VELTEK ASSOCIATES, INC.

DEC-CYCLE® II (0.4 - 0.8% Dilution after mixing)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Date of issue: 16/04/2018 Revision date: 03/01/2025 Supersedes: 10/10/2023 Version: 3.0

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

1.1. Product identifier

Product form : Mixture
Product name : DEC-CYCLE® II (0.4 - 0.8% Dilution after mixing)
Product code : SDS VEL-134-EU

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

Relevant identified uses

Use of the substance/mixture : Disinfectant
Product for industrial use only

1.3. Details of the supplier of the safety data sheet

Veltek Associates, Inc.
15 Lee Blvd
Malvern, PA 19355-1234 USA
Telephone: +1 610-644-8335 - Fax: +1 610-644-8336
E-mail: vai@sterile.com

India distributor:
Tansha
A-17, Wadala Shriram, Industrial Estate
G. D. Ambekar Marg
Wadala, Mumbai- 400 031 India
Telephone: +91 22-43560400

1.4. Emergency telephone number

Emergency number : For Spill/Exposure Emergency Response Service in Europe in English (and 23 other European languages) (24 hours): +44 (0)1235 239 670
For Middle East/Africa (24 hours): +44 (0)1235 239 671
For Hindi (24 hours): 000 800 100 7479
For East/South East Asia: +65 3158 1074

Country/Area	Organisation/Company	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)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Aquatic Chronic 2 H411
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) :

GHS09

Signal word (CLP) : -

Hazard statements (CLP) : H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P273 - Avoid release to the environment.
P391 - Collect spillage.
P501 - Dispose of contents and container to an authorised waste collection point.

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

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	2-methylpentane-2,4-diol (107-41-5), Isopropanol (67-63-0), Biphenyl-2-ol (90-43-7)(1), Clorofene (120-32-1)(1), 2,2',2''-nitrilotriethanol (102-71-6)(1)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	2-methylpentane-2,4-diol (107-41-5), Isopropanol (67-63-0), Biphenyl-2-ol (90-43-7)(1), Clorofene (120-32-1)(1), 2,2',2''-nitrilotriethanol (102-71-6)(1)

(1) Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

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 substance(s) are 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 at a concentration equal to or greater than 0,1 %

Component	
Substance(s) not 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	2-methylpentane-2,4-diol (107-41-5), Isopropanol (67-63-0), Biphenyl-2-ol (90-43-7)(1), Clorofene (120-32-1)(1), 2,2',2''-nitrilotriethanol (102-71-6)(1)

(1) Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-methylpentane-2,4-diol	CAS-No.: 107-41-5 EC-No.: 203-489-0 EC index No.: 603-053-00-3	0.08 - 0.25	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d
Isopropanol	CAS-No.: 67-63-0 EC-No.: 200-661-7 EC index No.: 603-117-00-0	0.06 - 0.11	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Biphenyl-2-ol	CAS-No.: 90-43-7 EC-No.: 201-993-5 EC index No.: 604-020-00-6	0.04 - 0.08	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Clorofene	CAS-No.: 120-32-1 EC-No.: 204-385-8 EC index No.: 604-093-00-4	0.04 - 0.08	Acute Tox. 4 (Inhalation), H332 (ATE=2.5 mg/l/4h) Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 2, H351 Repr. 2, H361f STOT RE 2, H373 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=100)
2,2',2"-nitrilotriethanol	CAS-No.: 102-71-6 EC-No.: 203-049-8 REACH-no: 01-2119486482-31-XXXX	0.01 - 0.04	Not classified
Benzenesulfonic acid, C10-16-alkyl derivs.	CAS-No.: 68584-22-5 EC-No.: 271-528-9	0.01 - 0.04	Eye Irrit. 2, H319

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If symptoms develop, obtain medical attention.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If symptoms develop, obtain medical attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. If symptoms develop, obtain medical attention.

First-aid measures after ingestion : Do NOT induce vomiting. Do not give an unconscious person anything to drink. Wash out mouth with water and give 100-200 ml of water to drink. If symptoms develop, obtain medical attention.

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

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Carbon dioxide (CO2). Dry powder. Water.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Explosion hazard : On heating, there is a risk of bursting due to internal pressure build-up. Use water for cooling exposed containers.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid fire-fighting water entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Use self-contained breathing apparatus when in close proximity to fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures : Ventilate area. Avoid contact with skin and eyes. Evacuate unnecessary personnel.

For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Use chemically protective clothing.

