

Cleaning solutions and instructions for aluminum finishes

Mill Finish Aluminum

Mild Cleaning (Dirt & Grime)

Mild Soap & Water: Mix a little dish soap (like Dawn) with warm water and wipe with a soft cloth or sponge. Rinse and dry thoroughly.

Microfiber Towels: Excellent for gentle wiping and polishing.

For Oxidation & Stains

Vinegar & Water: Use a cloth or simmer in a pan (for cookware) to tackle tarnish and water spots.

Baking Soda Paste: Mix with water for stubborn spots; scrub gently with a moist cloth, then rinse.

A dampened ***Magic Eraser*** works great for getting out scraps and scuffs.

Medium to tough stains:

WINSOL® **Specialty Metals Cleaner** and brings back the shine of mill finished aluminum. Follow instructions on the label for using each product and safety information



When professionals are needed:

For Heavy Oxidation/Brightening (Specialty)

Aluma Brite: Specialty products designed to brighten the finish

Dilute: Mix with water according to instructions (e.g., pump sprayer or pressure washer).

Apply: Spray from the bottom up on a dry surface to prevent streaking.

Rinse: Pressure wash thoroughly from the top down.

Key Considerations:

Safety First: Contains acid (often sulfuric), so wear gloves, eye protection, and avoid skin/eye contact.

Not for All Surfaces: Do not use on glass, painted surfaces, or anodized aluminum; always test in an inconspicuous area.

Important Tips

Test First: Always test products in an inconspicuous area.

Avoid Abrasives: Never use heavy-duty scouring pads or harsh alkaline cleaners on mill finish, as they scratch easily.

Safety: Wear gloves, safety goggles, and/or a respirator when using strong chemicals.



Anodized Aluminum

To clean anodized aluminum, use a pH-neutral soap and warm water with a soft cloth or sponge for general dirt, rinsing well and drying; for tougher spots, a **mild abrasive pad** (like a [Scotch-Brite](#)) can work, but **avoid harsh acids, alkalis, or steel wool**, which can strip the protective layer

Stubborn Issues & Restoration

Either **Simple Green® Extreme** or **WINSOL® Specialty Metals Cleaner** work great for tough jobs. Follow instructions on the label for using each product and safety information



What to AVOID

Harsh Acids & Alkalis: Can chemically strip the finish.

Chlorine: Can cause damage. Steel Wool/Harsh Scrubbers: Too abrasive for the coating

Polycarbonate (Lexan®) windows

To clean polycarbonate, wash it with lukewarm water and mild dish soap, using a soft cloth or sponge and follow the instructions below.

Step 1: Wet the surface

- wet the polycarbonate with lukewarm water to remove loose dirt and debris.
- This prevents scratches by washing away grit before you start scrubbing.

Step 2: Wash with a mild solution

- Mix a few drops of mild dish soap into a bucket of lukewarm water.
- Dip a soft cloth or sponge into the solution and gently wash the surface.
- If there are stubborn spots, apply more soap and water and let it sit, but do not scrub.

Step 3: Rinse and dry

- Rinse the polycarbonate thoroughly with clean water to remove all soap residue.
- Dry the surface with a soft, lint-free cloth to prevent water spots.
- **Do not:** let the item air dry in direct sunlight or intense heat.

What to Avoid (DO NOT USE):

Harsh Chemicals: Ammonia (Windex), acetone, thinners, benzene, or highly alkaline cleaners.

Abrasives: Scouring pads, razor blades, scrapers, or abrasive cleaners.

Conditions: Cleaning in direct hot sun, which can cause staining.





Special Metals Cleaner Concentrate

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Special Metals Cleaner Concentrate
SDS Number: 6316, 10316
Revision Date: 07/17/2024
Product Use: For removal of fingerprints and greasy marks from Stainless Steel, Titanium, and Aluminum.
Supplier Details: Winsol Inc
 712 S Portland St
 Seattle, WA 98108
Emergency: INFOTRAC 1-800-535-5053 (North America); 1-352-323-3500 (International)
Phone: 206-782-5500
Web: www.winsol.com

2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

- Health, Serious Eye Damage/Eye Irritation, 2 B
- Health, Acute toxicity, 5 Dermal

GHS Label elements, including precautionary statements

GHS Signal Word: **WARNING**

GHS Hazard Pictograms:

no GHS pictograms indicated for this product

GHS Hazard Statements:

- H320 - Causes eye irritation
- H313 - May be harmful in contact with skin

GHS Precautionary Statements:

- P102 - Keep out of reach of children.
- P103 - Read label before use.
- P281 - Use personal protective equipment as required.
- P301 - IF SWALLOWED: May cause gastrointestinal irritation.
- P302 - IF ON SKIN: Prolonged or repeated and confined exposure may cause skin irritation. Wash contaminated clothing and footwear before reuse.
- P304 - IF INHALED: Not considered dangerous.
- P305 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If irritation persists consult medical personnel.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas#	%	Chemical Name
0	1-5%	Ammonium Methyl Sulfate
0	1-5%	Fatty Alcohol Ethoxylate
34590-94-8	1-5%	Propanol, 1(or 2)-(2-methoxymethylethoxy)-
0	1-5%	Sodium Citrate

"0" equals no Cas# available/trade secret

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

Composition Comments: Components and trace elements not listed are either non-hazardous or are below reportable limits.



Special Metals Cleaner Concentrate

4 FIRST AID MEASURES

Inhalation:	Not considered dangerous.
Skin Contact:	Prolonged or repeated and confined exposure may cause skin irritation. Wash contaminated clothing and footwear before reuse.
Eye Contact:	Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If irritation persists consult medical personnel.
Ingestion:	Swallowing may cause gastrointestinal irritation. If irritation persists consult medical personnel.

5 FIRE FIGHTING MEASURES

Flammability:	Not flammable
Flash Point:	N/A
LEL:	N/A
UEL:	N/A

EXTINGUISHING MEDIA: Water

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

SPECIAL FIRE FIGHTING PROCEDURES: Self-contained breathing apparatus with a full face piece operated in a pressure demand or other positive pressure mode.

6 ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb liquid on paper, vermiculite, floor absorbent or other absorbent material and transfer to labeled containers.

LARGE SPILL: Stop spill at source, dike area of spill to prevent spreading, pump liquid into salvage tank. Remaining liquid may be taken up on sand, clay, floor absorbent or other absorbent material and shoveled into labeled containers.

WASTE DISPOSAL METHOD: Review Federal, Provincial and Local Government requirements prior to disposal.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Exercise care and caution. Store in cool dry place.

OTHER PRECAUTIONS: Containers of this material may be hazardous when emptied, since emptied containers retain product residues (vapor, liquid and/or solids), all hazard precautions given in the data sheet must be observed.

7 HANDLING AND STORAGE

Handling Precautions:	Keep material out of reach of children.
Storage Requirements:	Store in cool/dry area.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:	None
Personal Protective Equipment:	<p>RESPIRATORY PROTECTION: If TLV of the product or component is exceeded, a NIOSH/MSHA jointly approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators under specified condition.</p> <p>Ventilation: Provide general or mechanical ventilation or local exhaust.</p> <p>PROTECTIVE GLOVES: Use impermeable gloves to prevent skin contact. Use head caps, boots, chemical aprons when necessary.</p> <p>EYE PROTECTION: Use safety eyewear designed to protect eyes against liquid splash and mists. Consult your safety equipment supplier.</p> <p>OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Use protective clothing to prevent skin contact. Use head caps, boots, chemical aprons when necessary.</p> <p>WORK/HYGIENIC PRACTICES: Eyewashes and safety showers in the workplace are recommended. Wash hands after using. Monitor exposure levels.</p>



Special Metals Cleaner Concentrate

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear	Odor:	Mild
Physical State:	Liquid	Solubility:	100% in water
Odor Threshold:	No data available	Freezing/Melting Pt.:	No data available
Spec Grav./Density:	1.01	Flash Point:	No data available
Viscosity:	No data available	Vapor Density:	No data available
Boiling Point:	No data available	Auto-Ignition Temp:	No data available
Flammability:	None	UFL/LFL:	No data available
Partition Coefficient:	No data available		
Vapor Pressure:	No data available		
pH:	No data available		
Evap. Rate:	No data available		
Decomp Temp:	No data available		

10 STABILITY AND REACTIVITY

Reactivity:	Product is stable under normal conditions.
Chemical Stability:	Product is stable under normal conditions.
Conditions to Avoid:	N/A
Materials to Avoid:	Strong Oxidizing Agents, Acids.
Hazardous Decomposition:	Not known.
Hazardous Polymerization:	Will not occur.

11 TOXICOLOGICAL INFORMATION

Propanol, 1(or 2)-(2-methoxymethylethoxy)- (34590-94-8) :

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - 5,152 mg/kg

Inhalation LC50 no data available

Dermal LD50

Other information on acute toxicity

Skin corrosion/irritation: Serious eye damage/eye irritation:

Eyes - rabbit - Mild eye irritation - 24 h

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, NTP, OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmonized System): no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System): no data available

Aspiration hazard: no data available

Potential health effects: Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation.

Signs and Symptoms of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects: no data available

Additional Information:

RTECS: JM1575000



Special Metals Cleaner Concentrate

12 ECOLOGICAL INFORMATION

Propanol, 1(or 2)-(2-methoxymethylethoxy)- (34590-94-8) :

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - > 10,000 mg/l - 96 h.

Toxicity to daphnia EC50 - Daphnia magna (Water flea) - 1,919 mg/l - 48 h.

and other aquatic invertebrates

Persistence and degradability: Biodegradability

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: no data available

13 DISPOSAL CONSIDERATIONS

Waste Disposal Method: Review Federal, Provincial and Local Government requirements prior to disposal.

14 TRANSPORT INFORMATION

Non-hazardous.

15 REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Ammonium Methyl Sulfate (0) [1-5%]

Fatty Alcohol Ethoxylate (0) [1-5%]

Propanol, 1(or 2)-(2-methoxymethylethoxy)- (34590-94-8) [1-5%] MASS, OSHAWAC, PA, TSCA, TXAIR

Sodium Citrate (0) [1-5%]

Regulatory CODE Descriptions

MASS = MA Massachusetts Hazardous Substances List

OSHWAC = OSHA workplace Air Contaminants

PA = PA Right-To-Know List of Hazardous Substances

TSCA = Toxic Substances Control Act

TXAIR = TX Air Contaminants with Health Effects Screening Level



Special Metals Cleaner Concentrate

16 OTHER INFORMATION

HMIS III: Health = 1, Fire = 0, Physical Hazard = 0

HMIS PPE: B - Safety Glasses, Gloves

HMIS	
HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	B



HMIS Index: 1-slight , 2-moderate, 3-serious, 4-severe

The information contained herein has been compiled from sources believed to be reliable and accurate to the best of our knowledge at this date. It is provided without warranty, expressed or implied, as to the results of use of this information or to the product to which it relates. Winsol Laboratories, Inc. assumes no responsibility for injury to any person or property resulting from any use of the material. Each user assumes the risk in their use of this product and should review the data and recommendations in the specific context of their intended use.

ISSUE DATE: 05/19/15

REVISION DATE: 07/17/24

REVISIONS: 3 year revision/review



Polyclean

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Polyclean
SDS Number: 6045
Revision Date: 07/16/2024
Product Description: Non-abrasive cleaner for sheet plexi or polycarbonate.
Product Use: Removes tenacious oils, marks and residues from polycarbonate and glass surfaces.
Instructions: Do NOT use on molded, stressed, pre-formed or curved windows or skylights.
Supplier Details: Winsol Inc
 712 S Portland St
 Seattle, WA 98108
Emergency: INFOTRAC 1-800-535-5053 (North America); 1-352-323-3500 (International)
Phone: 206-782-5500
Web: www.winsol.com

2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

Health, Serious Eye Damage/Eye Irritation, 2 B
 Physical, Flammable Liquids, 4

GHS Label elements, including precautionary statements

GHS Signal Word: **WARNING**

GHS Hazard Pictograms:

no GHS pictograms indicated for this product

GHS Hazard Statements:

H320 - Causes eye irritation
 H227 - Combustible liquid

GHS Precautionary Statements:

P102 - Keep out of reach of children.
 P103 - Read label before use.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P301 - IF SWALLOWED: May cause gastrointestinal irritation.
 P302 - IF ON SKIN: Prolonged or repeated and confined exposure may cause skin irritation. Wash contaminated clothing and footwear before reuse.
 P304 - IF INHALED: Remove to fresh air.
 P305 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If irritation persists consult medical personnel.
 P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas#	%	Chemical Name
34590-94-8	>80%	Dipropylene glycol methyl ether

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

Composition Comments: Components and trace elements not listed are either non-hazardous or are below reportable limits.



Polyclean

4 FIRST AID MEASURES

Inhalation:	Not considered dangerous. Remove to fresh air.
Skin Contact:	Prolonged or repeated and confined exposure may cause skin irritation. Wash contaminated clothing and footwear before reuse.
Eye Contact:	Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If irritation persists consult medical personnel.
Ingestion:	Swallowing may cause gastrointestinal irritation. Do not induce vomiting. Rinse mouth with water, then drink one glass of water. If irritation persists consult medical personnel.

5 FIRE FIGHTING MEASURES

Flammability:	Combustible
EXTINGUISHING MEDIA:	Water
UNUSUAL FIRE AND EXPLOSION HAZARDS:	None
SPECIAL FIRE FIGHTING PROCEDURES:	Self-contained breathing apparatus with a full face piece operated in a pressure demand or other positive pressure mode.

6 ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb liquid on paper, vermiculite, floor absorbent or other absorbent material and transfer to labeled containers.

LARGE SPILL: Stop spill at source, dike area of spill to prevent spreading, pump liquid into salvage tank. Remaining liquid may be taken up on sand, clay, floor absorbent or other absorbent material and shoveled into labeled containers.

WASTE DISPOSAL METHOD: Review Federal, Provincial and Local Government requirements prior to disposal.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Exercise care and caution. Store in cool dry place.

OTHER PRECAUTIONS: Containers of this material may be hazardous when emptied, since emptied containers retain product residues (vapor, liquid and/or solids), all hazard precautions given in the data sheet must be observed.

7 HANDLING AND STORAGE

Handling Precautions:	Keep material out of reach of children.
Storage Requirements:	Store in cool/dry area.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal Protective Equipment:	Dipropylene glycol methyl ether (34590-94-8) [>80%] Personal protective equipment Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Eye protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
---------------------------------------	---



Polyclean

Skin and body protection: Impervious clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Dipropylene glycol methyl ether (34590-94-8) [>80%]

Components with workplace control parameters

TWA 100 ppm USA. ACGIH Threshold Limit Values (TLV)
Eye & Upper Respiratory Tract irritation Central Nervous System impairment Danger of cutaneous absorption

STEL 150 ppm USA. ACGIH Threshold Limit Values (TLV)
Eye & Upper Respiratory Tract irritation Central Nervous System impairment Danger of cutaneous absorption

TWA 100 ppm USA. Occupational Exposure Limits (OSHA) - Table Z- 1
600 mg/m3 Limits for Air Contaminants
Skin designation The value in mg/m3 is approximate.

