

Safety Data Sheet

MAG OEM

Precautionary statement(s)

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands and exposed skin thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P321	Drink large quantities of water. Follow with raw egg whites or milk of magnesia. Call a physician immediately.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents/container to local, state, and federal regulations

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

Component	Concentration
Oxalic acid dihydrate 10% (CAS no.: 6153-56-6)	<= 10 % (Weight)
CLASSIFICATIONS: Skin corrosion/irritation (chapter 3.2), Cat. 2; Eye damage/irritation (chapter 3.3), Cat. 2A. HAZARDS: No data available.	
Hydroxyacetic acid (CAS no.: 79-14-1)	<= 10 % (Weight)
CLASSIFICATIONS: Acute toxicity, inhalation (chapter 3.1), Cat. 4; Eye damage/irritation (chapter 3.3), Cat. 1; Skin corrosion/irritation (chapter 3.2), Cat. 1B. HAZARDS: No data available.	
Poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy- (CAS no.: 34398-01-1)	<= 5 % (Weight)
CLASSIFICATIONS: Acute toxicity, oral (chapter 3.1), Cat. 4; Eye damage/irritation (chapter 3.3), Cat. 1. HAZARDS: No data available.	
Quaternary ammonium compounds, coco alkylbis(hydroxyethyl)methyl, ethoxylated, chlorides (CAS no.: 61791-10-4)	<= 5 % (Weight)
CLASSIFICATIONS: Eye damage/irritation (chapter 3.3), Cat. 1; Hazardous to the aquatic environment - long-term hazard (chapter 4.1), Cat. 2. HAZARDS: H318 - Causes serious eye damage; H411 - Toxic to aquatic life with long lasting effects.	
ETHYLENE GLYCOL MONOBUTYL ETHER (CAS no.: 111-76-2; EC no.: 203-905-0; Index no.: 603-014-00-0)	<= 5 % (Weight)
CLASSIFICATIONS: Acute toxicity, oral (chapter 3.1), Cat. 4; Flammable liquids (chapter 2.6), Cat. 4; Acute toxicity, dermal (chapter 3.1), Cat. 4; Skin corrosion/irritation (chapter 3.2), Cat. 2; Eye damage/irritation (chapter 3.3), Cat. 2A; Acute toxicity, inhalation (chapter 3.1), Cat. 4. HAZARDS: No data available.	

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).
If inhaled	Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide

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artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

In case of skin contact

Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

In case of eye contact

Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.

If swallowed

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Personal protective equipment for first-aid responders

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Most important symptoms/effects, acute and delayed

No data available.

Indication of immediate medical attention and special treatment needed, if necessary

See section 2.2.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

Specific hazards arising from the chemical

No specific fire or explosion hazard.

Special protective actions for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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Further information

Hazardous thermal decomposition products:
carbon dioxide
carbonmonoxide Sulfur oxides phosphorus oxides
halogenated compounds

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training.
Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non- emergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

Reference to other sections

Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

SECTION 7: Handling and storage

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers.
Use appropriate containment to avoid environmental contamination.

Specific end use(s)

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Automotive wheel cleaner.

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: 111-76-2

2-Butoxyethanol

Cal/OSHA: 20 ppm PEL inhalation; NIOSH: 5 ppm REL inhalation; OSHA: 50 ppm PEL inhalation; 240 mg/m³ PEL inhalation

ETHYLENE GLYCOL MONOBUTYL ETHER

OSHA: dermal

CAS: 6153-56-6

Oxalic acid dihydrate 10%

ACGIH: 2 mg/m³ STEL; 1 mg/m³ TWA; OSHA: 1 mg/m³ PEL-TWA

CAS: 61791-10-4

Quaternary ammonium compounds, coco alkylbis(hydroxyethyl)methyl, ethoxylated, chlorides
TWA

CAS: 74-87-3

methyl chloride

ACGIH: 100ppm STEL; 50ppm TWA; OSHA: 200ppm STEL; 100ppm twa

Appropriate engineering controls

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Individual protection measures, such as personal protective equipment (PPE)

Pictograms



Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be

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noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Thermal hazards

No data available.

Environmental exposure controls

Prevent product runoff to sewers, drains, or soil.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form	CLEAR, THIN LIQUID, COLORLESS
Odor	Neutral
Odor threshold	No data available.
pH	No data available.
Melting point/freezing point	-4 DEG. C (26 DEG. F)
Initial boiling point and boiling range	105-110 DEG. C
Flash point	No data available.
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability limits	No data available.
Vapor pressure	17.1 (@ 20 C)
Vapor density	No data available.
Relative density	1.05-1.10 (@20 DEG. C)
Solubility(ies)	Miscible
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Explosive properties	Product is not explosive
Oxidizing properties	No data available.

