

SAFETY DATA SHEET

Issuing Date 28-Dec-2015 Revision Date 28-Dec-2015 Revision Number 2

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

MARKEM-IMAJE USA

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Suite 165

100 Chastain Center Blvd

-kennesaw, GA 30144 - USA

Product identifier

Product Name 7132 WHITE INK

Other means of identification

Product Code(s) 8048780

Synonyms No information available

Recommended use of the chemical and restrictions on use

Recommended Use Printing ink.

Uses advised against No information available

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)

Skin sensitization	Category 1
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1
Flammable liquids	Category 4

GHS Label elements, including precautionary statements

Emergency Overview

Danger

Hazard statements

May cause an allergic skin reaction

May cause genetic defects

May cause cancer

Causes damage to organs through prolonged or repeated exposure

Combustible liquid



Color White 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

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Specific treatment (see .? on this label)

Get medical advice/attention if you feel unwell

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

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

- 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 %
2-(2-Butoxyethoxy)ethyl acetate	124-17-4	5 - 10
Stoddard solvent	8052-41-3	1 - 5
Silica, amorphous	7631-86-9	1 - 5

Methyl ethyl ketoxime	96-29-7	< 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.

Skin ContactConsult 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. If symptoms persist, call a physician. Move to fresh air in case of accidental inhalation of vapors

or decomposition products.

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-aidersUse 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 Dry chemical. Alcohol-resistant foam. Water spray. Use:. Carbon dioxide (CO₂).

Unsuitable Extinguishing MediaDo 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. Keep product and empty container away from heat and sources of ignition. Risk of ignition.

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 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. Pay attention to flashback. Take precautionary

measures against static discharges.

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

Methods for Cleaning Up

Cover liquid spill with sand, earth or other noncombustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Dam up. Take precautionary measures against static discharges.

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. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from heat, sparks and open flame. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

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 away from heat and sources of ignition. Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Keep in properly labeled containers.

Incompatible Products

Strong oxidizing agents. Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium dioxide	TWA: 10 mg/m ³	TWA: 15 mg/m³ total dust	IDLH: 5000 mg/m ³
13463-67-7	-	(vacated) TWA: 10 mg/m³ total dust	-
Aluminum hydroxide	TWA: 1 mg/m³ respirable fraction(as		
21645-51-2	Aluminum insoluble compounds)		
Silica, amorphous	-	(vacated) TWA: 6 mg/m ³ <1%	IDLH: 3000 mg/m ³
7631-86-9		Crystalline silica	TWA: 6 mg/m ³
		TWA: 20 mppcf	
		: (80)/(% SiO2) mg/m³ TWA	
Stoddard solvent	TWA: 100 ppm	TWA: 500 ppm	IDLH: 20000 mg/m ³
8052-41-3		TWA: 2900 mg/m ³	Ceiling: 1800 mg/m ³ 15 min
		(vacated) TWA: 100 ppm	TWA: 350 mg/m ³
		(vacated) TWA: 525 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 Skin and Body Protection Respiratory Protection Tightly fitting safety goggles.

Long sleeved clothing. Chemical resistant apron. Antistatic boots. Impervious gloves.

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory

protection should be worn

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Hygiene Measures

Keep away from food and drink. When using, do not eat, drink or smoke. Wash contaminated clothing before re-use. It is good practice in industrial hygiene to avoid contact with solvents by using appropriate protective measures whenever possible. Provide regular cleaning of equipment, work area and clothing.









Glasses

Face Mask

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Characteristic. Color White. Odor

Physical State Liquid Hq

145°F / 63°C **Boiling Point/Range** 240°C / 464°F **Flash Point** Melting Point/Range **Autoignition Temperature** 201°C / 394°F Not determined Flammability Limits in Air **Explosion Limits** Not determined

Upper 24.6 24.6 Upper

Lower 0.8 Lower 0.8%

1.5044 Partly miscible. **Specific Gravity** Solubility **Evaporation Rate** Not determined Vapor Pressure Not determined **Vapor Density Liquid Density** Not determined 12.55481976 VOC Content(%) 5.7722 VOC (lb/gal) 6.2097986905

VOC (g/I) 744.09798948

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

Keep away from open flames, hot surfaces and sources of ignition. Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapours. Carbon dioxide (CO2). Carbon monoxide. Hydrocarbons. Cobalt.

