SAFETY DATA SHEET

Issuing Date 02-Jul-2015 **Revision Date** 30-May-2015 **Revision Number** 1

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

Product identifier

Product Name 6993 X-50 BLACK

Other means of identification

Product Code(s) 8045290

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

GHS Label elements, including precautionary statements

Emergency Overview

Warning

Hazard statements
Harmful if swallowed
Causes serious eye irritation

Color Black **Physical State** Liquid **Odor** Characteristic

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear eye/face protection

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

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
Silica, amorphous	7631-86-9	1 - 5

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

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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)/(% SiO2) 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

Information on basic physical and chemical properties

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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

Product Information Product does not present an acute toxicity hazard based on known information

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	.?	-		-
Silica, amorphous 7631-86-9	440: 72 h Pseudokirchneriella subcapitata mg/L EC50	5000: 96 h Brachydanio rerio mg/L LC50 static		7600: 48 h Ceriodaphnia dubia 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
Silica, amorphous 7631-86-9	None known

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 Complies

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

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)	
Silica, amorphous	X	X		

Chemical Name	New Jersey
Diethylene glycol monophenyl ether	X(as Glycol ethers)
Ethylene glycol monophenyl ether	X(as Glycol ethers)

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

16. OTHER INFORMATION

NFPA	**Health Hazard** 0	**Flammability** 1	**Reactivity** -
HMIS	**Health Hazard** 2	**Flammability** 1	**Reactivity** 0

Personal Protection X

Prepared By

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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