SAFETY DATA SHEET VERTICLING

According to EC Regulation 1907/2006/EC - revision 2015/830

 Print Date 29/01/2019
 Creation Date 02/02/2015
 Revision Date 21/01/2019

 Revision Date 21/01/2019
 Revision Date 21/01/2019

SECTION 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product identifier

Product Name VERTI CLING
Product Code VERTI CLING
11003183B3 (CLP)

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

Recommended use

Degreaser.

1.3. Details of the supplier of the safety data sheet

NCH UK & Ireland, NCH House, Springvale Avenue, Bilston, WV14 0QL Tel (UK): 01902 510200, Tel (Ireland): 042 939 5502

E-mail address technical_uk@nch.com
Website address www.ncheurope.com

1.4. Emergency telephone number

UK - 01902 510200 (available during Office Hours)

In Republic of Ireland (available from 8am to 10pm daily): 01 809 2166

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP/GHS) and its adaptations

Aerosols: Category 1 Skin irritation: Category 2 Skin sensitisation: Category 1 Eye irritation: Category 2 Aquatic chronic: Category 2

H222 - Extremely flammable aerosol

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H411 - Toxic to aquatic life with long lasting effects H229 - Pressurised container: May burst if heated

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP/GHS)

Contains DIPENTENE









Signal word DANGER

Hazard Statements

H222 - Extremely flammable aerosol

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H411 - Toxic to aquatic life with long lasting effects

H229 - Pressurised container: May burst if heated

Precautionary Statements

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

P273 - Avoid release to the environment

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P211 - Do not spray on an open flame or other ignition source

P251 - Do not pierce or burn, even after use

P271 - Use only outdoors or in a well-ventilated area

P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

P260 - Do not breathe vapors.

P280 - Wear protective clothing and eye protection.

Restricted to professional users.

For industrial and institutional use only.

Keep out of reach of children.

2.3. Other hazards

No additional hazards identified.

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

SECTION 3. COMPOSITION / INFORMATION OF INGREDIENTS

3.2 Mixture

Chemical Name	CAS-No.	EC No.	EU - REACH reg number	Weight-%	EU - GHS/CLP Notes Classification
DIPENTENE	138-86-3	205-341-0	01-2119529223- 47	10 - < 20	Skin Irrit. 2 (H315) C Flam. Liq. 3 (H226) Skin Sens. 1 (H317) Aquatic Acute 1 (H400)
PROPANE	74-98-6	200-827-9	01-2119486944- 21	10 - < 20	Aquatic Chronic 1 (H410) Press. Gas Flam. Gas 1 (H220)
BUTANE	106-97-8	203-448-7	01-2119474691- 32	10 - < 20	Press. Gas K Flam. Gas 1 (H220)
DODECYLBENZENESULPHONIC ACID, COMPOUND WITH 1-AMINOPROPAN-2-OL	42504-46-1	255-854-9		5 - < 10	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)
PROPYLENE GLYCOL MONOBUTYL ETHER	5131-66-8	225-878-4	01-2119475527- 28	5 - < 10	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)
COCAMIDE DEA (INCI)	68603-42-9	271-657-0		1 - < 3	Skin Irrit. 2 (H315) Eye Dam. 1 (H318)

For any H statements mentioned in this section, see the full text in section 16.

EU Notes

Note C - Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers.

Note K - The classification as a carcinogen or mutagen does not apply as the substance contains less than 0.1% w/w 1,3-butadiene

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice

Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mists. Get medical attention immediately if symptoms occur.

Eye Contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

Skin Contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.

<u>Ingestion</u>

Rinse mouth with water. Do NOT induce vomiting. If swallowed, seek medical advice immediately and show this container or label.

If exposed to high concentrations of the aerosol vapours, move to fresh air. If symptoms persist, call a physician.

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

Sensitisation

May cause sensitisation by skin contact.

Eye contact

May cause irritation as itching and redness.

Skin contact

May cause irritation as itching or redness.

<u>Inhalation</u>

Inhalation of mists may result in irritation to the respiratory tract. May cause headaches, dizziness, drowsiness and nausea.

