

Safety Data Sheet

Issued Date: November 4, 2015

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Version 1

1. IDENTIFICATION

Product Identifier

Product Name F-109A Window & Mirror Cleaner

Other means of identification

Product Code F-109A

Recommended use of the chemical and restrictions on use

Recommended Use Cleaning windows, glass, and non-metal hard surfaces.

Details of the supplier of the safety data sheet

Missouri Vocational Enterprises
 2727 Highway K
 Bonne Terre, MO 63628
 Phone: (573) 358-5516

Emergency Telephone Number

INFOTRAC 1-800-535-5053 (North America)
 1-352-323-3500 (International)

2. HAZARDOUS IDENTIFICATION

Signal Word DANGER

Classification	Hazard Category
Flammable Liquids	2
Serious Eye Damage/Irritation	1
Skin - Corrosion/Irritation	1
Acute Toxicity – Oral	4
Specific Target Organ Toxicity - Single Exposure	3
Hazardous to the Aquatic Environment, Acute Hazard	1

Health Hazard Statement(s)

H225 – Highly flammable liquid and vapor.
 H227 – Combustible liquid.
 H302 – Harmful if swallowed.
 H314 – Causes severe skin burns and eye damage.

H335 – May cause respiratory irritation.
 H336 – May cause drowsiness or dizziness.
 H411 – Toxic to aquatic life with long-lasting effects.

Hazard Pictogram(s)



Hazard Ratings

	HMIS	NFPA
Health	3	3
Flammability	3	3
Reactivity	0	0
PPE	B	N/A

Precautionary Statement(s)

P210 – Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
 P233 – Keep container tightly closed.
 P240 – Ground/bond container and receiving equipment.
 P241 – Use explosion-proof electrical/ventilating/lighting equipment.

P242 – Use only non-sparking tools.

P243 – Take precautionary measures against static discharge.

P260 – Do not breathe dust/fume/gas/mist/vapors/spray.

P264 – Wash face, hands and any exposed skin thoroughly after handling.

P270 – Do not eat, drink, or smoke when using this product.

P271 – Use only outdoors or in a well-ventilated area.

P273 – Avoid release to the environment.

P280 – Wear protective gloves/protective clothing/ eye protection/face protection.

P301+P330+P331 – IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.

P303+P361+P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340+P310 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

P305+P351+P338+P310 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

P312 – Call a POISON CENTER or doctor/physician if you feel unwell.

P363 – Wash contaminated clothing before reuse.

P403+P235 – Store in a well-ventilated place. Keep cool.

P405 – Store locked up.

P501 – Dispose of contents/container to an approved waste disposal plant.

Potential Health Effects

Skin Contact May cause skin corrosion/irritation/burns.

Eye Contact May cause eye damage.

Inhalation May cause respiratory irritation.

Ingestion May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENT

Chemical Name/Pure Substance	CAS #	Weight-%
Water	7732-18-5	75-80
Isopropanol	67-63-0	10-15
Eastman DE Solvent	111-90-0	2-5
Aqua Ammonia	1336-21-6	0-2
Trilon B Liquid BASF MTL	64-02-8	0-2
Sodium Xylene Sulfonate	1300-72-7	0-2
Plurafac S 405 LF	68987-81-5	0-1

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

General Advice If you feel unwell, seek medical advice (show label where possible).

Eye Contact Immediately flush eyes with water, remove contact lenses, if present, after the first 5 minutes, and then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay. Suitable emergency eye wash facility should be immediately available.

Skin Contact Wash off immediately with plenty of water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Call a POISON CENTER or doctor/physician if you feel unwell.

Ingestion Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms and effects**Symptoms**

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing. Headache, dizziness, fatigue, drowsiness, and lack of coordination.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Alcohol resistant foam, water fog, dry chemical powder, or carbon dioxide.

Unsuitable Extinguishing Media: Water jet.

Specific Hazards Arising from the Chemical

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

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**

Isolate area. Keep unnecessary personnel from entering the area. Keep upwind of spill. Ventilate area of spill. No smoking in area. Eliminate all sources of ignition in vicinity of spill or released vapor to avoid fire or explosion. Vapor explosion hazard. Check with combustible gas detector before reentering area. Use appropriate safety equipment.

Environmental precautions

Prevent from entering into soil, ditches, sewers, waterways, and/or groundwater.

Methods and material for containment and clean up**Methods for Containment**

Prevent further leakage or spillage if safe to do so.