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
Titanium dioxide	> 10000 mg/kg (Rat)	-	-
13463-67-7			
Aluminum hydroxide	> 5000 mg/kg (Rat)	-	-
21645-51-2			
Silica, amorphous	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	>2.2 mg/L (Rat)4 h
7631-86-9			
Stoddard solvent	500	-	-
8052-41-3			

Information on toxicological effects

Symptoms No information available

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

SensitizationNo information availableMutagenic EffectsNo 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
Titanium dioxide	-	Group 2B	-	X
13463-67-7				
Aluminum hydroxide	-	No information available	-	-
21645-51-2				
Silica, amorphous	-	Group 3	-	=
7631-86-9		•		
Stoddard solvent	-	No information available	-	-
8052-41-3				

ACGIH: (American Conference of Governmental Industrial Hygienists)

No information available

IARC: (International Agency for Research on Cancer)

No information available

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans OSHA: (Occupational Safety & Health Administration)

X - Present

Reproductive Toxicity
Specific target organ systemic toxicity (single exposure)
Specific target organ systemic

No information available No information available

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.

Target Organ Effects

Eyes, Skin, Blood, Liver, Kidney, Heart, Central nervous system (CNS), Gastrointestinal tract

(GI), Respiratory system , Pancreas, Lungs, 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) 9548 mg/kg ATEmix (dermal) 42615 mg/kg ATEmix (inhalation-gas) 99999 ATEmix (inhalation-dust/mist) 301123 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)
2-(2-Butoxyethoxy)ethyl	.?	50 - 70: 96 h Brachydanio		665: 48 h Daphnia magna
acetate		rerio mg/L LC50 static		mg/L LC50
124-17-4		77: 96 h Pimephales		_
		promelas mg/L LC50 static		
Stoddard solvent	.?	-		-
8052-41-3				
Silica, amorphous	440: 72 h Pseudokirchneriella	5000: 96 h Brachydanio rerio		7600: 48 h Ceriodaphnia
7631-86-9	subcapitata mg/L EC50	mg/L LC50 static		dubia mg/L EC50
Methyl ethyl ketoxime	83: 72 h Desmodesmus	320 - 1000: 96 h Leuciscus		750: 48 h Daphnia magna
96-29-7	subspicatus mg/L EC50	idus mg/L LC50 static		mg/L EC50
		777 - 914: 96 h Pimephales		
		promelas mg/L LC50 flow-		
		through		
		760: 96 h Poecilia reticulata		
		mg/L LC50 static		

Persistence and Degradability

No information available

Bioaccumulation

No information available

Chemical Name	Log Pow
2-(2-Butoxyethoxy)ethyl acetate	1.77
124-17-4	
Stoddard solvent	None known
8052-41-3	
Silica, amorphous	None known
7631-86-9	
Methyl ethyl ketoxime	0.65
96-29-7	

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

14. TRANSPORT INFORMATION

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 does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard

Chronic Health Hazard

Fire Hazard

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

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

The following chemicals in this product are known to the State of California to cause cancer or are reproductive hazards This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	California Prop. 65
2-Ethoxyethanol	110-80-5	Developmental
		Male Reproductive
Titanium dioxide	13463-67-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	Pennsylvania	Illinois	Rhode Island
2-(2-Butoxyethoxy)ethyl		X(as Glycol ethers)	X(as Glycol ethers)	
acetate				
Stoddard solvent	X	X		
Silica, amorphous	X	X		

Chemical Name	New Jersey
Titanium dioxide	X
Silica, amorphous	X
Stoddard solvent	X
Cobalt 2-Ethylhexanoate	X

International Regulations

Mexico - Grade Moderate risk, Grade 2

Chemical Name	Carcinogen Status	Exposure Limits
Stoddard solvent		Mexico: TWA 100 ppm
		Mexico: TWA 523 mg/m ³
		Mexico: STEL 200 ppm
		Mexico: STEL 1050 mg/m ³

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

NFPAHealth Hazard 2Flammability 2Reactivity -HMISHealth Hazard 2Flammability 2Reactivity 0

Personal Protection X

Prepared By Environmental and Safety Department

150 Congress St. PO Box 2100.

Keene, NH 03431 (603) 352-1130

Issuing Date 28-Dec-2015

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