

Safety Data Sheet
according to HPR, Schedule 1

Date of issue 12/04/2025

Version number 1

Revision: 12/03/2025

1 Identification**Product identifier****Trade name:** Megaclean**Other means of identification****Product code(s):** MC1-Q, MC1-G, MC1-5G**Application of the substance / the mixture:**

Heavy duty biodegradable cleaner and degreaser, water soluble, non flammable, and designed for semiconductors.

Details of the supplier of the safety data sheet**Manufacturer/Supplier:**Micronova Manufacturing
3431 West Lomita Boulevard
Torrance, CA, 90505, USA
Tel: +1 (310)784-6990
Fax: +1 (310)784-6980
Email: quality@micronova-mfg.com
www.micronova-mfg.com**Emergency telephone number:**CHEMTREC Canada: +1 703-741-5970
+1 (800)424-9300**2 Hazard identification****Classification of the substance or mixture**

Eye damage/irritation – Category 2A H319 Causes serious eye irritation.

Label elements**GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS07

Signal word Warning**Hazard statements**

H319 Causes serious eye irritation.

Precautionary statements:

P264 Wash thoroughly after handling.

P280 Wear eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

Additional Information:**Information pertaining to particular dangers for man and environment:****Classification system:****NFPA ratings (scale 0 - 4)**

Health = 2

Fire = 0

Reactivity = 0

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HMIS-ratings (scale 0 - 4)

HEALTH	*2	Health = *2
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

3 Composition/Information on ingredients

Description: Mixture: consisting of the following components.

Hazardous Components:

112-34-5	2-(2-butoxyethoxy)ethanol Eye damage/irritation – Category 2A, H319	30-60% w/w *
68439-46-3	(C9-C11) Alkyl alcohol, ethoxylate Eye damage/irritation – Category 1, H318; Acute Toxicity (Oral) - Category 4, H302	≥1-<3% w/w *

* Actual concentration ranges are withheld as a trade secret.

Information on components:

112-34-5	2-(2-butoxyethoxy)ethanol	Eye damage/irritation – Category 2A, H319	30-60% w/w
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4 First-aid measures

Description of first aid measures

After inhalation: Move patient to fresh air, if symptom arise consult a doctor.

After skin contact: Generally the product does not irritate the skin.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: Call for a doctor immediately.

Most important symptoms and effects, both acute and delayed

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents: Carbon dioxide (CO2). Dry chemical. Foam.

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters

Protective equipment:

Mouth respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Environmental precautions: Dilute with plenty of water.

Methods and material for containment and cleaning up:

Use neutralizing agent.

Dispose of the collected material according to local regulations.

Reference to other sections

See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

Precautions for safe handling

No special measures required.
No special precautions are necessary if used correctly.

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/ Personal protection

Control parameters

Components with limit values that require monitoring at the workplace:

112-34-5 2-(2-butoxyethoxy)ethanol

TLV (USA)	TWA: 67.5* mg/m ³ , 10* ppm *Inhalable fraction and vapor
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Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.

Breathing equipment: Not required.

Protection of hands:



Protective gloves

The glove material must be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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Trade name: Megaclean**Eye protection:**

Tightly sealed goggles

Goggles recommended during refilling.

Body protection: Protective work clothing**9 Physical and chemical properties****Information on basic physical and chemical properties****General Information**

Physical state	Liquid
Color:	Colorless.
Odor:	Not applicable.
Odor threshold:	Not determined.
Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	Not determined.
Flammability:	Not determined.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not determined.
Auto-ignition temperature:	Not determined.
Decomposition temperature:	Not determined.
pH-value:	Not determined.
Viscosity:	
Kinematic:	Not determined.
Dynamic:	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible.
Partition coefficient (n-octanol/water):	Not determined.
Vapor pressure:	Not determined.
Vapor pressure:	
Density:	Not determined.
Relative density	0.926-0.946
Vapor density	Not determined.
Particle characteristics	Not applicable.

Other information

Appearance:	
Form:	Liquid.
Danger of explosion:	Product does not present an explosion hazard. Not determined.

Flammability Limits:

Lower:	Not Determined.
Upper:	Not Determined.
Oxidizing properties	Not determined.
Evaporation rate	Not determined.

10 Stability and reactivity**Reactivity** No further relevant information available.**Chemical stability****Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

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Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No further relevant information available.

11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

112-34-5 2-(2-butoxyethoxy)ethanol

Oral	LD50	5,660 mg/kg (Rat)
Dermal	LD50	4,000 mg/kg (rabbit)

Primary irritant effect:

on the skin: No irritant effect.

on the eye: Irritating effect.

Sensitization: No sensitizing effects known.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

Carcinogenic categories

IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

NTP (National Toxicology Program)

None of the ingredients are listed.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects

Additional ecological information

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

Waste treatment methods

Recommendation:

Disposal must be made in accordance with official regulations.

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Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation:

Disposal must be made according to official regulations.

Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

Recommended cleansing agent: Water, if necessary with cleaning agents.

14 Transport information

UN-Number

DOT/TDG, ADR, IMDG, IATA Not applicable.

UN proper shipping name

DOT/TDG, ADR, IMDG, IATA Not applicable.

Transport hazard class(es)

DOT/TDG, ADR, ADN, IMDG, IATA Class Not applicable.

Packing group

DOT/TDG, ADR, IMDG, IATA Not applicable.

Environmental hazards:

Not applicable.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

Special precautions for user

Not applicable.

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

No further relevant information available.

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Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

112-34-5 | 2-(2-butoxyethoxy)ethanol

USA - TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

Canadian Domestic Substances List (DSL)

All ingredients are listed.

Canadian Non-Domestic Substances List (NDSL)

None of the ingredients are listed.

Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients are listed.

Canadian Ingredient Disclosure list (limit 1%)

112-34-5 | 2-(2-butoxyethoxy)ethanol

Per- and polyfluoroalkyl substances (PFAS)

None of the ingredients are listed.

GHS label elements

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16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Date of preparation 12/04/2025**Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent