



Chain & Engine Degreaser Spray

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Date of issue: 23-10-2018 Revision date: 25-2-2019 Supersedes: 25-1-2019 Version: 1.3

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

1.1. Product identifier

Product form : Mixture
Trade name : Chain & Engine Degreaser Spray
Product code : PW.10.00
Type of product : Detergent
Vaporizer : Aerosol
Product group : Trade product

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

1.2.1. Relevant identified uses

Intended for general public
Main use category : Industrial use, Professional use, Consumer use
Use of the substance/mixture : Washing and cleaning products (including solvent based products)

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Putoline Oil
Dollegoorweg 15
7602 EC Almelo - Netherlands
T 0031 (0)546 81 81 65
vib@putoline.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Llandough Hospital	Penarth CF64 2XX Cardiff	0344 892 0111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Aerosol, Category 1 H222;H229
Aspiration hazard, Category 1 H304
Hazardous to the aquatic environment — Chronic Hazard, Category 4 H413
Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Pressurised container: May burst if heated. Extremely flammable aerosol. May be fatal if swallowed and enters airways. May cause long lasting harmful effects to aquatic life.

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H222 - Extremely flammable aerosol.
H229 - Pressurised container: May burst if heated.
H413 - May cause long lasting harmful effects to aquatic life.

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Precautionary statements (CLP)	: P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. 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. P301+P310+P331 - IF SWALLOWED: Immediately call a doctor. Do NOT induce vomiting. P405 - Store locked up. P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH-statements	: EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

No additional information available

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]
Alkanes, C11-15-iso-	(CAS-No.) 90622-58-5 (EC-No.) 292-460-6	25 - 50	Flam. Liq. 3, H226 Asp. Tox. 1, H304
Alkanes (C11-C12), iso-alkanes, <2% aromates	(CAS-No.) 90622-57-4 (EC-No.) 918-167-1 (REACH-no) 01-2119472146-39	25 - 50	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
butane (containing < 0,1% butadiene (203-450-8)) substance with national workplace exposure limit(s) (GB)	(CAS-No.) 106-97-8 (EC-No.) 203-448-7 (EC Index-No.) 601-004-00-0 (REACH-no) 01-2119474691-32	10 - 25	Flam. Gas 1, H220 Press. Gas (Comp.), H280
Propane substance with a Community workplace exposure limit	(CAS-No.) 74-98-6 (EC-No.) 200-827-9 (EC Index-No.) 601-003-00-5 (REACH-no) 01-2119486944-21	10 - 25	Flam. Gas 1, H220 Press. Gas (Comp.), H280
Isononylphenol, ethoxylated substance listed as REACH Candidate (4-Nonylphenol, branched and linear, ethoxylated [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]) substance listed in REACH Annex XIV (4-Nonylphenol, branched and linear, ethoxylated (substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof))	(CAS-No.) 37205-87-1 (EC-No.) 609-346-2	1 - 2,5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately. Call a poison center or a doctor if you feel unwell. Get medical advice/attention if you feel unwell. IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Do not induce vomiting. Call a physician immediately. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact : Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after ingestion : Risk of lung oedema.

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 : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Extremely flammable aerosol.
Explosion hazard : Pressurised container: May burst if heated.
Hazardous decomposition products in case of fire : Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked up. Store in a well-ventilated place. Keep cool.
Storage temperature : 5 - 40 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

butane (containing < 0,1% butadiene (203-450-8)) (106-97-8)

Germany	TRGS 910 Acceptable concentration notes	
United Kingdom	Local name	Butane
United Kingdom	WEL TWA (mg/m ³)	1450 mg/m ³
United Kingdom	WEL TWA (ppm)	600 ppm
United Kingdom	WEL STEL (mg/m ³)	1810 mg/m ³
United Kingdom	WEL STEL (ppm)	750 ppm

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butane (containing < 0,1% butadiene (203-450-8)) (106-97-8)		
United Kingdom	Remark (WEL)	Carc (Capable of causing cancer and/or heritable genetic damage, only applies if Butane contains more than 0.1% of buta-1,3-diene)
United Kingdom	Regulatory reference	EH40/2005 (Third edition, 2018). HSE

Propane (74-98-6)		
EU	IOELV TWA (ppm)	1000 ppm
Germany	TRGS 910 Acceptable concentration notes	

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:					
Protective gloves					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR), Neoprene rubber (HNBR)	5 (> 240 minutes), 6 (> 480 minutes)	>=0,35		EN ISO 374

Eye protection:			
Safety glasses			
Type	Use	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colorless to Amber.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: -44 °C
Flash point	: -97 °C
Auto-ignition temperature	: > 200 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Extremely flammable aerosol.
Vapour pressure	: 8300 hPa at 20 °C
Relative vapour density at 20 °C	: No data available

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Relative density	: No data available
Density	: 0,661 g/cm ³ at 20 °C
Solubility	: Water: Insoluble / Slightly miscible
Log Pow	: No data available
Viscosity, kinematic	: < 20,5 mm ² /s (40 °C) - ASTM D7279
Viscosity, dynamic	: No data available
Explosive properties	: Pressurised container: May burst if heated.
Oxidising properties	: No data available
Lower explosive limit (LEL)	: 0,6 vol %
Upper explosive limit (UEL)	: 10,9 vol %

9.2. Other information

VOC content	: 649,1 g/l
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SECTION 10: Stability and reactivity

10.1. Reactivity

Extremely flammable aerosol. Pressurised container: May burst if heated.

