    | Not determined  |
| <b>Upper</b>                      | ND             |                            |                 |
| <b>Lower</b>                      | 0.9%           |                            |                 |
| <b>Specific Gravity</b>           | 1.15           | <b>Solubility</b>          | Not determined  |
| <b>Evaporation Rate</b>           | Not determined | <b>Vapor Pressure</b>      | Not determined  |
| <b>Vapor Density</b>              | Not determined | <b>Liquid Density</b>      | 9.61306626      |
| <b>VOC Content(%)</b>             | 64.852         | <b>VOC (lb/gal)</b>        | 6.9267747464    |
| <b>VOC (g/l)</b>                  | 830.01066849   |                            |                 |

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under normal conditions.

### Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

### Conditions to avoid

None known. Keep away from open flames, hot surfaces and sources of ignition.

### Incompatible materials

Incompatible with oxidizing agents. Incompatible with strong acids and bases.

### Hazardous Decomposition Products

Carbon dioxide (CO<sub>2</sub>). Carbon monoxide. Smoke.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | There is no data available for this product |
| <b>Eye Contact</b>  | There is no data available for this product |
| <b>Skin Contact</b> | There is no data available for this product |
| <b>Ingestion</b>    | There is no data available for this product |

### **Component Information**

| Chemical Name                                  | LD50 Oral            | LD50 Dermal             | LC50 Inhalation       |
|--|----------------------|-------------------------|-----------------------|
| Diethylene glycol monophenyl ether<br>104-68-7 | = 2140 mg/kg ( Rat ) | = 2120 µL/kg ( Rabbit ) | -                     |
| Ethylene glycol monophenyl ether<br>122-99-6   | = 1260 mg/kg ( Rat ) | = 5 mL/kg ( Rabbit )    | -                     |
| Silica, amorphous<br>7631-86-9                 | > 5000 mg/kg ( Rat ) | > 2000 mg/kg ( Rabbit ) | >2.2 mg/L ( Rat ) 4 h |

### Information on toxicological effects

**Symptoms** No information available

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available

**Mutagenic Effects** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name                                     | ACGIH | IARC                     | NTP | OSHA |
|---|-------|--------------------------|-----|------|
| Diethylene glycol monophenyl<br>ether<br>104-68-7 | -     | No information available | -   | -    |
| Ethylene glycol monophenyl<br>ether<br>122-99-6   | -     | No information available | -   | -    |
| Silica, amorphous<br>7631-86-9                    | -     | Group 3                  | -   | -    |

**ACGIH: (American Conference of Governmental Industrial Hygienists)**

No information available

A3 - Animal Carcinogen

**IARC: (International Agency for Research on Cancer)**

No information available

Group 3 - Not Classifiable as to Carcinogenicity in Humans

**Reproductive Toxicity** No information available

**Specific target organ systemic** No information available

**toxicity (single exposure)**

**Specific target organ systemic** No information available

**toxicity (repeated exposure)**

**Chronic Toxicity**

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

**Target Organ Effects**

Eyes, Skin, Respiratory system , Blood, Liver, Kidney, Thyroid, Bladder, Central Vascular System (CVS), Respiratory system.

**Aspiration hazard** No information available

### Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 1459 mg/kg

ATEmix (dermal) 4936 mg/kg

ATEmix (inhalation-gas) 99999

ATEmix (inhalation-dust/mist) 92965 mg/L

ATEmix (inhalation-vapor) 99999

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

| Chemical Name                                  | Toxicity to Algae                                   | Toxicity to Fish  | Toxicity to Microorganisms | Daphnia Magna (Water Flea)   |
|--|---|---|----------------------------|--|
| Ethylene glycol monophenyl ether<br>122-99-6   | 500: 72 h Desmodesmus subspicatus mg/L EC50         | 220 - 460: 96 h Leuciscus idus mg/L LC50 static<br>337 - 352: 96 h Pimephales promelas mg/L LC50 flow-through<br>366: 96 h Pimephales promelas mg/L LC50 static   |                            | 500: 48 h Daphnia magna mg/L EC50  |
| Diethylene glycol monophenyl ether<br>104-68-7 | .?  | -   |                            | -  |
| Bisphenol A<br>80-05-7                         | 2.5: 96 h Pseudokirchneriella subcapitata mg/L EC50 | 3.6 - 5.4: 96 h Pimephales promelas mg/L LC50 flow-through<br>4.0 - 5.5: 96 h Pimephales promelas mg/L LC50 static<br>4: 96 h Oncorhynchus mykiss mg/L LC50<br>9.9: 96 h Brachydanio rerio mg/L LC50 static |                            | 9.2 - 11.4: 48 h Daphnia magna mg/L EC50 Static<br>10.2: 48 h Daphnia magna mg/L EC50<br>3.9: 48 h Daphnia magna mg/L EC50 |

**Persistence and Degradability**

No information available

**Bioaccumulation**

No information available

| Chemical Name                                  | Log Pow    |
|--|------------|
| Ethylene glycol monophenyl ether<br>122-99-6   | 1.13       |
| Diethylene glycol monophenyl ether<br>104-68-7 | None known |
| Bisphenol A<br>80-05-7                         | 2.2        |

**Other Adverse Effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Waste Disposal Methods**

Dispose of in accordance with local regulations

**14. TRANSPORT INFORMATION****IATA****Proper Shipping Name**Not regulated  
not regulated**IMDG/IMO**

Not regulated

**ADR**

Not regulated

**15. REGULATORY INFORMATION****International Inventories****TSCA**

Does not Comply

## 15. REGULATORY INFORMATION

### Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

### U.S. Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

| Chemical Name                      | CAS-No   | Weight % | SARA 313 - Threshold Values % |
|------------------------------------|----------|----------|-------------------------------|
| Diethylene glycol monophenyl ether | 104-68-7 | 7.20381  | 1.0(as Glycol ethers)         |
| Ethylene glycol monophenyl ether   | 122-99-6 | 64.8343  | 1.0(as Glycol ethers)         |

#### 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  |

#### Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122)

#### 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)

### U.S. State Regulations

#### California Proposition 65

This product contains the following Proposition 65 chemicals:

| Chemical Name | CAS-No  | California Prop. 65 |
|---------------|---------|---------------------|
| Formaldehyde  | 50-00-0 | Carcinogen          |

### U.S. State Right-to-Know Regulations

| Chemical Name                      | Massachusetts | Pennsylvania        | Illinois            | Rhode Island |
|------------------------------------|---------------|---------------------|---------------------|--------------|
| Ethylene glycol monophenyl ether   |               | X(as Glycol ethers) | X(as Glycol ethers) |              |
| Diethylene glycol monophenyl ether |               | X(as Glycol ethers) | X(as Glycol ethers) |              |
| Bisphenol A                        | X             | X                   |                     |              |

| Chemical Name     | New Jersey |
|-------------------|------------|
| Silica, amorphous | X          |
| Bisphenol A       | X          |

### International Regulations

#### Mexico - Grade

Slight risk, Grade 1

#### Canada



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This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

**Legend**

NPRI - National Pollutant Release Inventory

**16. OTHER INFORMATION****NFPA****HMIS****Personal Protection X****Health Hazard 0****Health Hazard 2****Flammability 1****Flammability 1****Reactivity -****Reactivity 0****Prepared By**Environmental and Safety Department  
150 Congress St. PO Box 2100.  
Keene, NH 03431  
(603) 352-1130**Issuing Date**

27-Mar-2018

**Revision Note**

No information available

**General Disclaimer**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication

**End of Safety Data Sheet**