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

Notes to physician

Treat symptomatically. Sensitiser.

SECTION 5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use:. Dry powder. Alcohol-resistant foam. Carbon dioxide (CO2). Water spray.

Extinguishing media which must not be used for safety reasons

Water jet.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapours.

Possibility of harm to the aquatic life. Avoid release into the environment. Pressurized container. Extremely flammable. Keep product and empty container away from heat and sources of ignition.

5.3. Advice for firefighters

Firefighters should wear a self-contained breathing apparatus and full protective gear. Cool fire-exposed containers with water spray to prevent bursting.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes, and clothing. Refer to protective measures listed in sections 7 and 8. Prevent further leakage or spillage if safe to do so. Ventilate the area. Due to the nature of the aerosol packaging, a large spill is unlikely. For a small spill, wear appropriate protective clothing, ventilate the area, absorb with an inert material and transfer all material into a properly labeled container for disposal. Use care as spills may be slippery.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

Methods for Containment

Contain spillage, soak up with non-combustable absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Methods for Cleaning up

For the non volatile residues:. Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

Refer to sections 7, 8 and 13.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mists. Do not eat, drink or smoke when using this product. Keep away from open flames, hot surfaces and sources of ignition. Ensure adequate ventilation.

Anyone with a history of skin sensitization to any of the substances in this product, should refrain from handling.

7.2. Conditions for safe storage, including any incompatibilities

For safety reasons in case of fire, cans should be stored separately in closed containments. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Further information about storage conditions:.

7.3. Specific end use(s)

No information available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

If vapours, fumes or mists are generated, their concentration in the workplace area should be kept to the lowest reasonable level. For substances.

	Chemical Name	European Union	The United Kingdom	France	Germany	Austria
	DIPENTENE			TWA: 1000 mg/m ³		
				STEL: 1500 mg/m ³		
Г	PROPANE				AGW: 1000ppm	STEL: 2000 ppm
					AGW: 1800mg/m ³	STEL: 3600 mg/m ³
					Peak: 4000ppm	TWA: 1000 ppm

				Peak: 7200mg/m ³ TWA: 1000ppm TWA: 1800mg/m ³	TWA: 1800 mg/m ³
BUTANE	ST	STEL: 750 ppm FEL: 1810 mg/m ³ TWA: 600 ppm <i>N</i> A: 1450 mg/m ³	TWA: 800 ppm TWA: 1900 mg/m ³	AGW: 1000ppm AGW: 2400mg/m ³ Peak: 4000ppm Peak: 9600mg/m ³ TWA: 1000ppm TWA: 2400mg/m ³	STEL: 1600 ppm STEL: 3800 mg/m ³ TWA: 800 ppm TWA: 1900 mg/m ³

Chemical Name	Spain	Portugal	Italy	The Netherlands	Switzerland
PROPANE	TVA: 1000 ppm	TWA: 1000 ppm			STEL: 4000 ppm
					STEL: 7200 mg/m ³
					TWA: 1000 ppm
					TWA: 1800 mg/m ³
BUTANE	TVA: 1000 ppm	TWA: 1000 ppm			STEL: 3200 ppm
					STEL: 7200 mg/m ³
					TWA: 800 ppm
					TWA: 1900 mg/m ³ TWA:
					1000 ppm

Chemical Name	Denmark	Finland	Norway	Sweden	Czech
DIPENTENE			TWA: 25 ppm	25 ppm	
			TWA: 140 mg/m ³ TWA:	150 mg/m ³	
			40 ppm	50 ppm	
			TWA: 275 mg/m ³	300 mg/m ³	
PROPANE	TWA: 1000 ppm	TWA: 800 ppm	TWA: 500 ppm		
	TWA: 1800 mg/m ³	TWA: 1500 mg/m ³	TWA: 900 mg/m ³ TWA:		
		STEL: 1100 ppm	40 ppm		
		STEL: 2000 mg/m ³	TWA: 275 mg/m ³		
BUTANE	TWA: 500 ppm	TWA: 800 ppm	TWA: 250 ppm		
	TWA: 1200 mg/m ³	STEL: 1000 ppm	TWA: 600 mg/m ³ TWA:		
			40 ppm		
			TWA: 275 mg/m ³		
PROPYLENE GLYCOL					PEL: 270mg/m ³
MONOBUTYL ETHER					NPK-P: 550mg/m ³