SECTION 10: Stability and reactivity

Reactivity

No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

The product is stable

Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

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Conditions to avoid

Direct sunlight, incompatible materials.

Incompatible materials

Reactive or incompatible with the following materials: oxidizing materials, reducing materials, organic materials, metals, alkalis and moisture.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Quaternary ammonium compounds, coco alkylbis(hydroxyethyl)methyl, ethoxylated, chlorides

LD50 Skin

Remarks: FHSa Skin irritation index = 4.0

ETHYLENE GLYCOL MONOBUTYL ETHER

LD50 Oral - Guinea pig - 1400 mg/kg

Citation: DOW Chemical rev. date: 04/21/2015

ETHYLENE GLYCOL MONOBUTYL ETHER

LD50 Oral - Rat - 1300 mg/kg

Citation: DOW Chemical rev. date: 04/21/2015

ETHYLENE GLYCOL MONOBUTYL ETHER

LD50 Skin - Guinea pig - >2000 mg/kg

Citation: DOW Chemical rev. date: 04/21/2015

ETHYLENE GLYCOL MONOBUTYL ETHER

LC50 Inhalation - Guinea pig - >3.1 mg/l - 1hr

Result: No deaths occurred at this value

Remarks: vapor

Citation: DOW Chemical rev. date: 04/21/2015

Poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy-

LC50 Oral - Rat - 1000-2000 mg/kg

Poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy-

LC50 Skin - Rabbit - >2000 mg/kg

Oxalic acid dihydrate 10%

LD50 Oral - Rat - 7500 mg/kg

Oxalic acid dihydrate 10%

LD50 Skin - Rat - 20000 mg/kg

Hydroxyacetic acid

LD50 Oral - Rat - 2040 mg/kg

Hydroxyacetic acid

LC50 Inhalation - Rat - 3.6 mg/l - 4h

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Skin corrosion/irritation

Hydroxyacetic acid

- Rabbit

Result: Corrosive

Remarks: OECD 404

Serious eye damage/irritation

Quaternary ammonium compounds, coco alkylbis(hydroxyethyl)methyl, ethoxylated, chlorides

Remarks: This product has not been tested. The information is derived from products of a similar composition.

Respiratory or skin sensitization

ETHYLENE GLYCOL MONOBUTYL ETHER

Result: Did not cause allergic skin reactions when tested in humans.

Did not cause allergic skin reactions when tested in guinea pigs.

Citation: DOW Chemical rev. date: 04/21/2015

Germ cell mutagenicity

No data available.

Carcinogenicity

ETHYLENE GLYCOL MONOBUTYL ETHER

ACGIH carcinogen

Result: A3: Confirmed animal carcinogen with unknown relevance to humans.

Citation: DOW Chemical rev. date: 04/21/2015

Reproductive toxicity

Hydroxyacetic acid

Oral - Rat

Result: Maternal Effects: Other effects. Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Specific

Developmental Abnormalities: Musculoskeletal system.

Summary of evaluation of the CMR properties

No data available.

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

Additional information

No data available.

SECTION 12: Ecological information

Toxicity

ETHYLENE GLYCOL MONOBUTYL ETHER

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LC50 - *Oncorhynchus mykiss* (rainbow trout) - 1474 mg/l - 96hr
Result: Acute Toxicity
Remarks: OECD Test guideline 203
Citation: DOW Chemical rev. date: 04/21/2015

ETHYLENE GLYCOL MONOBUTYL ETHER
EC50 - *Daphnia magna* (water flea) - 1550 mg/l - 48hr
Result: Acute Toxicity
Remarks: OECD Test guideline 203
Citation: DOW Chemical rev. date: 04/21/2015

ETHYLENE GLYCOL MONOBUTYL ETHER
EbC50 - *Pseudokirchneriella subcapitata* (green algae) - 911 mg/l - 72hr
Result: Acute Toxicity: Biomass
Citation: DOW Chemical rev. date: 04/21/2015

ETHYLENE GLYCOL MONOBUTYL ETHER
IC50 - Bacteria - >1000 mg/l
Result: Acute Toxicity: Growth inhibition
Citation: DOW Chemical rev. date: 04/21/2015