Emergency procedures : Ventilate area. Avoid contact with skin and eyes.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if large amounts of the product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection. SECTION 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation. Avoid contact with skin and eyes.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Keep container tightly closed. Store in a well-ventilated place. Keep cool.

Incompatible materials : Oxidising agents. Reducing agents.

7.3. Specific end use(s)

Disinfectant. Product for industrial use only.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

2-methylpentane-2,4-diol (107-41-5)	
Ireland - Occupational Exposure Limits	
Local name	Hexylene glycol [2-Methylpentane-2,4-diol]
OEL (15 min ref) (mg/m3)	125 mg/m³
OEL STEL	25 ppm
Remark	Advisory OELV (Advisory Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024
United Kingdom - Occupational Exposure Limits	
Local name	2-Methylpentane-2,4-diol
WEL TWA (mg/m³)	123 mg/m³
WEL TWA (ppm)	25 ppm
WEL STEL (mg/m³)	123 mg/m³
WEL STEL (ppm)	25 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

Isopropanol (67-63-0)	
Ireland - Occupational Exposure Limits	
Local name	Isopropyl alcohol [Propan-2-ol]
OEL TWA	200 ppm
OEL STEL	400 ppm
Remark	Advisory OELV (Advisory Occupational Exposure Limit Values), Skin (Substances which have the capacity to penetrate intact skin when they come in contact with it and be absorbed into the body. A substantial contribution to the total body burden via dermal exposure is possible)
Regulatory reference	Chemical Agents Code of Practice 2024
Ireland - Biological limit values	
Local name	2-Propanol
Ireland - BMGV	40 mg/l Parameter: acetone - Medium: urine - Sampling time: End of shift at end of workweek - Notations: B (Background), Ns (Non-specific)
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)
United Kingdom - Occupational Exposure Limits	
Local name	Propan-2-ol
WEL TWA (mg/m³)	999 mg/m³
WEL TWA (ppm)	400 ppm
WEL STEL (mg/m³)	1250 mg/m³
WEL STEL (ppm)	500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

2,2',2''-nitrilotriethanol (102-71-6)	
Ireland - Occupational Exposure Limits	
Local name	Triethanolamine
OEL (8 hours ref) (mg/m³)	5 mg/m³

2,2',2''-nitrilotriethanol (102-71-6)	
Remark	Advisory OELV (Advisory Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:
Provide adequate ventilation.

Personal protection equipment

Personal protective equipment:
Avoid all unnecessary exposure.

Eye and face protection

Eye protection:
Wear goggles or safety glasses with side shields if contact with the eyes is possible. Standard EN 166 - Personal eye-protection.

Skin protection

Skin and body protection:
Long sleeved clothing

Hand protection:
Wear chemically resistant protective gloves. Standard EN 374 - Protective gloves against chemicals. The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed. Gloves should be removed and replaced if there are any signs of degradation or breakthrough.

Respiratory protection

Respiratory protection:
Not required for normal conditions of use. In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Thermal hazard protection:
Not required for normal conditions of use.

Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.
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	:	Amber.
Appearance	:	Clear.
Odour	:	Alcohol.
Odour threshold	:	Not available
Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	≈ 100 °C
Flammability (solid, gas)	:	Not applicable
Explosive properties	:	Not explosive.
Oxidising properties	:	Not oxidising.
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	Not available
Auto-ignition temperature	:	Not available

Decomposition temperature	:	Not available
pH	:	3 – 4.5
Viscosity, kinematic	:	Not available
Solubility	:	Water: Miscible
Log Kow	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	≈ 1 (Water = 1)
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended handling and storage conditions (see section 7).

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

Under fire conditions closed containers may rupture or explode.

10.4. Conditions to avoid

Extremely high or low temperatures. Direct sunlight.

10.5. Incompatible materials

Oxidising agents. Reducing agents.

10.6. Hazardous decomposition products

Fire may produce irritating, corrosive and/or toxic gases. Chlorine. Hydrocarbons.