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

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

Alkanes, C11-15-iso- (90622-58-5)

LD50 oral	> 10000 mg/kg bodyweight
LD50 dermal	> 3160 mg/kg bodyweight
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.

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Vaporizer	Aerosol
Viscosity, kinematic	< 20,5 mm ² /s (40 °C) - ASTM D7279

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: May cause long lasting harmful effects to aquatic life. Before neutralisation, the product may represent a danger to aquatic organisms.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: May cause long lasting harmful effects to aquatic life.

Alkanes, C11-15-iso- (90622-58-5)

LC50 fish 1	> 2500 mg/l
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EC50 other aquatic organisms 1	> 100 mg/l waterflea
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12.2. Persistence and degradability

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Persistence and degradability	Biodegradable.
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12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Component

Isononylphenol, ethoxylated (37205-87-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
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12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
European List of Waste (LoW) code	: 20 01 13* - solvents 15 01 04 - metallic packaging

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 1950	UN 1950	UN 1950	UN 1950	UN 1950
14.2. UN proper shipping name				
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS	AEROSOLS
Transport document description				
UN 1950 AEROSOLS, 2.1, (D)	UN 1950 AEROSOLS, 2.1 (-97°C c.c.)	UN 1950 Aerosols, flammable, 2.1	UN 1950 AEROSOLS, 2.1	UN 1950 AEROSOLS, 2.1
14.3. Transport hazard class(es)				
2.1	2.1	2.1	2.1	2.1
				
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No

No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: 5F
Special provisions (ADR)	: 190, 327, 344, 625
Limited quantities (ADR)	: 1I
Excepted quantities (ADR)	: E0
Packing instructions (ADR)	: P207
Special packing provisions (ADR)	: PP87, RR6, L2
Mixed packing provisions (ADR)	: MP9

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Transport category (ADR)	: 2
Special provisions for carriage - Packages (ADR)	: V14
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV9, CV12
Special provisions for carriage - Operation (ADR)	: S2
Tunnel restriction code (ADR)	: D

Transport by sea

Special provisions (IMDG)	: 63, 190, 277, 327, 344, 381, 959
Packing instructions (IMDG)	: P207, LP200
Special packing provisions (IMDG)	: PP87, L2
EmS-No. (Fire)	: F-D
EmS-No. (Spillage)	: S-U
Stowage category (IMDG)	: None
Stowage and handling (IMDG)	: SW1, SW22
Segregation (IMDG)	: SG69
Flash point (IMDG)	: -97°C c.c.

Air transport

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Y203
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 203
PCA max net quantity (IATA)	: 75kg
CAO packing instructions (IATA)	: 203
CAO max net quantity (IATA)	: 150kg
Special provisions (IATA)	: A145, A167, A802
ERG code (IATA)	: 10L

Inland waterway transport

Classification code (ADN)	: 5F
Special provisions (ADN)	: 190, 327, 344, 625
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E0
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01, VE04
Number of blue cones/lights (ADN)	: 1

Rail transport

Classification code (RID)	: 5F
Special provisions (RID)	: 190, 327, 344, 625
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E0
Packing instructions (RID)	: P207, LP200
Special packing provisions (RID)	: PP87, RR6, L2
Mixed packing provisions (RID)	: MP9
Transport category (RID)	: 2
Special provisions for carriage – Packages (RID)	: W14
Special provisions for carriage - Loading, unloading and handling (RID)	: CW9, CW12
Colis express (express parcels) (RID)	: CE2
Hazard identification number (RID)	: 23

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

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Contains a substance on the REACH candidate list in concentration $\geq 0.1\%$ or with a lower specific limit: 4-Nonylphenol, branched and linear, ethoxylated [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof] (EC 609-346-2, CAS 37205-87-1)

Contains REACH Annex XIV substances:

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: Nonylphenol ethoxylates (C₂H₄O)_nC₁₅H₂₄O (37205-87-1) (CAS Number).

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

VOC content : 649,1 g/l

Detergent Regulation : Labelling of contents (648/2004/EC):	
Component	%
aliphatic hydrocarbons	$\geq 30\%$
non-ionic surfactants	$< 5\%$

Directive 2012/18/EU (SEVESO III)

Seveso III Part I (Categories of dangerous substances)	Qualifying quantity (tonnes)	
	Lower-tier	Upper-tier
P3a FLAMMABLE AEROSOLS 'Flammable' aerosols Category 1 or 2, containing flammable gases Category 1 or 2 or flammable liquids Category 1	150	500

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

Indication of changes:			
Section	Changed item	Change	Comments
13.1	European List of Waste (LoW) code	Added	

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LD50	Median lethal dose
LC50	Median lethal concentration
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development

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PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant
TLM	Median Tolerance Limit
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Gas 1	Flammable gases, Category 1
Flam. Liq. 3	Flammable liquids, Category 3
Press. Gas (Comp.)	Gases under pressure : Compressed gas
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H226	Flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
EUH066	Repeated exposure may cause skin dryness or cracking.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product