

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

1.1. Product identifier

Product form : Mixture
Trade name : MLS Injector Cleaning Solution
Product code : 3005
Type of product : Food Safety -- [Food Safety]
Part Number(s) : 3005|700002028

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Scientific research and development

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Neogen Corporation
620 Leshner Place
48912 Lansing – Michigan
United States of America
T 800.234.5333
sds@neogen.com - <https://www.neogen.com/>

1.4. Emergency telephone number

Emergency number : 24 hours:
Medical: 1-800-498-5743 (U.S. and Canada) or 1-651-523-0318 (international)
Spill/CHEMTREC: 1-800-424-9300 (U.S. and Canada) or 1-703-527-3887 (international)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to GB CLP (SI 2019:720 as amended)

Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412
Full text of 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 GB CLP (SI 2019:720 as amended)

Hazard statements (GHS UK) : H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (GHS UK) : P273 - Avoid release to the environment.
P501 - Dispose of contents and container to a hazardous or special waste collection point, in accordance with local, regional, national and international regulations.

2.3. Other hazards

Results of PBT and vPvB assessment

Component

Substance(s) not meeting the PBT criteria of UK REACH regulation, in accordance with Annex XIII	Chlorhexidine digluconate (18472-51-0), Tertiary-octylphenoxypoly(ethoxyethanol) (9036-19-5)
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MLS Injector Cleaning Solution

Safety Data Sheet

According REACH Regulation 1907/2006 as retained in UK law by UK REACH SI 2019 No. 758 as amended

Component

Substance(s) not meeting the vPvB criteria of UK REACH regulation, in accordance with Annex XIII	Chlorhexidine digluconate (18472-51-0), Tertiary-octylphenoxypoly(ethoxyethanol) (9036-19-5)
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Results of Endocrine Disruptor assessment

Component

Substance(s) not considered as endocrine disrupting. They are not included in the list established in accordance with Article 59(1) of UK REACH for having endocrine disrupting properties, nor identified as having endocrine disrupting properties in accordance with the criteria set out in GB BPR and GB PPP	Tertiary-octylphenoxypoly(ethoxyethanol)(9036-19-5), Chlorhexidine digluconate(18472-51-0)
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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to GB CLP (SI 2019:720 as amended)
Tertiary-octylphenoxypoly(ethoxyethanol) substance listed on UK REACH candidate (Polyethylene glycol mono(tert-octylph-enyl) ether9036-19-5)	CAS-No.: 9036-19-5	0.1 – 0.5	Acute Tox. 4 (Oral), H302 (ATE=1700 mg/kg bodyweight) Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Chlorhexidine digluconate	CAS-No.: 18472-51-0 EC-No.: 242-354-0	< 0.1	Acute Tox. 4 (Oral), H302 (ATE=2000 mg/kg bodyweight) Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

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

SECTION 4: First aid measures

4.1. Description of first aid measures

No additional information available

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

No additional information available

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

No additional information available

5.2. Special hazards arising from the substance or mixture

No additional information available

MLS Injector Cleaning Solution

Safety Data Sheet

According REACH Regulation 1907/2006 as retained in UK law by UK REACH SI 2019 No. 758 as amended

5.3. Advice for firefighters

No additional information available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

No additional information available

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

No additional information available

7.2. Conditions for safe storage, including any incompatibilities

No additional information available

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

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

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

MLS Injector Cleaning Solution

Safety Data Sheet

According REACH Regulation 1907/2006 as retained in UK law by UK REACH SI 2019 No. 758 as amended

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

No additional information available

8.2.2.2. Skin protection

No additional information available

8.2.2.3. Respiratory protection

No additional information available

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Colorless liquid.
Colour	: Colourless.
Odour	: Odourless.
Odour threshold	: Not available
pH	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flash point	: Not available
Flammability	: Not available
Explosive limits	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Relative vapour density at 20°C	: Not available
Relative density	: Not available
Density	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
Viscosity, kinematic	: Not available
Explosive properties	: Not available

9.2. Other information

Particle characteristics : Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

MLS Injector Cleaning Solution

Safety Data Sheet

According REACH Regulation 1907/2006 as retained in UK law by UK REACH SI 2019 No. 758 as amended

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

Chlorhexidine digluconate (18472-51-0)

LD50 oral rat	2000 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 5000 mg/kg bodyweight (US EPA, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))

Tertiary-octylphenoxypoly(ethoxyethanol) (9036-19-5)

LD50 oral rat	4190 mg/kg (Rat, Oral)
LD50 oral	1700 mg/kg
LD50 dermal rabbit	> 3000 mg/kg (Rabbit, Dermal)

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)

Chlorhexidine digluconate (18472-51-0)

pH	5.91 (200 g/l, 20 °C, DIN 38412: German standard methods for the examination of water, waste water and sludge)
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Tertiary-octylphenoxypoly(ethoxyethanol) (9036-19-5)

pH	6 – 7.5 (1 %)
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Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)

Chlorhexidine digluconate (18472-51-0)

pH	5.91 (200 g/l, 20 °C, DIN 38412: German standard methods for the examination of water, waste water and sludge)
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Tertiary-octylphenoxypoly(ethoxyethanol) (9036-19-5)

pH	6 – 7.5 (1 %)
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Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