TWA 100 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants -
600 mg/m3 1910.1000
Skin notation

STEL 150 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants -
900 mg/m3 1910.1000
Skin notation

TWA 100 ppm USA. NIOSH Recommended Exposure Limits
600 mg/m3
Potential for dermal absorption

ST 150 ppm USA. NIOSH Recommended Exposure Limits
900 mg/m3
Potential for dermal absorption

9

PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear	Odor:	Citrus
Physical State:	Liquid	Solubility:	Miscible
Odor Threshold:	No data available	Freezing/Melting Pt.:	No data available
Spec Grav./Density:	.96	Flash Point:	-167° F
Viscosity:	No data available	Vapor Density:	No data available
Boiling Point:	356° F	Auto-Ignition Temp:	400° F
Flammability:	Combustible liquid	UFL/LFL:	No data available
Partition Coefficient:	No data available		
Vapor Pressure:	No data available		
pH:	No data available		
Evap. Rate:	No data available		
Decomp Temp:	No data available		



Polyclean

10 STABILITY AND REACTIVITY

Reactivity:	Product is stable under normal conditions.
Chemical Stability:	Product is stable under normal conditions.
Conditions to Avoid:	N/A
Materials to Avoid:	Strong Oxidizing Agents, Acids.
Hazardous Decomposition:	Not known.
Hazardous Polymerization:	Will not occur.

11 TOXICOLOGICAL INFORMATION

Dipropylene glycol methyl ether (34590-94-8) [>80%]

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - 5,152 mg/kg

Inhalation LC50 no data available

Dermal LD50

Other information on acute toxicity

Skin corrosion/irritation: Serious eye damage/eye irritation:

Eyes - rabbit - Mild eye irritation - 24 h

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, NTP and OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmonized System): no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System): no data available

Aspiration hazard: no data available

Potential health effects: Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation.

Signs and Symptoms of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects: no data available

Additional Information: RTECS: JM1575000

12 ECOLOGICAL INFORMATION

Dipropylene glycol methyl ether (34590-94-8) [>80%]

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - > 10,000 mg/l - 96 h.

Toxicity to daphnia EC50 - Daphnia magna (Water flea) - 1,919 mg/l - 48 h.

and other aquatic invertebrates

Persistence and degradability: Biodegradability

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: no data available



Polyclean

13 DISPOSAL CONSIDERATIONS

Dipropylene glycol methyl ether (34590-94-8) [>80%]

Waste treatment methods

Product: This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging: Dispose of as unused product.

14 TRANSPORT INFORMATION

Non-regulated.

15 REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Dipropylene glycol methyl ether (34590-94-8) [>80%] MASS, OSHAWAC, PA, TSCA, TXAIR

Regulatory CODE Descriptions

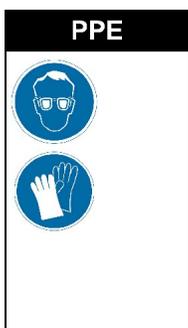
MASS = MA Massachusetts Hazardous Substances List
OSHAWAC = OSHA Workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level

16 OTHER INFORMATION

HMIS III: Health = 1, Fire = 2, Physical Hazard = 0

HMIS PPE: B - Safety Glasses, Gloves

HMIS	
HEALTH	1
FLAMMABILITY	2
PHYSICAL HAZARD	0
PERSONAL PROTECTION	B



HMIS Index: 1-slight, 2-moderate, 3-serious, 4-severe

The information contained herein has been compiled from sources believed to be reliable and accurate to the best of our knowledge at this date. It is provided without warranty, expressed or implied, as to the results of use of this information or to the product to which it relates. Winsol Laboratories, Inc. assumes no responsibility for injury to any person or property resulting from any use of the material. Each user assumes the risk in their use of this product and should review the data and recommendations in the specific context of their intended use.

ISSUE DATE: 05/27/15
REVISION DATE: 07/16/24
REVISIONS: 3 year revision/review