Methods for Clean up

Contain spilled material if possible. Ground and bond all containers and handling equipment. Pump with explosion proof equipment. If available, use foam to smother or suppress. Collect in suitable and properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Keep away from heat, sparks, and flames. Avoid contact with eyes. Avoid breathing vapor. Wash thoroughly after handling. Keep container closed. Use only with adequate ventilation. No smoking, open flames, or sources of ignition in handling and storage areas. Electrically bond and ground all containers and equipment before transfer or use of material. Use of non-sparking or explosion-proof equipment may be necessary, depending upon the type of operation. Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas. Ignition and/or flash back may occur. Never use air pressure for transferring product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Minimize sources of ignition, such as static build-up, heat, spark, or flame. Keep container closed. Flammable mixtures may exist within the vapor space of containers at room temperature. Store in a well-ventilated place.

Incompatible Materials Strong acids, strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropanol (67-63-0)	200 ppm TWA 400 ppm STEL	400 ppm TWA	-
Aqua Ammonia (1336-21-6)	35 ppm STEL 25 ppm TWA	50 ppm PEL	35 ppm STEL 25 ppm TWA
Sodium Hydroxide (1310-73-2)	2 mg/m ³ Ceiling	2 mg/m ³ PEL	2 mg/m ³ Ceiling

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits. Explosion-proof general and local exhaust ventilation. Ventilation rates should be matched to conditions.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear approved safety glasses with side shields (or goggles) and a face shield.

Skin and Body Protection Wear appropriate clothing and gloves to prevent repeated or prolonged skin contact.

Respiratory Protection If engineering controls do not maintain airborne concentrations below recommended exposure limits or to an acceptable level, an approved respirator must be worn.

General Hygiene Considerations Do not eat, drink, or smoke when using this product. Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State	Liquid	Odor	Ammonia
Color	Blue	Odor Threshold	Not Determined

<u>Property</u>	<u>Values</u>	<u>Remarks - Method</u>
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pH	11-12
Melting Point/Freezing Point	Not determined
Boiling Point/Boiling Range	Not determined
Flash Point	Not determined
Evaporation Rate	Not determined
Flammability (Solid, Gas)	Flammable
Upper Flammability Limits	Not determined
Lower Flammability Limits	Not determined
Vapor Pressure	Not determined
Vapor Density	Not determined
Specific Gravity	0.98
Water Solubility	Complete
Solubility in other solvents	Not determined
Partition Coefficient	Not determined
Auto-ignition Temperature	Not determined
Decomposition Temperature	Not determined
Viscosity	Not determined

Explosive Properties
Oxidizing Properties

Not determined
Not determined

10. STABILITY AND REACTIVITY

Reactivity	None known.
Chemical Stability	Stable under recommended storage conditions.
Conditions to Avoid	Avoid heat, sparks, open flames, and other ignition sources. Avoid temperatures exceeding the flash point.
Incompatible materials	Strong acids. Strong oxidizers. Halogens. Aldehydes.
Hazardous Decomposition Products	Carbon oxides. Nitrogen oxides. Sulfur oxides.
Hazardous Polymerization	Will not occur.

11. TOXICOLOGICAL INFORMATION

Mixture Toxicity

Toxicological data have not been determined specifically for this product.

12. ECOLOGICAL INFORMATION

Ectotoxicity

Ecological studies have not been carried out on this product.

13. DISPOSAL CONSIDERATIONS

Disposal Instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways, or ditches with chemical or used container.
Hazardous Waste Code	Not available.
Waste from residues / unused products	Dispose of in accordance with local, regional, national, and international laws and regulations.
Contaminated Packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

<u>Note</u>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
DOT I.D. Number	Not available.
DOT Proper Shipping Name	Combustible Liquid
DOT Hazard Classes:	
US DOT	3
Road (ADR)	3
Air (ICAO/IMDG)	3
Sea (IMO/IMDG)	3
Packing Group	II
DOT Label	8,3

15. REGULATORY INFORMATION**U.S. Federal Regulations**

Contents of this SDS comply with OSHA Hazard Communication Standard CFR 1910.1200.

OSHA Hazard Communication Standard (29 CFR 1910.1200)

(X) Hazardous () Non- Hazardous

SARA TITLE III

Section 302/304

Section 311/312

Section 313

Extremely Hazardous Substances: None.

(40CFR370) Hazardous Categories: Fire, Acute, Chronic

Contains the following SARA 313 Toxic Release Chemicals: Isopropanol (67-63-0), Ammonium Hydroxide (1336-21-6)

CERCLA

CERCLA Regulatory

Sodium Hydroxide (1310-73-2) and Ammonium Hydroxide (1336-21-6)

State Regulations

California Prop 65

This product may contain the following ingredient(s) known to the state of California to cause cancer, birth defects or other reproductive harm: None known based on information supplied.

16. OTHER INFORMATION**Disclaimer**

The information provided in this 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 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.

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Prepared By: Ryan AuBuchon, Chemist I