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

2-methylpentane-2,4-diol (107-41-5)	
LD50 oral, rat	> 2000 mg/kg (OECD 420 method)
LD50 dermal, rabbit	> 2000 mg/kg (OECD 402 method)
LC50 inhalation, rat (mg/l)	> 60 ml/m³ - 8 Hours

Isopropanol (67-63-0)	
LD50 oral, rat	5840 mg/kg
LD50 dermal, rat	16.4 ml/kg
LC50 inhalation, rat (ppm)	> 10000 ppm - 6 Hours

Biphenyl-2-ol (90-43-7)	
LD50 oral, rat	2733 mg/kg Source: ECHA registration data
LD50 dermal, rabbit	> 2000 mg/kg Source: ECHA registration data
LC50 inhalation, rat (mg/l)	> 949 mg/m³ - 1 Hours

Clorofene (120-32-1)	
LD50 oral, rat	4147 mg/kg (OECD 401 method)
LD50 dermal, rat	> 2000 mg/kg (OECD 402 method)
LC50 inhalation, rat (mg/l)	2.5 mg/l - 4 Hours (OECD 403 method)

2,2',2''-nitrilotriethanol (102-71-6)	
LD50 oral, rat	4200 – 11300 mg/kg
LD50 dermal, rat	> 2000 mg/kg (OECD 402 method)

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
LD50 oral, rat	> 5000 mg/kg (OECD 401 method) (Read-across)

Skin corrosion/irritation : Not classified
pH: 3 – 4.5

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

2,2',2''-nitrilotriethanol (102-71-6)	
pH	10.5

Serious eye damage/irritation : Not classified
pH: 3 – 4.5

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

2,2',2''-nitrilotriethanol (102-71-6)	
pH	10.5

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

Isopropanol (67-63-0)	
IARC group	3 - Not classifiable

Biphenyl-2-ol (90-43-7)	
IARC group	3 - Not classifiable

2,2',2''-nitrilotriethanol (102-71-6)	
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

Isopropanol (67-63-0)	
STOT-single exposure	May cause drowsiness or dizziness.

Biphenyl-2-ol (90-43-7)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified
Additional information : Based on available data, the classification criteria are not met

Clorofene (120-32-1)	
STOT-repeated exposure	May cause damage to organs (kidneys) through prolonged or repeated exposure.

Aspiration hazard : Not classified
Additional information : Based on available data, the classification criteria are not met

11.2. Information on other hazards

Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : 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 substance(s) are 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 at a concentration equal to or greater than 0,1 %

Other information

Potential adverse human health effects and symptoms : Not expected to present a significant hazard under anticipated conditions of normal use

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) : Toxic to aquatic life with long lasting effects.

2-methylpentane-2,4-diol (107-41-5)	
LC50 fish	8510 mg/l - 96 Hours (Gambusia affinis)
EC50 Daphnia	2800 mg/l 48 Hours (Ceriodaphnia sp.)
NOEC chronic algae	429 mg/l - 72 Hours (Raphidocelis subcapitata) (OECD 201 method)

Isopropanol (67-63-0)	
LC50 fish	9640 mg/l
EC50 Daphnia	> 10000 mg/l - 48 Hours (Daphnia magna)
NOEC chronic algae	1800 mg/l - 7 days (Scenedesmus quadricauda)

Biphenyl-2-ol (90-43-7)	
LC50 fish	4.5 mg/l - 96 Hours (Danio rerio)
EC50 Daphnia	1.5 mg/l
EC50 72h - Algae [1]	5 mg/l
ErC50 algae	3.57 mg/l - 72 Hours (Pseudokirchneriella subcapitata, Growth rate), (OECD 201 method)
NOEC (chronic)	0.009 mg/l - 21 days (Daphnia magna, reproduction), (OECD 211 method)
NOEC chronic fish	0.036 mg/l - 21 days (Pimephales promelas, reproduction)
NOEC chronic algae	0.468 mg/l - 72 Hours (Pseudokirchneriella subcapitata, Growth rate), (OECD 201 method)

Clorofene (120-32-1)	
LC50 fish	1.5 mg/l - 96 Hours (Danio rerio)
EC50 Daphnia	0.655 mg/l - 48 Hours (Daphnia magna)(OECD 202 method)
EC50 - Other aquatic organisms [1]	0.089 mg/l - 96 Hours (Americamysis bahia)(EPA OPPTS 850.1035)
ErC50 algae	0.435 mg/l - 72 Hours (Navicula pelliculosa, Growth rate)(OCSPP 850.4500)
ErC50 other aquatic plants	0.155 mg/l - 96 Hours (Skeletonema costatum, Growth rate)((OECD 201 method)
NOEC chronic fish	0.0095 mg/l - 30 days (Danio rerio) (OECD 210 method)
NOEC chronic crustacea	0.0067 mg/l - 21 days (Daphnia magna, reproduction)

2,2',2''-nitrilotriethanol (102-71-6)	
LC50 fish	11800 mg/l
EC50 Daphnia	609.98 mg/l
EC50 72h - Algae [1]	216 mg/l - 72 Hours (Desmodesmus subspicatus, Growth rate)(DIN 38412, 9)
ErC50 algae	169 mg/l
NOEC (acute)	16 mg/l 21 days - Daphnia magna
NOEC chronic crustacea	16 mg/l - 21 days (Daphnia magna)

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
LC50 fish	> 10000 mg/l 96h (OECD 203 method) - Cyprinodon variegatus
EC50 Daphnia	> 1000 mg/l 48h - Daphnia magna
EC50 96h - Algae [1]	> 1000 Raphidocelis subcapitata

12.2. Persistence and degradability

DEC-CYCLE® II (0.4 - 0.8% Dilution after mixing)	
Persistence and degradability	Not established.

2-methylpentane-2,4-diol (107-41-5)	
Persistence and degradability	Readily biodegradable.
Biodegradation	81 % 28d (OECD 301F method)

Isopropanol (67-63-0)	
Persistence and degradability	Readily biodegradable.
Biochemical oxygen demand (BOD)	1.19 g O2/g substance - 5 days (Test method EU C.5)
Chemical oxygen demand (COD)	2.23 g O2/g substance (Test method EU C.6)
Biodegradation	53 % - 5 days

Biphenyl-2-ol (90-43-7)	
Persistence and degradability	Readily biodegradable.
Biodegradation	70.8 – 75.7 % - 28 days (OECD 301B method)

Clorofene (120-32-1)	
Persistence and degradability	Inherently biodegradable, Not readily biodegradable.

2,2',2''-nitrilotriethanol (102-71-6)	
Persistence and degradability	Rapidly degradable.
Additional information	(marine water) :. Not readily biodegradable

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
Persistence and degradability	Not readily biodegradable.
Chemical oxygen demand (COD)	8 % ThOD 28d (OECD 301D method)

12.3. Bioaccumulative potential

DEC-CYCLE® II (0.4 - 0.8% Dilution after mixing)	
Bioaccumulative potential	No information available.

2-methylpentane-2,4-diol (107-41-5)	
Log Pow	0.58 Source: HSDB
Log Kow	≤ 3
Bioaccumulative potential	Low bioaccumulation potential.

Isopropanol (67-63-0)	
Log Pow	0.05 (25°C)
Bioaccumulative potential	Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.

Biphenyl-2-ol (90-43-7)	
BCF - Fish [1]	21.7 (Danio rerio)
Log Pow	3.09
Bioaccumulative potential	Not expected to bioaccumulate.

Clorofene (120-32-1)	
Log Pow	4.18
Bioaccumulative potential	No significant bioaccumulation potential (OECD 305).

2,2',2''-nitrilotriethanol (102-71-6)	
BCF - Fish [1]	3.9 l/kg (OECD 305 method) - Cyprinus carpio
Log Pow	-1.59
Bioaccumulative potential	Bioaccumulation unlikely.

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
Log Pow	2
Bioaccumulative potential	Not expected to bioaccumulate.

12.4. Mobility in soil

DEC-CYCLE® II (0.4 - 0.8% Dilution after mixing)	
Ecology - soil	Miscible with water.

2-methylpentane-2,4-diol (107-41-5)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.001
Ecology - soil	Not expected to adsorb to soil.

Isopropanol (67-63-0)	
Ecology - soil	Miscible with water.

Biphenyl-2-ol (90-43-7)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.4 – 2.6 (20 °C)

Clorofene (120-32-1)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.43 (OECD 121 method)

2,2',2''-nitrilotriethanol (102-71-6)	
Ecology - soil	Expected to adsorb to soil.

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
Mobility in soil	1064

12.5. Results of PBT and vPvB assessment

DEC-CYCLE® II (0.4 - 0.8% Dilution after mixing)
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	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	2-methylpentane-2,4-diol (107-41-5), Isopropanol (67-63-0), Biphenyl-2-ol (90-43-7)(1), Clorofene (120-32-1)(1), 2,2',2''-nitrilotriethanol (102-71-6)(1)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	2-methylpentane-2,4-diol (107-41-5), Isopropanol (67-63-0), Biphenyl-2-ol (90-43-7)(1), Clorofene (120-32-1)(1), 2,2',2''-nitrilotriethanol (102-71-6)(1)

(1) Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : 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 substance(s) are 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 at a concentration equal to or greater than 0,1 %.

