

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
 Product name : CLOVER ECO 460
 Product code : 460
 Type of product : Detergent
 Product group : Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial
 For professional use only
 Use of the substance/mixture : Cleaner
 Function or use category : Detergent

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Clover Chemicals Ltd
 Clover House
 Macclesfield Road
 SK23 7DQ Whaley Bridge - United Kingdom
 T 01663 733114 - F 01663 733115
info@cloverchemicals.com - www.cloverchemicals.com

1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Eye Dam. 1 H318
 Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

CLP Signal word : Danger
 Hazardous ingredients : D-Glucopyranose, oligomers, decyl octyl glycoside; Alcohols, C9-11, ethoxylated
 Hazard statements (CLP) : H318 - Causes serious eye damage.
 Precautionary statements (CLP) : P102 - Keep out of reach of children.
 P280 - Wear eye 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.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
 This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
D-Glucopyranose, oligomers, decyl octyl glycoside	(CAS-no) 68515-73-1 (Einecs nr) 500-220-1 (REACH-no) 01-2119488530-36	5 – 10	Eye Dam. 1, H318
Alcohols, C9-11, ethoxylated	(CAS-no) 68439-46-3	3 – 5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Diethylene glycol monobutyl ether	(CAS-no) 112-34-5 (Einecs nr) 203-961-6 (EG annex nr) 603-096-00-8 (REACH-no) 01-2119475104-44	1 – 3	Eye Irrit. 2, H319

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
Inhalation	: Allow affected person to breathe fresh air. Allow the victim to rest.
Skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
Eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Acute effects eyes : Causes serious eye damage. Redness.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon dioxide. Carbon monoxide.

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures

: Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Keep container closed when not in use.

Incompatible products

: Strong bases. Strong acids.

Packaging materials

: polyethylene. stainless steel.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Diethylene glycol monobutyl ether (112-34-5)

Ireland - Occupational Exposure Limits

Local name	2-(2-Butoxyethoxy)ethanol
OEL (8 hours ref) (mg/m ³)	67.5 mg/m ³
OEL (8 hours ref) (ppm)	10 ppm
OEL (15 min ref) (mg/m ³)	101.2 mg/m ³
OEL (15 min ref) (ppm)	15 ppm
Notes (IE)	IOELV
Regulatory reference	Chemical Agents Code of Practice 2020

United Kingdom - Occupational Exposure Limits

Local name	2-(2-Butoxyethoxy)ethanol
WEL TWA (mg/m ³)	67.5 mg/m ³
WEL TWA (ppm)	10 ppm
WEL STEL (mg/m ³)	101.2 mg/m ³
WEL STEL (OEL STEL) [ppm]	15 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.2. Exposure controls

Appropriate engineering controls:

Ensure that there is a suitable ventilation system.

Personal protective equipment:

Avoid all unnecessary exposure.

Eye protection:

Chemical goggles or safety glasses

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

: Liquid

Physical state/form

: Liquid.

Colour

: Colourless.

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Odour	: Characteristic.
Odour threshold	: No data available
pH	: 6 – 8
Relative evaporation rate (butylacetate=1)	: No data available
Melting point/range	: 0 °C
Freezing point	: No data available
Boiling point/Boiling range	: 100 °C
Flash point	: No data available
Autoignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.018
Solubility	: Soluble in water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content : 30 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

D-Glucopyranose, oligomers, decyl octyl glycoside (68515-73-1)

LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Alcohols, C9-11, ethoxylated (68439-46-3)

LD50 oral rat	> 300 (≤ 2000) mg/kg
ATE CLP (oral)	2000 mg/kg bodyweight

Diethylene glycol monobutyl ether (112-34-5)

LD50 oral rat	> 2000 mg/kg
LD50 dermal	2764 mg/kg bodyweight
LC50 Inhalation - Rat (Dust/Mist)	> 196 mg/l

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ATE CLP (dermal)	2764 mg/kg bodyweight
ATE CLP (dust,mist)	5000 mg/m ³

Skin corrosion/irritation	: Not classified pH: 6 – 8
Additional information	: Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Causes serious eye damage. pH: 6 – 8
Respiratory or skin sensitisation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-repeated exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

D-Glucopyranose, oligomers, decyl octyl glycoside (68515-73-1)

EC50 Daphnia 1	> 100 mg/l
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Alcohols, C9-11, ethoxylated (68439-46-3)

LC50 fish 1	1 – 10 mg/l
LC50 fish 2	1 – 10 mg/l

Diethylene glycol monobutyl ether (112-34-5)

LC50 fish 1	> 100 mg/l
EC50 Daphnia 1	> 1000 mg/l
EC50 other aquatic organisms 1	> 1000 mg/l waterflea
EC50 other aquatic organisms 2	> 100 mg/l
ErC50 (algae)	> 100 mg/l

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12.2. Persistence and degradability

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Persistence and degradability	Biodegradable. The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
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D-Glucopyranose, oligomers, decyl octyl glycoside (68515-73-1)

Persistence and degradability	Biodegradable.
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Diethylene glycol monobutyl ether (112-34-5)

Persistence and degradability	Readily biodegradable.
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12.3. Bioaccumulative potential

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Bioaccumulative potential	No bioaccumulation.
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D-Glucopyranose, oligomers, decyl octyl glycoside (68515-73-1)

Bioaccumulative potential	No bioaccumulation.
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Diethylene glycol monobutyl ether (112-34-5)

Log Pow	0.56
Bioaccumulative potential	No bioaccumulation.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

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This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Component

D-Glucopyranose, oligomers, decyl octyl glycoside (68515-73-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
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12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Waste / unused products : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA
14.1. UN number		
Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name		
Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)		
Not regulated	Not regulated	Not regulated

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14.4. Packing group

Not regulated	Not regulated	Not regulated
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14.5. Environmental hazards

Not regulated	Not regulated	Not regulated
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No supplementary information available

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content : 30 g/l

Detergent Regulation (648/2004/EC): Labelling of contents:	
Component	%
non-ionic surfactants	5-15%
perfumes	

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H302	Harmful if swallowed.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Eye Dam. 1	H318	Calculation method
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SDS EU (REACH Annex II)

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.