



SAFETY DATA SHEET MIRROR X

SECTION 1: IDENTIFICATION

Product Name:	Mirror X
Product Code:	M70
Product Use:	Polished metal cleaner
Manufacturer's Name:	E-ZOIL Products, Inc.
Address:	234 Fillmore Avenue
Address:	Tonawanda, NY 14150 USA
Business Phone:	855-693-9645
Emergency Phone:	800-633-8253 PERS
Date of Preparation:	October 1, 2015
Date of Last Revision:	October 1, 2015
Regulatory Standard:	CFR29 1910.1200 HazCom 2012

SECTION 2: HAZARDS IDENTIFICATION

GHS-US classification
Flammable Liquid 2
Acute toxicity 4 (Oral)
Acute toxicity 1, sub-category B (Dermal)
Acute toxicity 2 (Inhalation)
Eye Irritation 1
Carcinogenicity – No data available
Reproductive toxicity – No data available
Specific target organ toxicity – No data available
Specific target organ toxicity – No data available
Specific target organ toxicity – No data available

Hazard pictograms (GHS-US):



Signal word (GHS-US): Danger

Hazard statements (GHS-US): Harmful if swallowed. Fatal if inhaled. Causes severe skin burns and eye damage.

Precautionary statements – Prevention (GHS-US): Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wear respiratory protection. Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements – Response (GHS-US): Absorb spillage to prevent material damage. See specific measures in Section 4 First Aid. Immediately call a POISON CENTER or doctor/physician. See specific treatment in section 4 First Aid.

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.

If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

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.

If swallowed: Call a Poison Center or doctor/physician if you feel unwell. Rinse mouth. Do not induce vomiting.

Precautionary statements – Storage (GHS-US): Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Precautionary statements – Disposal (GHS-US): Dispose of contents/container to an approved waste disposal plant.

Other information – May be harmful in contact with skin. Toxic to aquatic life with long lasting effects.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS Number	%
Phosphoric acid	7664-38-2	30-40
Glycolic Acid	79-14-1	7-14
2-Butoxyethanol	111-76-2	3-9
Surfactant	Trade Secret	2-6
Benzenesulfonic Acid	68584-22-5	2-6

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

SECTION 4: FIRST AID MEASURES

General advice: Remove contaminated clothing and shoes. Do not breathe dust/fume/gas/mist/vapors/spray. Do not delay care and transport of a seriously injured person. For further assistance, contact your local Poison Control Center.

First-aid measures after inhalation: Administer oxygen if breathing is difficult. Do not use mouth-to-mouth method if victim inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Give artificial respiration if victim is not breathing. Move victim to fresh air.

First-aid measures after skin contact: For minor skin contact, avoid spreading material on unaffected skin. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing.

First-aid measures after eye contact: In case of contact with substance, immediately flush eyes with running water for at least 15 minutes. Seek immediate medical attention, preferably with an ophthalmologist. If the physician is not immediately available, eye irrigation should be continued for an additional 15 minutes. If it is necessary to transport the patient to a physician and the eye needs to be bandaged, use a dry sterile cloth pad and cover both eyes.

First-aid measures after ingestion: If swallowed give 2-3 glasses of water if victim is conscious and alert. Do not give anything by mouth to an unconscious person. Do NOT induce vomiting. Obtain medical attention immediately if ingested. Do not use mouth-to-mouth method if victim ingested the substance. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Persons attending the victim should avoid direct contact with heavily contaminated clothing and vomitus. Wear impervious gloves while decontaminating skin and hair.

Most important symptoms and effects, both acute and delayed: Reference Sources for Section 11.

Indication of any immediate medical attention and special treatment needed: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

SECTION 5: FIRE FIGHTING MEASURES

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritating and toxic gases and vapors. May form peroxides of unknown stability. During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide, Sodium Oxide.

Hazardous combustion products: Carbon dioxide (CO₂). Carbon oxides. Phosphorus oxides.

Explosion data: None

Sensitivity to mechanical impact: None

Sensitivity to static discharge: None

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.

SECTION 6: ACCIDENTAL RELEASE MEASURES

General measures: Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. Do not touch damaged packages or spilled material. Do not touch or walk through spilled material.

For containment: Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained. Prevent entry into waterways, sewers, basements or confined areas. Exercise caution during neutralization as considerable heat may be generated. Neutralize spill area with soda ash, sodium bicarbonate or lime. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Large Spillages: Flush spill area with water spray. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal. Flush neutralized spill with copious amounts of water. Avoid generating dust.

Methods for cleaning up: Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling: Do not get on skin or in eyes. Avoid breathing vapors and mists. Do not ingest. Handle and open container with care. Use only with adequate ventilation. Use caution when combining with water; DO NOT add water to corrosive liquid, ALWAYS add corrosive liquid to water while stirring to prevent release of heat, steam and fumes. This product reacts violently with bases liberating heat and causing spattering.

Storage conditions: Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep out of the reach of children. Store locked up. Store in accordance with the particular national regulations.

Incompatible materials: Strong oxidizing agents. Strong reducing agents. Bases. Certain metals.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Phosphoric acid 7664-38-2	STEL: 3 mg/m ³ TWA: 1 mg/m ³	TWA: 1 mg/m ³ (vacated) TWA: 1 mg/m ³ (vacated)	IDLH: 1000 mg/m ³ TWA: 1 mg/m ³ STEL: 3 mg/m ³
2-Butoxyethanol	TWA: 20 ppm	TWA: 50 ppm	IDLH: 700 ppm

111-76-2		TWA: 240 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m ³ (vacated) S* S*	TWA: 5 ppm TWA: 24 mg/m ³
----------	--	---	---

Appropriate engineering controls: Showers, eyewash stations, ventilation systems.

Eye protection: Chemical resistant goggles must be worn. If splashing is likely, wear tight fitting goggles and face shield. Tight sealing safety goggles.

Skin protection: Wear chemical resistant clothing such as gloves, apron, boots or whole bodysuits made from neoprene, as appropriate.

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.

General Hygiene considerations: Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid

Appearance: Translucent

Color: Green

Odor: Mild, butyl odor

Odor threshold: No data available

pH: <2

Melting point/freezing point: No data available

Boiling point/boiling range: No data available

Flash point: No data available

Evaporation rate: No data available

Flammability (solid, gas): No data available

Flammability Limit in Air: No data available

Upper flammability limit: No data available

Lower flammability limit: No data available

Vapor pressure: No data available

Vapor density: No data available

Relative density: 1.25

Water solubility: No data available

Solubility in other solvents: No data available

Partition coefficient: No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity: No data available

Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No dangerous reactions known under conditions of normal use.

Chemical Stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: Hazardous polymerization does not occur.

Conditions to avoid: Extremes of temperature and direct sunlight. Incompatible materials.

Incompatible materials: Strong oxidizing agents. Strong reducing agents. Bases. Certain metals.

Hazardous decomposition products: Carbon monoxide. Carbon dioxide (CO₂). Oxides of Phosphorus.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity: Toxic if swallowed, in contact with skin or if inhaled.

Name	Oral	Dermal LD50	Inhalation LC50
Phosphoric acid 7664-38-2	= 1530 mg/kg (rat)	= 2730 mg/kg (rabbit)	>850 mg/m ³ (rat) 1 h
Glycolic acid 79-14-1	= 1950 mg/kg (rat)	-	= 7100 µg/m ³ (rat) 4 h
2-Butoxyethanol 111-76-2	= 470 mg/kg (rat)	= 220 mg/kg (rabbit)	= 450 ppm (rat) 4 h
Benzenesulfonic acid 68584-22-5	= 530 mg/kg (rat)	= 530 mg/kg (rat)	-

Product information: This product is an acid. The primary effects and toxicity of this material are due to its corrosive nature.

Inhalation: Harmful by inhalation.

Eye contact: Risk of serious damage to eyes. Avoid contact with eyes.

Skin contact: Harmful in contact with skin. Contact causes severe skin irritation and possible burns.

Ingestion: Ingestion causes burns of the upper digestive and respiratory tracts. Harmful if swallowed.

Symptoms: Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes.

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

Sensitization: No information available.

Germ cell mutagenicity: No information available.

Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen.

Name	ACGIH	IARC	NTP	OSHA
2-Butoxyethanol 111-76-2	A3	Group 3	-	-

Reproductive toxicity: Classification criteria not met.

STOT - single exposure: No data available.

STOT - repeated exposure: No data available.

Aspiration hazard: No data available.

Numerical measures of toxicity – Product Information

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

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

ATEmix (oral): 1,195.00

ATEmix (dermal): 2,409.00

ATEmix (inhalation-dust/mist): 0.31

ATEmix (inhalation-vapor): 4,050.00

SECTION 12: ECOLOGICAL INFORMATION

Toxicity:

Name	Algae/aquatic plants	Fish	Crustacea
Phosphoric acid 7664-38-2	-	3 - 3.5: 96 h <i>Gambusia affinis</i> mg/L LC50	4.6: 12 h <i>Daphnia magna</i> mg/L EC50
Glycolic Acid 79-14-1	-	5000: 96 h <i>Brachydanio rerio</i> mg/L LC50 static	-
2-Butoxyethanol 111-76-2	-	1490: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 2950: 96 h <i>Lepomis macrochirus</i> mg/L LC50	1698 - 1940: 24 h <i>Daphnia magna</i> mg/L EC50 1000: 48 h <i>Daphnia magna</i> mg/L EC50
Benzenesulfonic Acid 68584-22-5	-	3: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static	2.9: 48 h <i>Daphnia magna</i> mg/L EC50

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Name	Partition coefficient
Glycolic Acid 79-14-1	-1.11
2-Butoxyethanol 111-76-2	0.81
Benzenesulfonic Acid 68584-22-5	2

Mobility in soil: No data available.

Other adverse effects: No known ecological damage caused by this product.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste disposal recommendations: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

Contaminated packaging: Do not reuse container.

Name	California Hazardous Waste Status
Phosphoric acid 7664-38-2	Corrosive

SECTION 14: TRANSPORT INFORMATION

UN number: UN3265

Proper shipping name: Corrosive Liquid, Acidic, Organic, n.o.s., (Phosphoric Acid and Glycolic Acid)

Transport hazard class(es): 8

Hazard labels:



Packing group: III

Other information: No supplementary information available.

Special transport precautions: Do not handle until all safety precautions have been read and understood.

SECTION 15: REGULATORY INFORMATION

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: 2-Butoxyethanol - Yes Phosphoric Acid - Yes

Chronic Health Hazard: 2-Butoxyethanol - Yes

Fire hazard: 2-Butoxyethanol - Yes

Sudden release of pressure hazard: No

Reactive Hazard: No

CWA (Clean Water Act): This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phosphoric acid 7664-38-2	5000 lb	-	-	X

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). There may be specific reporting requirements at the local, regional, or state.

Name	Hazardous substances RQs	CERCLA/SARA RQ	Reportable quantity
Phosphoric acid 7664-38-2	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

State regulations:

California Proposition 65: This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

U.S. EPA Label Information: EPA Pesticide Registration Number not applicable.

SECTION 16: OTHER INFORMATION

NFPA Health hazards 2 Flammability 1 Instability 0

HMIS Health hazards 2 Flammability 1 Instability 0

Other information: None.

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.