12.7. Other adverse effects

DEC-CYCLE® II (0.4 - 0.8% Dilution after mixing)	
Other information	Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

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

14.1. UN number or ID number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name : Not regulated
Proper Shipping Name (IMDG) : Not regulated
Proper Shipping Name (IATA) : Not regulated
Proper Shipping Name (ADN) : Not regulated
Proper Shipping Name (RID) : Not regulated

14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : Not regulated

IMDG
Transport hazard class(es) (IMDG) : Not regulated

IATA
Transport hazard class(es) (IATA) : Not regulated

ADN
Transport hazard class(es) (ADN) : Not regulated

RID
Transport hazard class(es) (RID) : Not regulated

14.4. Packing group

Packing group : Not regulated
Packing group (IMDG) : Not regulated
Packing group (IATA) : Not regulated
Packing group (ADN) : Not regulated
Packing group (RID) : Not regulated

14.5. Environmental hazards

Other information : No supplementary information available

14.6. Special precautions for user

Special transport precautions : DO NOT TRANSPORT - This dilution of product is an on-site dilution in water by the user according to product label directions. It is not supplied nor transported in commerce at this dilution, This dilution is classified as dangerous for transport. Details of this transport classification have not been provided, as the diluted form of this product shall not be transported, See SDS DCY-98-01-EU for hazards of undiluted product.

Overland transport
Not regulated

Transport by sea
Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	**Applicable on**	**Entry title or description**
3.	DEC-CYCLE® II (0.4 - 0.8% Dilution after mixing) ; 2-methylpentane-2,4-diol ; Isopropanol ; Benzenesulfonic acid, C10-16-alkyl derivs.	Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008
3(a)	Isopropanol	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
3(b)	2-methylpentane-2,4-diol ; Isopropanol ; Benzenesulfonic acid, C10-16-alkyl derivs.	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	DEC-CYCLE® II (0.4 - 0.8% Dilution after mixing)	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1
40.	Isopropanol	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Substances 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: Chlorophene (120-32-1)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items: Triethanolamine (102-71-6).

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

National regulations

Germany

Air Quality Control (TA Luft)					
Category	Class	Applicable on	Local name	Max. mass flow	Max. mass concentration

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes		
Section	**Changed item**	**Comments**
1	Relevant identified uses of the substance or mixture and uses advised against	**Modified**
2	Hazards identification	**Modified**
3	Composition/information on ingredients	**Modified**
4	First aid measures	**Modified**
5	Fire fighting measures	**Modified**
6	Accidental release measures	**Modified**
7	Handling and storage	**Modified**
8	Exposure controls/personal protection	**Modified**
10	Stability and reactivity	**Modified**
11	Toxicological information	**Modified**
12.	Ecological information	**Modified**
13	Waste disposal recommendations	**Modified**
16	Other information	**Modified**

Abbreviations and acronyms:	
	ADR (Accord relatif au transport international des marchandises dangereuses par route)
	ATE (Acute Toxicity Estimate)
	CAS (Chemical Abstracts Service) number
	CLP (Classification, Labeling and Packaging)

Abbreviations and acronyms:	
	DNEL (Derived No Effect Level)
	EC (European Community)
	EC50 (Effective Concentration 50%)
	EN (European Norm)
	IARC (International Agency for Research on Cancer)
	IATA (International Air Transport Association)
	IMDG (International Maritime Dangerous Goods Code)
	IMO (International Maritime Organisation)
	LC50 (Lethal Concentration 50%)
	LD50 (Lethal Dose 50%)
	MAC (Maximal Allowed Concentration)
	OECD (Organisation for Economic Co-operation and Development)
	PBT (Persistent, Bioaccumulative and Toxic)
	PNEC (Predicted No Effect Concentration)
	REACH (Registration, Evaluation and Authorisation of CHemicals)
	RID (Règlement concernant le transport international ferroviaire de marchandises)
	STEL (Short Term Exposure Limit)
	TWA (Time Weighted Average)
	UNxxxx (Number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods)
	vPvB (very Persistent and very Bioaccumulative)

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. ECHA (European Chemicals Agency), http://echa.europa.eu/.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), 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 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Carc. 2	Carcinogenicity, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2

Full text of H- and EUH-statements:	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis
H225	Highly 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.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H361d	Suspected of damaging the unborn child.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
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.

Safety Data Sheet (SDS), EU

This SDS has been translated into the official language of the country/region in which the product is to be placed on the market. Where no official translation exists, the regulatory text is reported in English, as it appears in the relevant regulatory text.