Chemical Name	Poland	Ireland
PROPANE	NDS: 1800 mg/m ³	TWA: 1000 ppm
	1126. 1000 mg/m	STEL: 3000 ppm
BUTANE	NDSCh: 3000 mg/m ³	TWA: 1000 ppm
	NDS: 1900 mg/m ³	STEL: 3000 ppm

8.2. Exposure controls

Control parametres

Provide washing facilities. Anyone with a history of skin sensitization to any of the substances in this product, should refrain from handling. Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Use personal protection equipment as per Directive 89/686/EEC.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Conforming to EN 14387 ABEK filters. In case of inadequate ventilation wear respiratory protection.

Hand Protection

Wear suitable protective gloves conforming to EN 374. Type of gloves suggested:. Short term use eg occasional contact or splash protection;. Nitrile rubber (0.4 mm). PVC (0.7mm). Long term use eg continuous wear or immersion;. Neoprene gloves (0.4 mm). Breakthrough time of the glove material (protective index 6, breakthrough time: >480 min). For break through times, refer to glove manufacturers recommendations.

Skin Protection

Body protection must be chosen based on activity and possible exposure, e.g. footwear (solid shoes, rubber boots), rubber apron, long-sleeved work clothing, impervious suit.

Eye Protection

Safety glasses if the method of use presents the likelihood of eye contact. Approved to EN 166.

General hygiene considerations

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practise. Wash hands before breaks and at the end of workday.

Environmental exposure controls

Local authorities should be advised if significant spillages cannot be contained.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Information below relates to typical values and does not constitute a specification.

Appearance White Foam Specific Gravity 0.84

Physical StateLiquidSolubilitySoluble in waterOdourCitrusAutoignition TemperatureNo information available.

pH 10 Viscosity Non viscous

Melting Point/Range No information available. Explosive properties No information available

Boiling Point/Range-10 °COxidizing PropertiesNo information available.Flash Point< -50 °C</td>VOC Content (%)36.3 %

Evaporation Rate
Flammability Limits in Air %
Vapor Pressure
Vapor Density
No information available.
No information available.
No information available.

9.2. Other information

No other information available

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

Not considered as highly reactive. See further information below.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

The mixture itself will not dangerously react or polymerise to create hazardous conditions in normal use.

10.4. Conditions to avoid

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Keep away from open flames, hot surfaces, and sources of ignition.

10.5. Incompatible materials

Strong acids. Strong oxidising agents.

10.6. Hazardous decomposition products

None under normal storage conditions and use.

Thermal decomposition can lead to release of irritating gases and vapours.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Product Information

The product itself has not been tested.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
PROPANE			= 658 mg/L (Rat) 4 h
BUTANE			= 658 g/m ³ (Rat) 4 h
PROPYLENE GLYCOL MONOBUTYL ETHER	= 1900 mg/kg (Rat)		

Sensitisation

May cause sensitisation by skin contact.

Skin contact

May cause irritation as itching or redness.

Inhalation

Inhalation of mists may result in irritation to the respiratory tract. May cause headaches, dizziness, drowsiness and nausea.

Eye contact

May cause irritation as itching and redness.

Carcinogenicity

There are no known carcinogenic substances in this product.

Mutagenic Effects

There are no known mutagenic substances in this product.

Reproductive Effects

There are no known substances in this product with effects on reproduction.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Product Information

The product itself has not been tested.

Ecotoxicity effects

Contains substance(s) known to be hazardous to the aquatic environment.

Chemical Name	Toxicity to Fish	Water Flea	Toxicity to Algae
DIPENTENE	LC50 0.72 mg/l 96h		
COCAMIDE DEA (INCI)	LC50 = 3.6 mg/L Brachydanio rerio 96 h		

12.2. Persistence and degradability

Ecotoxicological properties are substance specific, i.e. bioaccumulation, persistence and degradability. The information is given, where available and appropriate, for substance(s) of the mixture.

