



SAFETY DATA SHEET

1. Identification

Product identifier Imperial Clean

Other means of identification
Product Code 1940

Recommended use Automotive Detailing

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information
Manufacturer

Company name Malco Products, Inc.
Address 361 Fairview Ave
Barberton, OH 44203
United States

Telephone Phone 800-253-2526
Fax 330-753-2025

Website www.malcopro.com
E-mail msdsinfo@malcopro.com

Contact person Technical Department

Emergency phone number Phone 1-800-424-9300

Supplier Not available.

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Serious eye damage/eye irritation Category 2A

Environmental hazards Not classified.

Label elements



Signal word Warning

Hazard statement Causes serious eye irritation.

Precautionary statement

Prevention Wash thoroughly after handling. Wear eye protection/face protection.

Response IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor if you feel unwell. If eye irritation persists: Get medical advice/attention.

Storage Store locked up. Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Other hazards None known.

Supplemental information 8.46% of the mixture consists of component(s) of unknown acute oral toxicity. 10.14% of the mixture consists of component(s) of unknown acute dermal toxicity. 8.99% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 10.67% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
"Sulfonic Acids, C14-16-alkane Hydroxy And C14-16-alkene, Sodium Salts"		68439-57-6	5 - < 10

Chemical name	Common name and synonyms	CAS number	%
Ethylene Glycol Monobutyl Ether		111-76-2	3
Propylene Glycol Monomethyl Ether		107-98-2	2.99
Tetrasodium Ethylenediaminetetraacetate		64-02-8	< 1
"1,3-Bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione"		6440-58-0	0.16
Other components below reportable levels			80 - < 90

DSD: Directive 67/548/EEC.

CLP: Regulation No. 1272/2008.

#: This substance has been assigned Community workplace exposure limit(s).

M: M-factor

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. *Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Composition comments The full text for all R- and H-phrases is displayed in section 16.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth thoroughly. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
--	--

Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not get in eyes, on skin, or on clothing. Do not get this material on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store in a well-ventilated place. Keep away from food, drink and animal feedingstuffs. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	20 ppm
Propylene Glycol Monomethyl Ether (CAS 107-98-2)	STEL	100 ppm
	TWA	50 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	97 mg/m3
		20 ppm
Propylene Glycol Monomethyl Ether (CAS 107-98-2)	STEL	553 mg/m3
	TWA	150 ppm
		369 mg/m3
		100 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	20 ppm
Propylene Glycol Monomethyl Ether (CAS 107-98-2)	STEL	75 ppm
	TWA	50 ppm

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	20 ppm
Propylene Glycol Monomethyl Ether (CAS 107-98-2)	STEL	100 ppm
	TWA	50 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	20 ppm
Propylene Glycol Monomethyl Ether (CAS 107-98-2)	STEL	100 ppm
	TWA	50 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

Components	Type	Value
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	TWA	97 mg/m3
		20 ppm
Propylene Glycol Monomethyl Ether (CAS 107-98-2)	STEL	553 mg/m3
	TWA	150 ppm
		369 mg/m3
		100 ppm

Biological limit values**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*

* - For sampling details, please see the source document.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure adequate ventilation, especially in confined areas. Provide eyewash station.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear safety glasses with side shields (or goggles).

Skin protection**Hand protection**

Wear appropriate chemical resistant gloves.

Other

Wear chemical protective equipment that is specifically recommended by the manufacturer. It may provide little or no thermal protection.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties**Appearance**

Clear.

Physical state

Liquid.

Form

Liquid.

Color

Green

Odor

Green Apple

Odor threshold

Not available.

pH

9 - 10

Melting point/freezing point

-120.77 °F (-84.87 °C) estimated

Initial boiling point and boiling range

290.77 °F (143.76 °C) estimated

Flash point

> 200.0 °F (> 93.3 °C)

Evaporation rate

Not available.

Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.6 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	50 cP
Viscosity temperature	68 °F (20 °C)
Other information	
Density	8.43 lbs/gal
Explosive properties	Not explosive.
Flammability class	Combustible IIIB estimated
Kinematic viscosity	49.446 cSt
Kinematic viscosity temperature	68 °F (20 °C)
Oxidizing properties	Not oxidizing.
VOC	0.03 % w/w By Weight

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Information on toxicological effects

Acute toxicity Not known.

Components	Species	Test Results
"1,3-Bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione" (CAS 6440-58-0)		
Acute		
Oral		
LD50	Rat	2 g/kg
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)		
Acute		
Dermal		
LD50	Rabbit	400 mg/kg
Oral		
LD50	Rat	560 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitization		
Canada - Alberta OELs: Irritant		
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	Irritant	
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity		
ACGIH Carcinogens		
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	A3 Confirmed animal carcinogen with unknown relevance to humans.	
Propylene Glycol Monomethyl Ether (CAS 107-98-2)	A4 Not classifiable as a human carcinogen.	
Canada - Manitoba OELs: carcinogenicity		
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	Confirmed animal carcinogen with unknown relevance to humans.	
Propylene Glycol Monomethyl Ether (CAS 107-98-2)	Not classifiable as a human carcinogen.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)	3 Not classifiable as to carcinogenicity to humans.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	May be harmful if absorbed through skin. Prolonged inhalation may be harmful.	
	2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.	
	Prolonged exposure may cause chronic effects.	

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
"Sulfonic Acids, C14-16-alkane Hydroxy And C14-16-alkene, Sodium Salts" (CAS 68439-57-6)		
Aquatic		
Crustacea	EC50	Water flea (Ceriodaphnia dubia)
		4.14 - 4.95 mg/l, 48 hours
Ethylene Glycol Monobutyl Ether (CAS 111-76-2)		
Aquatic		
Fish	LC50	Inland silverside (Menidia beryllina)
		1250 mg/l, 96 hours

Components	Species	Test Results
------------	---------	--------------

Tetrasodium Ethylenediaminetetraacetate (CAS 64-02-8)

Aquatic

Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>)	472 - 500 mg/l, 96 hours
------	------	---	--------------------------

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Ethylene Glycol Monobutyl Ether	0.83
---------------------------------	------

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

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. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

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

TDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

15. Regulatory information

Canadian regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Toxic Chemical Substances (TCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information**Issue date** 06-08-2018**Revision date** 06-08-2018**Version #** 02**References** ACGIH
EPA: AQUIRE database
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents**Disclaimer** Malco Products, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. 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 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.**Revision information** Product and Company Identification: Product and Company Identification
Composition / Information on Ingredients: Component Summary
Physical & Chemical Properties: Multiple Properties
GHS: Classification