

Safety data sheet according to (EU) 2015/830

Printing date 20.11.2017

Version number 1.1

Revision: 20.11.2017

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

1.1 Product identifier**Trade name:** *Spray 2000***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***Lubricant**Anticorrosion additive**Only for proper handling.***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.**Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.***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

Signal word *Danger***Hazard-determining components of labelling:***Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics
Distillates (petroleum), hydrotreated heavy paraffinic
isopentane***Hazard statements***H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.***Precautionary statements***P101 If medical advice is needed, have product container or label at hand.*

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- 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.
 P251 Do not pierce or burn, even after use.
 P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
- **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:**

CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0 Reg.nr.: 01-2119474691-32	butane Flam. Gas 1, H220; Press. Gas C, H280	25-50%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 Reg.nr.: 01-2119486944-21	propane Flam. Gas 1, H220; Press. Gas C, H280	10-25%
EC number: 919-857-5 Reg.nr.: 01-2119463258-33	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics Asp. Tox. 1, H304; STOT SE 3, H336	10-25%
CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-01-8 Reg.nr.: 01-2119485395-27	isobutane Flam. Gas 1, H220; Flam. Liq. 1, H224; Press. Gas C, H280	1-2.5%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Remove residues with soap and water.
- **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.

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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 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.
- **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**

· **Ingredients with limit values that require monitoring at the workplace:**

106-97-8 butane

WEL	Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
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· DNELs		
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics		
Oral	DNEL/general population/Systemic effects/Long-term	300 mg/kg/24h (consumer)
Dermal	DNEL / Workers / Systemic effects / Long-term	300 mg/kg/24h (worker)
	DNEL/general population/Systemic effects/Long-term	300 mg/kg/24h (consumer)
Inhalative	DNEL / Workers / Systemic effects / Long-term	1,500 mg/m3 (worker)
	DNEL/general population/Systemic effects/Long-term	900 mg/m3 (consumer)

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

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

· **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:**

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).

· **Eye 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: Fluid

Colour: Colourless

· **Odour:** Solvent-like

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· 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:	<-30 °C
· Flammability (solid, gas):	Not applicable.
· Ignition temperature:	365 °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:	1.5 Vol %
Upper:	10.9 Vol %
· Vapour pressure at 20 °C:	8,300 hPa
· Density at 20 °C:	0.65 g/cm ³ (ASTM D 4052)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	<1 mm ² /s @40 °C
· Dynamic:	Not determined.
· Kinematic:	<1 mm ² /s @40 °C (DIN 51562-1)
· VOC (EC)	69.25 %
· Solids content:	0.0 %
· 9.2 Other information	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.

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· **LD/LC50 values relevant 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)
	LC50 / 4h	658 mg/l (rat)
	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)

74-98-6 propane

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)

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics

Oral	LD50	5,000-15,000 mg/kg (rat)
	NOAEL	1,000-5,000 mg/kg/24h (rat)
Dermal	LD50	2,000 mg/kg (rat)
		3,160-5,000 mg/kg (rabbit)
Inhalative	LC50 / 4h	4.951-9.3 mg/l (rat)
	LC50 / 8h	41-4,467 ppm (rat)
	LC50 / 8h	5 mg/l (rat)
	NOAEL	200 ppm (rat)
	NOAEC	275-10,400 mg/m ³ (rat)

75-28-5 isobutane

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	21.641 mg/l (rat)
	LOAEC	12,000 ppm (rat)

· **Primary irritant effect:**· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.· **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.

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- **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.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

106-97-8 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)

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)

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics

LL50	1,000 mg/l/96h (fish)
LL50	1,000 mg/l/72h (fish)
LL50	1,000 mg/l/48h (fish)
LL50	1,000 mg/l/24h (fish)
LL0	100 mg/l/96h (fish)
EL50	1,000 mg/l/48h (aquatic invertebrates)
EL50	1,000 mg/l/24h (aquatic invertebrates)
EL50	1,000 mg/l/72h (algae / cyanobacteria)
ELO	1,000 mg/l/48h (aquatic invertebrates)
NOELR	0.131 mg/l/28d (fish)
NOELR	0.23 mg/l/21d (aquatic invertebrates)
NOELR	3-100 mg/l/72h (algae / cyanobacteria)

75-28-5 isobutane

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)

- **12.2 Persistence and degradability** No further relevant information available.

· 12.3 Bioaccumulative potential

106-97-8 butane

Partition coefficient	1.09-2.8 [---] (log Kow) (Bioaccumulation)
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74-98-6 propane

Partition coefficient	1.09-2.8 [---] (log Kow) (Bioaccumulation)
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Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics

Biodegradability	80 % (28d) (Bioaccumulation) (OECD 301 F)
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75-28-5 isobutane

Partition coefficient 1.09-2.8 [---] (log Kow) (Bioaccumulation)

Biodegradability 100 % (28d) (Biodegradability)

· **12.4 Mobility in soil** No further relevant information available.· **Additional ecological information:**· **General notes:**

Water hazard class 1 (German Regulation) (Self-classification according VwVwS, 17.05.1999): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **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
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· **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

· **14.2 UN proper shipping name**· **ADR/RID/ADN**

1950 AEROSOLS

· **IMDG**

AEROSOLS

· **IATA**

AEROSOLS, flammable

· **14.3 Transport hazard class(es)**· **ADR/RID/ADN**· **Class**

2 5F Gases.

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· 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:	F-D,S-U
· Stowage Code	SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum 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 maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR/RID/ADN	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· Transport category	2
· Tunnel restriction code	D
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1

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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
- **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.
H224 Extremely flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H336 May cause drowsiness or dizziness.
- **Department issuing SDS:** Abteilung Produktsicherheit
- **Abbreviations and acronyms:**
Flam. Gas 1: Flammable gases – Category 1
Aerosol 1: Aerosols – Category 1
Press. Gas C: Gases under pressure – Compressed gas
Flam. Liq. 1: Flammable liquids – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Asp. Tox. 1: Aspiration hazard – Category 1
- *** Data compared to the previous version altered.**

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