12.3. Bioaccumulative potential

Not likely to bioaccumulate. Component information below.

Chemical Name	log Pow
PROPANE	2.3
BUTANE	2.89

12.4. Mobility in soil

Soluble in water.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB. As defined under the regulation EC 1907/2006.

12.6. Other adverse effects

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues / Unused Products

Dispose of in accordance with local regulations.

Contaminated Packaging

Do not expose to heat, flames, sparks or other sources of ignition. Do not pierce or burn, even after use. Empty containers should be taken for local recycling, recovery or waste disposal.

EWC waste disposal No

The following EWC/ AVV waste codes may be applicable:

16 05 04* gases in pressure containers (including halons) containing dangerous substances

15 01 10* packaging containing residues of or contaminated by dangerous substances

Other Information

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific

SECTION 14. TRANSPORT INFORMATION

14.1, 14.2, 14.3, 14.4.

IMDG/IMO

UN Number UN1950

UN proper shipping name Aerosols, Flammable

Hazard Class 2.1 EmS F-D, S-U

ADR / RID

 UN-No
 UN1950

 Hazard Class
 2.1

 Classification Code
 5F

 Limited Quantity
 1 L

 Transport Cat. (Tunnel Restriction
 2 (D)

Code)

IATA/ICAO

 UN-No
 UN1950

 Hazard Class
 2.1

 ERG Code
 10P

14.5. Environmental hazards

The mixture is environmentally hazardous for transport

Product is a marine pollutant according to the criteria set by IMDG/IMO

14.6. Special precautions for user

No special precautions.

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

Packaged product, not typically transported in IBC's.

Additional information

The above information is based on latest transport regulations i.e. ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport.

SECTION 15. REGULATORY INFORMATION

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

This mixture was classified in compliance with EC Regulation 1272/2008 (CLP) and its adaptations.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for this mixture by the supplier

SECTION 16. OTHER INFORMATION

Text of H statements mentioned in Section 3

H220 - Extremely flammable gas. H226 - Flammable liquid and vapour. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. 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. H411 - Toxic to aquatic life with long lasting effects.

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

On the basis of test data. H222 - Extremely flammable aerosol. Calculation method. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. Summation method. H411 - Toxic to aquatic life with long lasting effects.

Prepared By Austen Pimm **Creation Date 02/02/2015** Revision Date 21/01/2019

Revision summary

CLP update. SDS sections updated: 16

Abbreviations

REACH: Registration Evaluation Authorisation Restriction of Chemicals

EU: European Union

EC: European community

EEC: European Economic Community

UN: United Nations

CAS: Chemical Abstracts Service

PBT: Persistent Bioaccumulative Toxic

vPvB: very Persistent very Bioaccumulative

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

EC50: Effective concentration, 50 percent

LogPow: LogP octanol/water

VwVwS: Verwaltungsvorschrift wassergefährdende Stoffe (Administrative order relating to substances hazardous to water - Germany)

WGK: Wassergefahrdungsklasse (Water Hazard Class - Germany).

AVV: Abfallverzeichnis-Verordnung (Waste Code - Germany)

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (European agreement governing the international carriage of dangerous goods by road)

IMDG: International Maritime Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

RID: Reglement international concernant le transport des merchandises dangereuses par chemin der fer (Regulations concerning the International carriage of

Dangerous goods by rail)

EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods

ERG: Emergency Response Guidebook

IUCLID / RTECS International Uniform Chemical Information Database / Registry of Toxic Effects of Chemical Substances

GHS: Globally Harmonised System of classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

VOC: Volatile Organic Chemical w/w: weight for weight DMSO: Dimethyl sulphoxide

OECD: Organization for Economic Cooperation and Development

STEL: Short Term Exposure Limit TWA: Time Weighted Average

Further Information

Component test results displayed in sections 11 and 12 are typically supplied by Chemadvisor and assembled from publicly available literature sources e.g. IUCLID / RTECS

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet