

Printing date 09.07.2018

Version number 1.0

Revision: 09.07.2018

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

- · 1.1 Product identifier
- · Trade name: CHAINLUBE ADVENTURE SPRAY
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · **Application of the substance / the mixture**Only for proper handling.
 Chain lubricant
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

BUCHER AG LANGENTHAL MOTOREX-Schmiertechnik Bern-Zürich-Strasse 31 CH-4901 Langenthal Telefon +41 (0)62 919 75 75

· Only representative in EU:

MOTOREX Deutschland AG, Bismarckstrasse 28, D-69198 Schriesheim

- · Further information obtainable from: msds@motorex.com
- · 1.4 Emergency telephone number:

In case of a medical emergency following exposure to a chemical, the public should call NHS Direct in England or Wales 0845 46 47 or NHS 24 in Scotland 08454 24 24 24 (UK only).

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Aerosol 1

H222-H229 Extremely flammable aerosol. Pressurised container: May

burst if heated.

Skin Irrit. 2

H315

Causes skin irritation.

Asp. Tox. 1

H304

May be fatal if swallowed and enters airways.

Aquatic Chronic 3 H412

Harmful to aquatic life with long lasting effects.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms





GHS02 GHS07

- · Signal word Danger
- · Hazard-determining components of labelling:

Butene, polymer with 2-methyl-1-propene

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Hydrocarbons C6-C7, n-alkanes, iso-alkanes, cyclenes, <5% n-hexane

Hydrocarbons, C15-C20 n-alkanes, isoalkanes, cycloalkanes, <0.03% aromatics

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· Hazard statements

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

Causes skin irritation.

H412

Harmful to aquatic life with long lasting effects.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

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.

Do not pierce or burn, even after use. P251 Wash thoroughly after handling. P264 P273 Avoid release to the environment.

Wear protective gloves. P280

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

P362+P364 Take off contaminated clothing and wash it before reuse.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P501 Dispose of contents/container in accordance with local/regional/national/ international regulations.

· Additional information:

Buildup of explosive mixtures possible without sufficient ventilation.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:		
1	butane Flam. Gas 1, H220; Press. Gas (Comp.), H280	10-25%
CAS: 9044-17-1 Polymer	Butene, polymer with 2-methyl-1-propene Asp. Tox. 1, H304	10-25%
Reg.nr.: 01-2119473851-33	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H336	10-25%
Reg.nr.: 01-2119475514-35	Hydrocarbons C6-C7, n-alkanes, iso-alkanes, cyclenes, <5% n-hexane Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	10-25%
	propane Flam. Gas 1, H220; Press. Gas (Comp.), H280	2.5-7.5%

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· Additional information:

Note L: The classification as carcinogen does not apply because the mixture (or substance) contains less than 3% dimethyl sulfoxide extract (DMSO), measured according to IP 346. For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- · After inhalation:

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Remove residues with soap and water.

Immediately wash with water and soap and rinse thoroughly.

- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- Protective equipment: No special measures required.

SECTION 6: Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures
 Wear protective equipment. Keep unprotected persons away.
- · 6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling No special precautions are necessary if used correctly.

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· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use. Do not spray onto a naked flame or any incandescent material.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles:

 Observe official regulations on storing packagings with pressurised containers.
- Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep container tightly sealed.
- · Storage class: 2 B
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters

106-9	17-8 butane
WEL	Short-term value: 1810 mg/m³, 750 ppm Long-term value: 1450 mg/m³, 600 ppm Carc (if more than 0.1% of buta-1.3-diene)

Car	c (if more than 0.1% of buta-1.3-diene)	
·DNELs		
Hydrocar	bons, C7-C9, n-alkanes, isoalkanes, c	yclics
Oral	DNEL/general population/Systemic effects/Long-term	699 mg/kg/24h (consumer)
Dermal	DNEL / Workers / Systemic effects / Long-term	773 mg/kg/24h (worker)
	DNEL/general population/Systemic effects/Long-term	699 mg/kg/24h (consumer)
Inhalative	DNEL / Workers / Systemic effects / Long-term	2,035 mg/m3 (worker)
	DNEL/general population/Systemic effects/Long-term	608 mg/m3 (consumer)
Hydrocar	bons C6-C7, n-alkanes, iso-alkanes, c	yclenes, <5% n-hexane
Oral	DNEL/general population/Systemic effects/Long-term	699 mg/kg/24h (consumer)
Dermal	DNEL / Workers / Systemic effects / Long-term	773 mg/kg/24h (worker)
	DNEL/general population/Systemic effects/Long-term	699 mg/kg/24h (consumer)
Inhalative	DNEL / Workers / Systemic effects / Long-term	2,035 mg/m3 (worker)
	DNEL/general population/Systemic effects/Long-term	608 mg/m3 (consumer)

· Additional information: The lists valid during the making were used as basis.

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· 8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

Respiratory protection:

Not necessary if room is well-ventilated.

Respiratory protection if formation of aerosol or mist: use mask with filter type A2, A2/P2 or ABEK.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

Protective gloves to EN374, resistant to oil in use. Standard EN 374 Level 3 control G1 The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Fluorocarbon rubber (Viton)

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.4 mm

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the mixture of chemicals mentioned below the penetration time has to be at least 60 minutes (Permeation according to EN 374 Part 3: Level 1).

- · Eve protection: Not required.
- · Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Colour: Liquefied gas Beige

· Odour:

Solvent-like

· Odour threshold:

Not determined.

· pH-value:

Not determined.

· Change in condition

Melting point/freezing point:

Undetermined.

Initial boiling point and boiling range: Not applicable, as aerosol.

· Flash point:

<-20 °C

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· Flammability (solid, gas):	Not applicable.
Ignition temperature:	>230 °C (DIN 51794)
Decomposition temperature:	Not determined.
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Explosion limits: Lower: Upper:	0.9 Vol % 8.5 Vol %
Vapour pressure at 20 °C:	2,100 hPa
Density at 20 °C: Relative density Vapour density Evaporation rate	0.756 g/cm³ (ASTM D 4052) Not determined. Not determined. Not applicable.
Solubility in / Miscibility with water:	Not miscible or difficult to mix.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity: Dynamic: Kinematic: VOC (EC)	Not determined. < 50 mm²/s @40 °C (DIN 51562-1) 50.00 %
Solids content: 9.2 Other information	0.0 % No further relevant information available.

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:
 No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50	values relevan	t for classification:	
106-97-8	butane		
Inhalative	LC50 / 15 min	1,442.738-1.443 mg/l (rat)	
	LC50 / 15 min	800,000 ppm (rat)	
	LC50 / 2h	1,237 mg/l (mouse)	
	LC50 / 2h	520,400-539,600 ppm (mouse)	
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	LC50 / 4h	658 mg/l (rat)	1 2
	NOAEC	4,000-16,000 ppm (rat)	
	NOAEC	7.2-21.4 mg/l (rat)	
	LOAEC	21.6 mg/l (rat)	
	LOAEC	12,000 ppm (rat)	
Hydrocar	bons, C7-C9, r	-alkanes, isoalkanes, cyclics	
Oral	LD50	8 ml/kg (rat)	
Dermal	LD50	4 ml/kg (rat)	
	LD50	2,800-3,100 mg/kg (rat)	
Inhalative	LC50 / 4h	23.3 mg/l (rat)	
	NOAEC	5.8-24.3 mg/l (rat)	
Hydrocar	bons C6-C7, n	-alkanes, iso-alkanes, cyclenes, <5% n-hexane	
Oral	LD50	8 ml/kg (rat)	
Dermal	LD50	4 ml/kg (rat)	
	LD50	2,800-3,100 mg/kg (rat)	
Inhalative	LC50 / 4h	25.2 mg/l (rat)	
	NOAEC	8.117-24.3 mg/l (rat)	
74-98-6 pi	ropane		
Inhalative	LC50 / 15 min	1,442.738-1.443 mg/l (rat)	
	LC50 / 15 min	800,000 ppm (rat)	
	LC50 / 2h	1,237 mg/l (mouse)	
	LC50 / 2h	520,400-539,600 ppm (mouse)	
	NOAEC	4,000-16,000 ppm (rat)	
	NOAEC	7.214-21.394 mg/l (rat)	
	LOAEC	21.64 mg/l (rat)	
	LOAEC	12,000 ppm (rat)	

- · Primary irritant effect:
- Skin corrosion/irritation

Causes skin irritation.

· Serious eye damage/irritation

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

- · Respiratory or skin sensitisation
- Based on available data, the classification criteria are not met.
- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard

May be fatal if swallowed and enters airways.

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12.1 To	xicity
	toxicity:
106-97-8	8 butane
LC50	24.1-147.5 mg/l/96h (fish)
LC50	14.2-69.4 mg/l/48h (aquatic invertebrates)
EC50	7.7-19.4 mg/l/96h (algae / cyanobacteria)
Hydroca	arbons, C7-C9, n-alkanes, isoalkanes, cyclics
EC50	0.23 mg/l/21d (aquatic invertebrates)
EC50	0.64 mg/l/48h (aquatic invertebrates)
LL50	3-10 mg/l/96h (fish)
LL50	10-30 mg/l/72h (fish)
LL50	10-30 mg/l/48h (fish)
LL50	30-100 mg/l/24h (fish)
LLO	3 mg/l/96h (fish)
EL50	13 mg/l/96h (algae / cyanobacteria)
EL50	4.6-10 mg/l/48h (aquatic invertebrates)
	10-30 mg/l/48h (algae / cyanobacteria)
EL50	10-22 mg/l/24h (aquatic invertebrates)
	10-30 mg/l/24h (algae / cyanobacteria)
EL50	10-30 mg/l/72h (algae / cyanobacteria)
ELO	4.6 mg/l/48h (aquatic invertebrates)
ELO	10 mg/l/24h (aquatic invertebrates)
VOEC	0.17 mg/l/21d (aquatic invertebrates)
VOELR	0.574 mg/l/28d (fish)
VOELR	1 mg/l/21d (aquatic invertebrates)
VOELR	6.3 mg/l/96h (algae / cyanobacteria)
LOEC	0.32 mg/l/72h (aquatic invertebrates)
Hydroca	arbons C6-C7, n-alkanes, iso-alkanes, cyclenes, <5% n-hexane
EC50	0.23 mg/l/21d (aquatic invertebrates)
EC50	0.64 mg/l/48h (aquatic invertebrates)
L50	11.4 mg/l/96h (fish)
L50	15.8 mg/l/72h (fish)
LO	5.1 mg/l/96h (fish)
EL50	3 mg/l/48h (aquatic invertebrates)
EL50	12 mg/l/24h (aquatic invertebrates)
EL50	10-100 mg/l/72h (algae / cyanobacteria)
ELO	2 mg/l/48h (aquatic invertebrates)
ELO	10 mg/l/24h (aquatic invertebrates)
VOEC	0.17 mg/l/21d (aquatic invertebrates)
VOELR	2.045 mg/l/28d (fish)
VOELR	1 mg/l/21d (aquatic invertebrates)

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74-98-6	propane	
LC50	24.11-147.54 mg/l/96h (fish)	
LC50	14.22-69.43 mg/l/48h (aquatic invertebrates)	
EC50	7.71-19.37 mg/l/96h (algae / cyanobacteria)	
	LC50 LC50	74-98-6 propane LC50

· 12.2 Persistence and degradability No further relevant information available.

1212 7 0101010100	and degradating the failure revolution in entire areas areas	
· 12.3 Bioaccumula	ative potential	
106-97-8 butane		
Partition coefficien	t 1.09-2.8 [] (log Kow) (Bioaccumulation)	
Hydrocarbons, C	7-C9, n-alkanes, isoalkanes, cyclics	
Biodegradability	98 % (28d) (Biodegradability) (OECD 301 F)	
Hydrocarbons Co	6-C7, n-alkanes, iso-alkanes, cyclenes, <5% n-hexane	
Biodegradability	81 % (28d) (Biodegradability) (OECD 301 F)	
74-98-6 propane		
Partition coefficien	t 1.09-2.8 [] (log Kow) (Bioaccumulation)	

- · 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Water hazard class 2 (according to Appendix 1 AWSV): significantly hazardous to water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact waste processors for recycling information.

- · European waste catalogue
- 16 05 04* gases in pressure containers (including halons) containing hazardous substances
- · Uncleaned packaging:
- · Recommendation:

Disposal must be made according to official regulations.

Discharged containers can contain flammable or explosive vapours.

SECTION 14: Transport information

- · 14.1 UN-Number
- · ADR/RID/ADN, IMDG, IATA

UN1950

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· 14.2 UN proper shipping name · ADR/RID/ADN · IMDG	1950 AEROSOLS AEROSOLS
IATA	AEROSOLS, flammable
14.3 Transport hazard class(es)	
ADR/RID/ADN	
Class	2 5F Gases.
Label	2.1
IMDG, IATA	
Class	2.1
Label	2.1
14.4 Packing group ADR/RID/ADN, IMDG, IATA	Void
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user	Warning: Gases.
Danger code (Kemler): EMS Number:	
Stowage Code	F-D,S-U SW1 Protected from sources of heat.
ctorage cour	SW22 For AEROSOLS with a maximu capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre Category B. For WASTE AEROSOLS Category C, Clear of living quarters.
Segregation Code	SG69 For AEROSOLS with a maximu capacity of 1 litre: Segregation as for class Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacita above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the subdivision of class 2.
	appropriate subdivision of class 2.
14.7 Transport in bulk according to An II of Marpol and the IBC Code	nex Not applicable.
Transport/Additional information:	
ADR/RID/ADN	
Limited quantities (LQ)	1L
Excepted quantities (ÉQ)	Code: E0 Not permitted as Excepted Quantity
Transport category	2

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· Tunnel restriction code	D
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E0 Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1

SECTION 15: Regulatory information

- ·15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P3a FLAMMABLE AEROSOLS
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 150 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 40
- · 15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

The classification of the mixture was carried out by calculation in accordance with the rules laid down in Annex I of Regulation (EC) No 1272/2008.

No special training instructions to ensure protection of human health and environment are required.

· Relevant phrases

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

Department issuing SDS: Abteilung Produktsicherheit

Abbreviations and acronyms:

Flam. Gas 1: Flammable gases - Category 1

Aerosol 1: Aerosols – Category 1 Press. Gas (Comp.): Gases under pressure – Compressed gas

Flam. Liq. 2: Flammable liquids - Category 2

Skin Irrit. 2: Skin corrosion/irritation - Category 2

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

Asp. Tox. 1: Aspiration hazard - Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3