

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 10.12.2012

Version number 1

Revision: 10.12.2012

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

- **Product identifier**
- **Trade name: SUNSTAR CHAIN LUBE DIRT**
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation**
Lubrication, anticorrosive
Only for proper handling.
- **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
Sunstar Engineering Americas
700 Watkins Glen Dr.
Franklin, OH 45005
937-743-9049 PH
937-743-9069 Fax
- **Only representative in EU:**
MOTOREX Deutschland AG, Bismarckstrasse 28, D-69198 Schriesheim
- **Further information obtainable from:** msds@motorex.com
- **Emergency telephone number:**
Toxicological Information Centre, CH-8028 Zurich,
info@toxi.ch,
T. +41 (0) 44 251 51 51

2 Hazards identification

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



GHS02 flame

Flam. Aerosol 1 H222 Extremely flammable aerosol.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



F+; Extremely flammable

R12: Extremely flammable.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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- **Label elements**

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- **Code letter and hazard designation of product:**



F+ Extremely flammable

- **Risk phrases:**

12 Extremely flammable.

- **Safety phrases:**

2 Keep out of the reach of children.

16 Keep away from sources of ignition - No smoking.

29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

46 If swallowed, seek medical advice immediately and show this container or label.

51 Use only in well-ventilated areas.

- **Special labelling of certain preparations:**

Labeled as aerosol under § 6(4,5) Ordinance on Hazardous Materials (GefStoffV):
Pressurized 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 into open flame and onto glowing surfaces.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

- **Classification in accordance with Directive 75/324/EEC: Extremely flammable**

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 106-97-8 EINECS: 203-448-7	butane F+ R12 Flam. Gas 1, H220; Press. Gas, H280	25-50%
CAS: 74-98-6 EINECS: 200-827-9	propane F+ R12 Flam. Gas 1, H220; Press. Gas, H280	2.5-10%
CAS: 75-28-5 EINECS: 200-857-2	isobutane F+ R12 Flam. Gas 1, H220; Press. Gas, H280	1-3%

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CAS: 78-78-4 EINECS: 201-142-8	isopentane Xn R65; F+ R12; N R51/53 R66-67 Flam. Liq. 1, H224; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H336	0.1-1.5%
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· **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **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.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture**
No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **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.
- **Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Open and handle receptacle with care.

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- **Information about fire - and explosion protection:**
 Keep ignition sources away - Do not smoke.
 Protect against electrostatic charges.
 Pressurized 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.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
 Store in a cool location.
 Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
 Keep container tightly sealed.
 Do not seal receptacle gas tight.
 Store in cool, dry conditions in well sealed receptacles.
 Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **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)

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

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not required.
- **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**
 Fluorocarbon rubber (Viton)
 Nitrile rubber, NBR
 Recommended thickness of the material: ³ 0.2 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 15 minutes (Permeation according to EN 374 Part 3: Level 1).

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· **Eye protection:**

Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

· Form:	Liquefied gas
· Colour:	Light yellow
· Odour:	typical, characteristic
· Odour threshold:	Not determined.

· **pH-value:** Not determined.· **Change in condition**

· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	Not applicable, as aerosol.

· **Flash point:** < -5°C· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 365°C (DIN 51794)
ca. 500 °C (DIN 51794)

· **Decomposition temperature:** Not determined.· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Explosion limits:**

· Lower:	1.5 Vol %
	2.1 Vol. %
· Upper:	8.5 Vol %
	9.5 Vol. %

· **Vapour pressure at 20°C:** 2.1 hPa
3200 mbar

· **Density at 20°C:** 0.77 g/cm³ (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 mm²/s @40 °C· **Dynamic:** Not determined.· **Kinematic:** < 1 mm²/s @40 °C (DIN 51562-1)· **Solvent content:**

· **Organic solvents:** 36.9 %

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· **Other information**

No further relevant information available.

10 Stability and reactivity

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

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **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.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

16 05 04*	gases in pressure containers (including halons) containing dangerous substances
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- **Uncleaned packaging:**
- **Recommendation:**
Disposal must be made according to official regulations.
Discharged containers can contain flammable or explosive vapours.

14 Transport information

· UN-Number	
· ADR, IMDG, IATA	UN1950
· UN proper shipping name	
· ADR	1950 AEROSOLS
· IMDG	AEROSOLS
· IATA	AEROSOLS, flammable
· Transport hazard class(es)	
· ADR	
	
· Class	2 5F Gases.
· Label	2.1
· IMDG, IATA	
	
· Class	2.1
· Label	2.1
· Packing group	
· ADR, IMDG, IATA	Void
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Gases.
· Danger code (Kemler):	-
· EMS Number:	F-D,S-U
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Transport category	2
· Tunnel restriction code	D
· UN "Model Regulation":	UN1950, AEROSOLS, 2.1

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15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **Code letter and hazard designation of product:**



F+ Extremely flammable

- **Risk phrases:**
12 Extremely flammable.
- **Safety phrases:**
2 Keep out of the reach of children.
16 Keep away from sources of ignition - No smoking.
29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
46 If swallowed, seek medical advice immediately and show this container or label.
51 Use only in well-ventilated areas.
- **Special labelling of certain preparations:**
*Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material.*
- **Classification in accordance with Directive 75/324/EEC:** Extremely flammable
- **National chemical directories**
Components listed or exempted from listing:
TSCA (USA)
DSL/NDL (CDN)
AICS (Aus)
IECSC (CN)
EINECS/ELINCS/NLP (EU)
ECL/KECI (KOR)
HSNO (NZ)
PICCS (RP)
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.

- **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.
H411 Toxic to aquatic life with long lasting effects.

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R12 *Extremely flammable.*

R51/53 *Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*

R65 *Harmful: may cause lung damage if swallowed.*

R66 *Repeated exposure may cause skin dryness or cracking.*

R67 *Vapours may cause drowsiness and dizziness.*

· **Department issuing MSDS:** Abteilung Produktsicherheit

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