



SAFETY DATA SHEET

Issuing Date 07-Mar-2018

Revision Date 05-Mar-2018

Revision Number 2

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

Product identifier

Product Name 6993 X-50 BLACK (1 quart)

Other means of identification

Product Code(s) 80452903200S

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
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

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

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	80 - 90
Diethylene glycol monophenyl ether	104-68-7	5 - 10
Bisphenol A	80-05-7	< 1

4. FIRST AID MEASURES

First aid measures

General Advice

If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

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.

Skin Contact

Consult a physician if necessary. 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

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 vapors. If symptoms persist, call 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.

Protection of First-aiders

Use personal protective equipment.

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 (CO₂). 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 entry into waterways, sewers, basements or confined areas. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. 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 7631-86-9	-	(vacated) TWA: 6 mg/m ³ <1% Crystalline silica TWA: 20 mppcf : (80)/(%) SiO ₂ mg/m ³ TWA	IDLH: 3000 mg/m ³ TWA: 6 mg/m ³

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Color	Black .	Odor	Characteristic.
Physical State	Liquid	pH	NA
Flash Point	250°F / 121°C	Boiling Point/Range	242°C / 468°F
Autoignition Temperature	495°C / 923°F	Melting Point/Range	Not determined
Flammability Limits in Air		Explosion Limits	Not determined
Upper	ND		
Lower	0.9%		
Specific Gravity	1.17	Solubility	Not determined
Evaporation Rate	Not determined	Vapor Pressure	Not determined
Vapor Density	Not determined	Liquid Density	9.7307364
VOC Content(%)	80.5329	VOC (lb/gal)	8.7065320279
VOC (g/l)	1043.2726245		

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 (CO₂). Carbon monoxide. Smoke.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	There is no data available for this product
Eye Contact	There is no data available for this product
Skin Contact	There is no data available for this product
Ingestion	There is no data available for this product

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Diethylene glycol monophenyl ether 104-68-7	= 2140 mg/kg (Rat)	= 2120 µL/kg (Rabbit)	-
Ethylene glycol monophenyl ether 122-99-6	= 1260 mg/kg (Rat)	= 5 mL/kg (Rabbit)	-
Silica, amorphous 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. This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Chemical Name	ACGIH	IARC	NTP	OSHA
Diethylene glycol monophenyl ether 104-68-7	-	No information available	-	-
Ethylene glycol monophenyl ether 122-99-6	-	No information available	-	-
Silica, amorphous 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 toxicity (single exposure) No information available

Specific target organ systemic toxicity (repeated exposure) No information available

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)	1458 mg/kg
ATEmix (dermal)	6291 mg/kg
ATEmix (inhalation-gas)	99999
ATEmix (inhalation-dust/mist)	360686 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 122-99-6	500: 72 h Desmodesmus subspicatus mg/L EC50	220 - 460: 96 h Leuciscus idus mg/L LC50 static 337 - 352: 96 h Pimephales promelas mg/L LC50 flow-through 366: 96 h Pimephales promelas mg/L LC50 static		500: 48 h Daphnia magna mg/L EC50

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Diethylene glycol monophenyl ether 104-68-7	?	-		-
Bisphenol A 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 4.0 - 5.5: 96 h Pimephales promelas mg/L LC50 static 4: 96 h Oncorhynchus mykiss mg/L LC50 9.9: 96 h Brachydanio rerio mg/L LC50 static		9.2 - 11.4: 48 h Daphnia magna mg/L EC50 Static 10.2: 48 h Daphnia magna mg/L EC50 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 122-99-6	1.13
Diethylene glycol monophenyl ether 104-68-7	None known
Bisphenol A 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**

Not regulated

IMDG/IMO

Not regulated

ADR

Not regulated

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

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

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	8.94168	1.0(as Glycol ethers)
Ethylene glycol monophenyl ether	122-99-6	80.4751	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
Aniline	62-53-3	Carcinogen
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

International Regulations

Mexico - Grade Slight risk, Grade 1

Canada

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 ByEnvironmental and Safety Department
150 Congress St. PO Box 2100.
Keene, NH 03431
(603) 352-1130**Issuing Date**

07-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