ETHYLENE GLYCOL MONOBUTYL ETHER
NOEC - *Danio rerio* (zebra fish) - >100 mg/l - 21days
Result: Chronic Toxicity
Citation: DOW Chemical rev. date: 04/21/2015

ETHYLENE GLYCOL MONOBUTYL ETHER
NOEC - *Daphnia magna* (water flea) - >100 mg/l - 21days
Result: Chronic Toxicity
Citation: DOW Chemical rev. date: 04/21/2015

Poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy-
LC50 - *Pimephales promelas* (fathead minnow) - 1-10ml/l - 96hr

Poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy-
LC50 - *Daphnia magna* (water flea) - 1-10ml/l - 96hr

Poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy-
LC50 - Algae - 1-10ml/l - 96hr

Oxalic acid dihydrate 10%
LC50 - *Pimephales promelas* (fathead minnow) - 100-1000 mg/l - 96h
Remarks: (anhydrous form)

Oxalic acid dihydrate 10%
EC50 - *Daphnia magna* (water flea) - 137 mg/l - 48h
Remarks: (anhydrous form)

Oxalic acid dihydrate 10%
LC50 - *Lepomis macrochirus* (bluegill) - 160 mg/l - 48h
Remarks: (anhydrous form)

Oxalic acid dihydrate 10%
- Algae - 790 mg/l - 168h

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Result: (Scenedesmus quadricauda; Anhydrous form)

Hydroxyacetic acid

LC50 - Danio rerio (zebra fish) - 5000 mg/l - 96h

Persistence and degradability

Quaternary ammonium compounds, coco alkylbis(hydroxyethyl)methyl, ethoxylated, chlorides

Result: Not readily biodegradable

Poly(oxy-1,2-ethanediyl), alpha-undecyl-omega-hydroxy-

Result: Readily biodegradable, as defined by OECD, substance that degrades > 60-70% within a 10 day window over 28 days.

Bioaccumulative potential

ETHYLENE GLYCOL MONOBUTYL ETHER

OECD

Result: Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water(log Pow): 0.81 Measured

Bioconcentration factor (BCF): 3.2

Citation: DOW Chemical rev. date: 04/21/2015

Mobility in soil

ETHYLENE GLYCOL MONOBUTYL ETHER

Result: Potential for mobility in soil is high (Koc between 50 and 150).

Partition coefficient(Koc): 67 Estimated.

Citation: DOW Chemical rev. date: 04/21/2015

Results of PBT and vPvB assessment

No data available.

Other adverse effects

No data available.

SECTION 13: Disposal considerations

Disposal of the product

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal of contaminated packaging

Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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Waste treatment

No data available.

Sewage disposal

Do not dispose of product through sewers.

Other disposal recommendations

No data available.

SECTION 14: Transport information

UN Number	1760
UN Proper Shipping Name	Compounds, cleaning liquids (Containing Glycolic Acid)
Transport hazard class(es)	8
Packing group	II

Special precautions for user

May be reclassified as a CONSUMER COMMODITY ORM-D when shipped by ground in the US in containers not exceeding 38 ounces.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Pennsylvania Right To Know Components

Chemical name: Ethanedioic acid, dihydrate

CAS number: 6153-56-6

Chemical name: Ethanol, 2-butoxy-

CAS number: 111-76-2

Hydroxyacetic acid

CAS: 79-14-1

Toxic Substances Control Act (TSCA) Inventory

Oxalic acid dihydrate 10%

CAS: 6153-56-6

Listed

yes

Chemical name: Ethanol, 2-butoxy-

CAS number: 111-76-2.....Compliant

DfE Surfactant

Poly(oxy-1,2-ethanediyl), a-undecyl-w-hydroxy- 34398-01-1 meets the criteria of the US EPA Design for Environment (DfE) Surfactant screen and is listed on CleanGredients.

SARA 311/312 Hazards

Acute health hazard

Chemical name: Ethanol, 2-butoxy-

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CAS number: 111-76-2....Acute Health Hazard, Fire Hazard, Chronic Health Hazard

SARA 313 Components

0.03% methyl chloride

Chemical name: Ethanol, 2-butoxy-

CAS number: 111-76-2

New Jersey Right To Know Components

Common name: 2-BUTOXY ETHANOL

CAS number: 111-76-2

Hydroxyacetic acid

CAS: 79-14-1

SECTION 16: Other information

Revision Date:

04/18/2016

Other Information:

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Party Responsible for the Preparation of This Document

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012