

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Date first issue: 01/08/2010 Review date: 20/08/2020 Supersedes version of: 16/02/2018 Version: 9.1

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

1.1. Product identifier

Product form : Mixture Product name : VIROSOL Product code : 326 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

Main use category : Professional use, Industrial use

Industrial/Professional use spec Industrial

For professional use only

Use of the substance/mixture : Cleaner

Degreaser

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer Supplier Clover Chemicals Ltd Christeyns NV Clover House Macclesfield Road Afrikalaan 182 9000 GENT SK23 7DQ Whaley Bridge – Derbyshire Belgium

United Kingdom T 01663 733114 - F 01663 733115

 $\underline{info@cloverchemicals.com} - \underline{www.cloverc} hemicals.com$

T +32 (0)9/ 223 38 71 - F +32 (0)9/ 233 03 44 info@christeyns.be - www.christeyns.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	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin Corr. 1 H314 Aquatic Chronic 3 H412

Full text of hazard classes, H- and EUH-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

Contains : Isotridecanol, ethoxylated, Fatty alcohol ethoxylate Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage.

H412 - Harmful to aquatic life with long lasting effects.

: P102 - Keep out of reach of children. Precautionary statements (CLP)

P260 - Do not breathe spray.

P280 - Wear protective gloves, eye protection.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P314 - Get medical advice/attention if you feel unwell.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water or shower.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

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

P362 - Take off contaminated clothing.

: EUH208 - Contains D-LIMONENE. May produce an allergic reaction.

2.3. Other hazards

EUH-statements

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

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
Isotridecanol, ethoxylated (69011-36-5)	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

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

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]
Isotridecanol, ethoxylated	CAS-no: 69011-36-5 REACH-no: polymer	1 – 3	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Fatty alcohol ethoxylate	CAS-no: 160875-66-1 Einecs nr: 605-233-7	1 – 3	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Diethylene glycol monobutyl ether substance with national workplace exposure limit(s) (IE, GB); substance with a Community workplace exposure limit	CAS-no: 112-34-5 Einecs nr: 203-961-6 EG annex nr: 603-096-00-8 REACH-no: 01-2119475104-	1 – 3	Eye Irrit. 2, H319
Sodium hydroxide substance with national workplace exposure limit(s) (IE, GB)	CAS-no: 1310-73-2 Einecs nr: 215-185-5 EG annex nr: 011-002-00-6 REACH-no: 01-2119457892- 27	0.1 – 1	Skin Corr. 1A, H314 Eye Dam. 1, H318 Met. Corr. 1, H290
D-LIMONENE	CAS-no: 5989-27-5 Einecs nr: 227-813-5 EG annex nr: 601-096-00-2 REACH-no: 01-2119529223- 47	0.1 – 1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
Sodium hydroxide	CAS-no: 1310-73-2 Einecs nr: 215-185-5 EG annex nr: 011-002-00-6 REACH-no: 01-2119457892- 27	(0.5 ≤C < 2) Eye Irrit. 2, H319 (0.5 ≤C < 2) Skin Irrit. 2, H315 (2 ≤C < 5) Skin Corr. 1B, H314 (5 ≤C < 100) Skin Corr. 1A, H314

Full text of H- and EUH-statements: see section 16

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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.

: Remove affected clothing and wash all exposed skin area with mild soap and water, Skin contact

followed by warm water rinse.

Eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

Ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

: May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat Acute effects inhalation

with constricting sensation of the larynx and difficulty in breathing.

Acute effects skin : Causes skin irritation, Red skin.

Acute effects eyes : Causes serious eye damage. redness, itching, tears. Risk of serious damage to eyes. Acute effects oral route : Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. Abdominal

pain, nausea.

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 : fume. 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. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Methods for cleaning up

Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

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.

7.2. Conditions for safe storage, including any incompatibilities

: Store in a cool, well-ventilated place. Keep container closed when not in use. Storage conditions

Incompatible products

Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

20/08/2020 (Revision date) EN (English) 3/10

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Sodium hydroxide (1310-73-2)		
Ireland - Occupational Exposure Limits		
Local name	Sodium hydroxide	
OEL STEL	2 mg/m³	
	Chemical Agents Code of Practice 2021	
Regulatory reference	Chemical Agents Code of Practice 2021	
United Kingdom - Occupational Exposure Limits	Coding budgeride	
Local name	Sodium hydroxide	
WEL STEL (OEL STEL)	2 mg/m³	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	
Diethylene glycol monobutyl ether (112-34-5)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	2-(2-Butoxyethoxy)ethanol	
IOEL TWA	67.5 mg/m³	
IOEL TWA [ppm]	10 ppm	
IOEL STEL	101.2 mg/m³	
IOEL STEL [ppm]	15 ppm	
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC	
Ireland - Occupational Exposure Limits		
Local name	2-(2-Butoxyethoxy)ethanol	
OEL TWA [1]	67.5 mg/m³	
OEL TWA [2]	10 ppm	
OEL STEL	101.2 mg/m³	
OEL STEL [ppm]	15 ppm	
Remark	IOELV (Indicative Occupational Exposure Limit Values)	
Regulatory reference	Chemical Agents Code of Practice 2021	
United Kingdom - Occupational Exposure Limits		
Local name	2-(2-Butoxyethoxy)ethanol	
WEL TWA (OEL TWA) [1]	67.5 mg/m³	
WEL TWA (OEL TWA) [2]	10 ppm	
WEL STEL (OEL STEL)	101.2 mg/m³	
WEL STEL (OEL STEL) [ppm]	15 ppm	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure that there is a suitable ventilation system.

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Safety glasses. Chemical goggles or safety glasses

8.2.2.2. Skin protection

Protective equipment:

Wear suitable protective clothing

Hand protection:

PVC gloves. butyl rubber gloves. nitrile rubber gloves. VITON gloves. neoprene gloves. Wear protective gloves.

8.2.2.3. Respiratory protection

Respiratory protection:

Not required

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

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
Colour : Orange.
Physical state/form : Liquid.

Odour : Citrus fruits. pleasant odour.

Odour threshold : Not available Melting point/range : 0 °C

Freezing point : Not available Boiling point/Boiling range : 100 °C

Flammability : Non flammable. **Explosive limits** · Not available Lower explosion limit : Not available : Not available Upper explosion limit Flash point : Not available Autoignition temperature : Not available Decomposition temperature : Not available : 12.5 – 14 рΗ Viscosity, kinematic : Not available

Solubility : Soluble in water. Soluble in ethanol.

Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50 °C : Not available

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Density : Not available
Relative density : 1.018
Relative vapour density at 20 °C : Not available
Particle characteristics : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

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

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

Fatty alcohol ethoxylate (160875-66-1)	
LD50 oral rat	> 300 (300 – 2000) mg/kg
LD50 dermal rat	> 2000 ma/ka

Diethylene glycol monobutyl ether (112-34-5)	
LD50 oral rat	6600 mg/kg bodyweight
LD50 dermal rabbit	2764 mg/kg bodyweight
LC50 Inhalation - Rat (Dust/Mist)	> 196 mg/l

Skin corrosion/irritation : Causes severe skin burns.

pH: 12.5 – 14

Serious eye damage/irritation : Assumed to cause serious eye damage

pH: 12.5 – 14

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

D-LIMONENE ((5989-27-5)
---------------------	-------------

IARC group	3 - Not classifiable
------------	----------------------

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

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and

symptoms

: Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

: Harmful to aquatic life with long lasting effects. Ecology - water : Not classified

Hazardous to the aquatic environment, short-term

Hazardous to the aquatic environment, long-term

(chronic)

: Harmful to aquatic life with long lasting effects.

Not rapidly degradable

Sodium hydroxide (1310-73-2)		
LC50 - Fish [1]	> 35 mg/l	
EC50 - Crustacea [1]	40.4 mg/l (Ceriodaphnia)	
EC50 - Other aquatic organisms [1]	> 33 mg/l waterflea	
Fatty alcohol ethoxylate (160875-66-1)	Fatty alcohol ethoxylate (160875-66-1)	
EC50 - Crustacea [1]	> 10 mg/l	
ErC50 algae	> 10 mg/l	
NOEC chronic fish	> 1 mg/l	
Diethylene glycol monobutyl ether (112-34-5)		
LC50 - Fish [1]	> 100 mg/l	
EC50 - Crustacea [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	

12.2. Persistence and degradability		
VIROSOL		
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.	
Sodium hydroxide (1310-73-2)		
Persistence and degradability Not applicable.		
Fatty alcohol ethoxylate (160875-66-1)		
Persistence and degradability	Biodegradable.	
Diethylene glycol monobutyl ether (112-34-5)		
Persistence and degradability	Readily biodegradable.	
12.3. Bioaccumulative potential		
VIROSOI		

VIROSOL	
Bioaccumulative potential No bioaccumulation.	
Sodium hydroxide (1310-73-2)	
Log Pow	-3.88

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Sodium hydroxide (1310-73-2)			
Bioaccumulative potential	No bioaccumulation.		
Fatty alcohol ethoxylate (160875-66-1)			
Bioaccumulative potential	No bioaccumulation.		
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

VIROSOL

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

12.6. Endocrine disrupting properties

No additional information available

12.7. 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. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Waste / unused products :

: Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number or ID 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
14.4. Packing group		
Not regulated	Not regulated	Not regulated
14.5. Environmental hazards		
Not regulated	Not regulated	Not regulated
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. Maritime transport in bulk according to IMO instruments

Not applicable

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Allergenic fragrances > 0,01%:

D-LIMONENE

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

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

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		
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1		
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1		
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3		
Asp. Tox. 1	Aspiration hazard, Category 1		
EUH208	Contains D-LIMONENE. May produce an allergic reaction.		
Eye Dam. 1	Serious eye damage/eye irritation, Category 1		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2		
Flam. Liq. 3	Flammable liquids, Category 3		
H226	Flammable liquid and vapour.		
H290	May be corrosive to metals.		
H302	Harmful if swallowed.		
H304	May be fatal if swallowed and enters airways.		
H314	Causes severe skin burns and eye damage.		
H315	Causes skin irritation.		
H317	May cause an allergic skin reaction.		

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:			
H318	Causes serious eye damage.		
H319	Causes serious eye irritation.		
H400	Very toxic to aquatic life.		
H410	Very toxic to aquatic life with long lasting effects.		
H412	Harmful to aquatic life with long lasting effects.		
Met. Corr. 1	Corrosive to metals, Category 1		
Skin Corr. 1	Skin corrosion/irritation, Category 1		
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A		
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B		
Skin Irrit. 2	Skin corrosion/irritation, Category 2		
Skin Sens. 1	Skin sensitisation, Category 1		

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:			
Skin Corr. 1	H314	On basis of test data	
Aquatic Chronic 3	H412	Calculation method	

Safety Data Sheet (SDS), EU

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.