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Version 1

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

Product identifier

Product name MS-1025 STREAKPROOF GLASS CLEANER

Recommended use of the chemical and restrictions on use

Product code F00137

Product Type Extremely Flammable Aerosol
Synonyms None

Supplier's details

Recommended Use Anti-Static CRT Cleaner.
Uses advised against No information available

Manufactured For:
Mark Supply, Inc.
P.O. Box 1451
Venice, FL 34285

Emergency telephone number
Chemical Emergency Phone Number INFOTRAC: 800-535-5053
Company Emergency Phone Number (941) 485-8199

2. HAZARDS IDENTIFICATION

Classification

Note: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.

Flammable aerosols	Category 1
Gases under pressure	Compressed Gas

GHS Label elements, including precautionary statements

Emergency Overview

DANGER

Highly flammable aerosol
Contains gas under pressure; may explode if heated



Appearance Clear

Physical state Aerosol

Odor Solvent

Precautionary Statements - Prevention

Keep away from heat/sparks/open flames/hot surfaces.-No smoking.
Do not spray on an open flame or other ignition source.
Pressurized container: Do not pierce or burn, even after use

Precautionary Statements - Storage

Protect from sunlight. Store in a well-ventilated place
Do not expose to temperatures exceeding 122°F (50°C)

Hazards not otherwise classified (HNOC)

None

Other information

0.000003% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %*
PROPANE/ISOBUTANE/N-BUTANE	68476-86-8	1-10
ISOPROPYL ALCOHOL	67-63-0	1-10
2-BUTOXYETHANOL	111-76-2	1-10
AMMONIA	1336-21-6	0.1-1

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice	Avoid contact with eyes, skin, and clothing. Avoid breathing vapors mist, or gas.
Eye contact	Rinse immediately with plenty of water for at least 15 minutes. If eye irritation persists, consult a specialist.
Skin contact	Wash off with plenty of water and soap. If skin irritation persists, call a physician.
Inhalation	Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.
Ingestion	Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.

Most important symptoms/effects, acute and delayed

Main Symptoms May cause skin and eye irritation. May cause respiratory irritation.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water fog. Dry chemical. Carbon dioxide (CO₂). Cool containers / tanks with water spray.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire. Cool containers / tanks with water spray.

Specific hazards arising from the chemical

Extremely Flammable/Flammable. Keep product and empty container away from heat and sources of ignition. No smoking. Cool containers/tanks with water spray. In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray.

Explosion Data

Sensitivity to Mechanical Impact no.

Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes, and clothing. Avoid breathing vapors or mists. Use with adequate ventilation. Keep container away from heat, flames, and all other sources of ignition. Keep can away from all sources of electricity such as electric motors and batteries. Do not spray on hot surfaces.

Environmental precautions

Environmental precautions Vapors can accumulate in low areas. Do not flush into surface water or sanitary sewer system. Report spills as required by local and federal regulations.

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

Prevent further leakage or spillage if safe to do so. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up

Soak up with inert absorbent material. Contain liquid and collect with an inert, non-combustible material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water. Prevent product from entering drains. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE

Precautions for safe handling**Advice on safe handling**

Avoid contact with skin, eyes and clothing. Use with adequate ventilation. Keep container away from heat, flames, and all other sources of ignition. Keep can away from all sources of electricity such as electric motors and batteries. Do not spray on hot surfaces.

Conditions for safe storage, including any incompatibilities**Technical measures/Storage conditions**

Keep away from heat and sources of ignition. Keep containers tightly closed in a cool, well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition.

Incompatible products

Strong acids, alkalis, or oxidizing agents.

Aerosol Level

1

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	74-98-6: TWA: 1000 ppm 106-97-8: STEL: 1000 ppm 75-28-5: STEL: 1000 ppm	74-98-6: TWA: 1000 ppm TWA: 1800 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m ³ 106-97-8: (vacated) TWA: 800 ppm (vacated) TWA: 1900 mg/m ³	74-98-6: IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m ³ 106-97-8: TWA: 800 ppm TWA: 1900 mg/m ³ 75-28-5: TWA: 800 ppm TWA: 1900 mg/m ³
ISOPROPYL ALCOHOL 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³
2-BUTOXYETHANOL 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m ³ (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m ³

ACGIH: (American Conference of Governmental Industrial Hygienists)

OSHA: (Occupational Safety & Health Administration)

NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls

Engineering Measures
Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and body protection Chemical resistant apron. Protective gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state	Aerosol	Odor	Solvent
Appearance	Clear	Odor Threshold	
Color			

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	No information available	
Melting/freezing point	No information available	
Boiling point/boiling range		
Flash Point	-91 °C / -132 °F	Based on propellant
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
upper flammability limit		
lower flammability limit		
Vapor pressure		
Vapor density		
Specific Gravity	0.675	
Water solubility	Practically insoluble	
Partition coefficient: n-octanol/water		
Autoignition temperature	No information available	Not applicable
Decomposition temperature		
Viscosity	No information available	
Explosive properties		

Other information

VOC Content(%) 11.45

10. STABILITY AND REACTIVITY

Reactivity

Stable under recommended storage conditions

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

Strong acids, alkalis, or oxidizing agents.