Chlorhexidine digluconate (18472-51-0)

Viscosity, kinematic	2.51 mm ² /s (20 °C, Solution, 20 %, OECD 114: Viscosity of Liquids)
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MLS Injector Cleaning Solution

Safety Data Sheet

According REACH Regulation 1907/2006 as retained in UK law by UK REACH SI 2019 No. 758 as amended

Tertiary-octylphenoxypoly(ethoxyethanol) (9036-19-5)

Viscosity, kinematic	371.429 mm ² /s
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Other information

Endocrine disrupting properties

No additional information available

Other information

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified (Based on available data, the classification criteria are not met)

Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

Chlorhexidine digluconate (18472-51-0)

LC50 - Fish [1]	2.08 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Brachydanio rerio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	0.087 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
EC50 72h - Algae [1]	0.0187 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0.0101 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	276.261 mg/l Source: ECOSAR
ErC50 algae	0.081 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
NOEC chronic fish	0.065 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '28 d'

Tertiary-octylphenoxypoly(ethoxyethanol) (9036-19-5)

LC50 - Fish [1]	7.2 mg/l
EC50 96h - Algae [1]	0.21 mg/l
ErC50 algae	0.21 mg/l

12.2. Persistence and degradability

MLS Injector Cleaning Solution

Persistence and degradability	Not rapidly degradable
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Chlorhexidine digluconate (18472-51-0)

Persistence and degradability	Readily biodegradable in water.
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Tertiary-octylphenoxypoly(ethoxyethanol) (9036-19-5)

Persistence and degradability	Biodegradability in water: no data available.
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MLS Injector Cleaning Solution

Safety Data Sheet

According REACH Regulation 1907/2006 as retained in UK law by UK REACH SI 2019 No. 758 as amended

12.3. Bioaccumulative potential

Chlorhexidine digluconate (18472-51-0)

BCF - Fish [1]	40 – 42 (3 day(s), Leuciscus melanotus, Static system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	-1.81 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20.7 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Tertiary-octylphenoxypoly(ethoxyethanol) (9036-19-5)

Bioaccumulative potential	No bioaccumulation data available.
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12.4. Mobility in soil

Chlorhexidine digluconate (18472-51-0)

Surface tension	50 mN/m (room temperature, 0.59 vol %)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.86 (log Koc, Calculated value)
Ecology - soil	Adsorbs into the soil.

12.5. Results of PBT and vPvB assessment

Component

Chlorhexidine digluconate (18472-51-0)	This substance does not meet the PBT criteria of UK REACH regulation, annex XIII This substance does not meet the vPvB criteria of UK REACH regulation, annex XIII
Tertiary-octylphenoxypoly(ethoxyethanol) (9036-19-5)	This substance does not meet the PBT criteria of UK REACH regulation, annex XIII This substance does not meet the vPvB criteria of UK REACH regulation, annex XIII

12.6. Other adverse effects

Ozone : Not classified (Based on available data, the classification criteria are not met)

SECTION 13: Disposal considerations

13.1. Waste treatment methods

No additional information available

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated for transport				
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
Transport document description				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

MLS Injector Cleaning Solution

Safety Data Sheet

According REACH Regulation 1907/2006 as retained in UK law by UK REACH SI 2019 No. 758 as amended

ADR	IMDG	IATA	ADN	RID
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	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

Inland waterway transport

Not regulated

Rail 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. National regulations

UK REACH Annex XVII (Restriction List)

This product contains no substance(s) listed on UK REACH Annex XVII (Restriction List) equal to or above the level of SDS disclosure

UK REACH Annex XIV (Authorisation List)

This product contains no substance(s) listed on UK REACH Annex XIV (Authorisation List) equal to or above the 0.1% level of disclosure

UK REACH Candidate List (SVHC)

This product contains substance(s) listed on the UK REACH Candidate list (SVHC) above the 0.1% level of disclosure Polyethylene glycol mono(tert-octylph-enyl) ether9036-19-5 - Endocrine disrupting properties (Article 57(f) - environment)

GB PIC regulation (Prior Informed Consent)

This product contains no substance(s) listed on the GB PIC List equal to or above the level of SDS disclosure

POP Regulation (Persistent Organic Pollutants)

This product contains no substance(s) listed on the GB POP List equal to or above the level of SDS disclosure

Ozone Regulation (S.I. No. 168 of 2015)

This product contains no substance(s) listed on the GB Ozone Depletion List equal to or above the level of SDS disclosure

Control of Poisons and Explosives Precursors Act

This product contains no substance(s) listed as a reportable poison on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure

This product contains no substance(s) listed as a regulated poison on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure

This product contains no substance(s) listed as a reportable explosive precursor on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure

This substance is not listed as a regulated poison on the Control of Poisons and Explosives Precursors Regulations

MLS Injector Cleaning Solution

Safety Data Sheet

According REACH Regulation 1907/2006 as retained in UK law by UK REACH SI 2019 No. 758 as amended

Drug Precursors Regulation (EC 273/2004)

This product contains no substance(s) listed on the GB Drug Precursors List equal to or above the level of SDS disclosure

15.1.2. Other Information

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

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
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H302	Harmful if swallowed.
H318	Causes serious eye damage.
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.

Safety Data Sheet (SDS), UK

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.