Safety Data Sheet

Revision Date: 28-Jul-2015

Michigan State Industries

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name:

GLASS CLEANER Concentrate

Recommended Use:

Glass cleaner

Uses Advised Against:

For Industrial and Institutional Use Only

Manufacturer/Supplier:

Michigan State Industries 1780 E. Parnall Rd. Jackson, MI 49201 517-780-6726

24 Hour Emergency Phone Numbers:

Transportation/Spill/Leak:

CHEMTEL 800-255-3924

2. HAZARDS IDENTIFICATION

GHS Classification

Not Classified

Not dangerous according to the Globally Harmonized System (GHS)

GHS Label Elements

Signal Word:

No signal word

Symbols:

Hazard Statements:

Precautionary Statements:

No hazard statements

Prevention:

Response:

Not Applicable

-Specific Treatment:

See Safety Data Sheet Section 4: "FIRST AID MEASURES" for additional information.

Storage:

Disposal:

Not Applicable Not Applicable

Hazards Not Otherwise Classified:

Not Applicable

Other Information:

· May be harmful if swallowed.

May cause eye irritation.

· May cause skin irritation.

Inhalation of vapors or mist may cause respiratory irritation.

Keep out of reach of children.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
water	7732-18-5	60-100
isopropanol	67-63-0	5-10

Specific chemical identity and/or exact percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

-Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

> easy to do. Continue rinsing. If eye irritation persists: Get medical attention. Wash with soap and water. If skin irritation occurs: Get medical attention.

-Skin Contact: -Inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a

poison control center or physician if you feel unwell.

-Ingestion: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious

person. Get medical attention if you feel unwell.

Note to Physicians: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Product does not support combustion. Use extinguishing agent suitable for type of

surrounding fire

Specific Hazards Arising from the

Chemical:

Dried product is capable of burning. Combustion products are toxic.

Hazardous Combustion Products:

May include Carbon monoxide Carbon dioxide and other toxic gases or vapors.

Protective Equipment and Precautions for Firefighters: Wear MSHA/NIOSH approved self-contained breathing apparatus (SCBA) and full

protective gear. Cool fire-exposed containers with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Environmental Precautions: Methods for Clean-Up:

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Do not rinse spill onto the ground, into storm sewers or bodies of water.

Prevent further leakage or spillage if safe to do so. Contain and collect spillage with

non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

7. HANDLING AND STORAGE

Advice on Safe Handling:

Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly

after handling.

Storage Conditions:

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children. Keep from freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH
isopropanol	STEL: 400 ppm	TWA: 400 ppm	IDLH: 2000 ppm
67-63-0	TWA: 200 ppm	TWA: 980 mg/m ³	TWA: 400 ppm
		(vacated) TWA: 400 ppm	TWA: 980 mg/m ³
	<u> </u>	(vacated) TWA: 980 mg/m³	STEL: 500 ppm
		(vacated) STEL: 500 ppm	STEL: 1225 mg/m ³
		(vacated) STEL: 1225 mg/m ³	

Engineering Controls:

Provide good general ventilation.

If work practices generate dust, fumes, gas, vapors or mists which expose workers to chemicals above the occupational exposure limits, local exhaust ventilation or other

engineering controls should be considered.

Personal Protective Equipment

Eye/Face Protection:

Skin and Body Protection:

Not required with expected use. Not required with expected use.

Respiratory Protection:

Not required with expected use.

If occupational exposure limits are exceeded or respiratory irritation occurs, use of a NIOSH/MSHA approved respirator suitable for the use-conditions and chemicals in Section

3 should be considered.

General Hygiene Considerations:

Wash hands and any exposed skin thoroughly after handling.

See 29 CFR 1910.132-138 for further guidance.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State:	Liquid
Color:	Clear Blue
Odor:	Alcohol scent
pH:	9.0-10.0
Melting Point / Freezing Point:	No information available.
Boiling Point / Boiling Range:	100 °C / 212 °F
Flash Point:	> 100 °C / > 212 °F ASTM D56
Evaporation Rate:	< 1 (Butyl acetate = 1)
Flammability (solid, gas)	No information available.
Upper Flammability Limit:	No information available.
Lower Flammability Limit:	No information available.
Vapor Pressure:	No information available.
Vapor Density:	No information available.
Specific Gravity:	0.991
Solubility(ies):	Soluble in water
Partition Coefficient:	No information available.
Autoignition Temperature:	No information available.
Decomposition Temperature:	No information available.
Viscosity:	No information available.

10. STABILITY AND REACTIVITY

Reactivity:

This material is considered to be non-reactive under normal conditions of use.

Chemical Stability:

Stable under normal conditions.

Possibility of Hazardous Reactions: Not expected to occur with normal handling and storage.

Conditions to Avoid:

Extremes of temperature and direct sunlight.

Incompatible Materials:

Strong oxidizing agents. Strong acids.

Hazardous Decomposition

May include carbon monoxide, carbon dioxide (CO2) and other toxic gases or vapors.

Products:

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:

Symptoms of Exposure:

Eyes, Skin, Ingestion, Inhalation.

-Eye Contact:

Pain and redness.

-Skin Contact:

Drying of the skin.

-Inhalation:

Nasal discomfort and coughing. Pain, nausea, vomiting and diarrhea.

-Ingestion:

Immediate, Delayed, Chronic Effects

Product Information:

Data not available or insufficient for classification.

Target Organ Effects:

-Eyes. Respiratory System. -Skin.

Numerical Measures of Toxicity

The following acute toxicity estimates (ATE) are calculated based on the GHS document.

ATEmix (inhalation-dust/mist):

3646.6 mg/l

mnopent Acute Toxicity Information

	Component Acute Toxicity Information					
-	Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50		

water 7732-18-5	> 90 mL/kg(Rat)	Not Available	Not Available
isopropanol 67-63-0	= 4396 mg/kg (Rat)	= 12800 mg/kg (Rat) = 12870 mg/kg (Rabbit)	= 72.6 mg/L (Rat)4 h

Carcinogenicity: No components present at 0.1% or greater are listed as to being carcinogens by ACGIH, IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/Aquatic Plants	Fish	Toxicity to Microorganisms	Crustacea
isopropanol 67-63-0	1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50	9640: 96 h Pimephales promelas mg/L LC50 flow-through 11130: 96 h Pimephales promelas mg/L LC50 static 1400000: 96 h Lepomis macrochirus µg/L LC50	Not Available	13299: 48 h Daphnia magna mg/L EC50

Persistence and Degradability:

Bioaccumulation:

No information available.

No information available.

Other Adverse Effects:

No information available.

13. DISPOSAL CONSIDERATIONS

Disposal of Wastes:

Contaminated Packaging:

Dispose of in accordance with federal, state and local regulations.

Dispose of in accordance with federal, state and local regulations.

14 TRANSPORTINFORMATION

Proper Shipping Name:

Not Regulated

Non Hazardous Product Special Provisions:

Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Check with a trained hazardous materials transportation

expert for information specific to your situation.

Not Regulated

Proper Shipping Name:

Non Hazardous Product

15. REGULATORY INFORMATION

TSCA Status: (Toxic Substance Control Act Section 8(b) Inventory)

All chemical substances in this product are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

SARA 313

This product contains the following listed substances:

isopropanol

CAS No 67-63-0 only if manufactured by the strong acid process, no supplier notification

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

California Proposition 65

This product is not subject to warning requirements under California Proposition 65.

16. OTHER INFORMATION

NFPA

Health Hazards: 1

Flammability: 0

Instability: 0

Special: N/A

HMIS

Health Hazards: 1

Flammability: 0

Physical Hazards: 0

Revision Date:

28-Jul-2015

Reasons for Revision:

Section 14 and 15

Disclaimer:

The information provided in this Material Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet

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