Hazardous Decomposition Products

Carbon oxides. Fumes. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Product Information	Product does present an acute toxicity hazard based on known information
Inhalation	Exposure to high vapor concentrations may cause nervous systems effects such as headache, dizziness, and nausea.
Eye contact	May cause eye irritation.
Skin contact	May be harmful in contact with skin.
Ingestion	May be harmful if swallowed.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
ISOPROPYL ALCOHOL 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat) 4 h
2-BUTOXYETHANOL 111-76-2	= 470 mg/kg (Rat)	= 99 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h
AMMONIA 1336-21-6	= 350 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms May cause skin and eye irritation. May cause respiratory irritation.

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

Skin corrosion/irritation	May cause irritation to skin.
Eye damage/irritation	May cause eye irritation.
Irritation	May cause skin, eye and respiratory irritation.
Sensitization	None known.
Germ Cell Mutagenicity	None known.
Carcinogenicity	The table below indicates whether each agency has evaluated a listed ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-BUTOXYETHANOL 111-76-2	-	Group 3	-	-

ACGIH: (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to Carcinogenicity in Humans

OSHA: (Occupational Safety & Health Administration)

X - Present

Reproductive toxicity	No information available.
Specific target organ systemic toxicity (single exposure)	No known effect based on information supplied.
Specific target organ systemic toxicity (repeated exposure)	No known effect based on information supplied.
Chronic toxicity	No information available.

Target Organ Effects Central Nervous System, Peripheral Nervous System, Eyes, Kidney, Liver, Lungs, Respiratory System, Skin, Blood, and Hematopoietic System through prolonged or repeated exposure.

Aspiration hazard No known effect based on information supplied.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0.000003% of the mixture consists of ingredient(s) of unknown toxicity

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

ATEmix (oral) 42353 mg/kg

ATEmix (dermal) 99124 mg/kg

ATEmix (inhalation-dust/mist) 135.2 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
ISOPROPYL ALCOHOL 67-63-0	1000 mg/L EC50 Desmodemus subspicatus 96h 1000 mg/L EC50 Desmodemus subspicatus 72h	9640 mg/L LC50 Pimephales promelas 96h flow-through 11130 mg/L LC50 Pimephales promelas 96h static 1400000 µg/L LC50 Lepomis macrochirus 96h	-	13299 mg/L EC50 Daphnia magna 48h
2-BUTOXYETHANOL 111-76-2	-	1490 mg/L LC50 Lepomis macrochirus 96h static 2950 mg/L LC50 Lepomis macrochirus 96h	-	1000 mg/L EC50 Daphnia magna 48h
AMMONIA 1336-21-6	-	8.2 mg/L LC50 Pimephales promelas 96h	-	0.66 mg/L EC50 water flea 48h 0.66 mg/L EC50 Daphnia pulex 48h

Persistence and degradability

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Bioaccumulation

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Chemical Name	log Pow
PROPANE/ISOBUTANE/N-BUTANE 68476-86-8	<=2.8
ISOPROPYL ALCOHOL 67-63-0	0.05
2-BUTOXYETHANOL 111-76-2	0.81

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Dispose of in accordance with federal, state, and local regulations.

Contaminated packaging Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Ground CONSUMER COMMODITY ORM-D
or
LIMITED QUANTITY

IATA UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD. QTY.

IMDG UN1950, AEROSOLS, 2.1,LTD.QTY.

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
PROPANE/ISOBUTANE/N-BUTANE	X	X	X	Not listed	X	X	X	X
ISOPROPYL ALCOHOL	X	X	X	X	X	X	X	X
2-BUTOXYETHANOL	X	X	X	X	X	X	X	X
AMMONIA	X	X	X	X	X	X	X	X

Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- CHINA** - China Inventory of Existing Chemical Substances
- KECL** - Korean Existing and Evaluated Chemical Substances
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- AICS** - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does contain 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 %
ISOPROPYL ALCOHOL - 67-63-0	67-63-0	1-10	1.0
2-BUTOXYETHANOL - 111-76-2	111-76-2	1-10	1.0
AMMONIA - 1336-21-6	1336-21-6	0.1-1	1.0

SARA 311/312 Hazard Categories

- Acute Health Hazard** Yes
- Chronic Health Star Hazard** no
- Fire Hazard** Yes
- Sudden Release of Pressure Hazard** Yes
- Reactive Hazard** Yes

Clean Water Act

This product does contain the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
AMMONIA 1336-21-6	1000 lb			X

CERCLA

This material, as supplied, does contain substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
AMMONIA 1336-21-6	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
ETHYLENE GLYCOL - 107-21-1	Developmental

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
ISOPROPYL ALCOHOL 67-63-0	X	X	X
2-BUTOXYETHANOL 111-76-2	X	X	X
AMMONIA 1336-21-6	X	X	X

EPA Pesticide Registration Number Not applicable

Canada

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

16. OTHER INFORMATION

NFPA	Health Hazard 2	Flammability 4	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 2*	Flammability 4	Physical Hazard 1	Personal protection B
<i>Chronic Hazard Star Legend</i>		<i>Chronic Health Star Hazard Repeated or prolonged exposure may cause damage</i>		<i>central nervous system</i>

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Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet