

Safety Data Sheet
acc. to OSHA HCS

1 Identification

- **Product identifier**
- **Trade name:** CHAIN CLEAN SPRAY (US)
- **Application of the substance / the mixture**
Chain cleaner
Only for proper handling.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
BUCHER_AG_LANGENTHAL
MOTOREX-Schmiertechnik

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurized container: May burst if heated.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.

- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Danger

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Trade name: CHAIN CLEAN SPRAY (US)

(Contd. of page 1)

· **Hazard statements**

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

H319 Causes serious eye irritation.

· **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P251 Do not pierce or burn, even after use.

P211 Do not spray on an open flame or other ignition source.

P280 Wear eye protection / face protection.

P264 Wash thoroughly after handling.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 4

Reactivity = 3

· **HMIS-ratings (scale 0 - 4)**



Health = 1

Fire = 4

Reactivity = 3

· **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 the substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 64742-48-9 Reg.nr.: 01-2119463258-33	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics ⚠ Asp. Tox. 1, H304	60-80%
CAS: 67-64-1 Reg.nr.: 01-2119471330-49	acetone ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	10-25%
CAS: 106-97-8 Reg.nr.: 01-2119474691-32	butane ⚠ Flam. Gas 1, H220; Press. Gas, H280	5-10%
CAS: 74-98-6 Reg.nr.: 01-2119486944-21	propane ⚠ Flam. Gas 1, H220; Press. Gas, H280	1-2.5%

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.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Trade name: CHAIN CLEAN SPRAY (US)

(Contd. of page 2)

- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **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 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **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 to enter sewers/ surface or ground water.*
- **Methods and material for containment and cleaning up:** *Ensure adequate ventilation.*
- **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** *No special precautions are necessary if used correctly.*
- **Information about protection against explosions and fires:**
*Keep ignition sources away - Do not smoke.
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 on a naked flame or any incandescent material.*
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
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 receptacle tightly sealed.*
- **Storage class:** *2 B*
- **Specific end use(s)** *No further relevant information available.*

US

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Trade name: CHAIN CLEAN SPRAY (US)

(Contd. of page 3)

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

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

67-64-1 acetone

PEL	Long-term value: 2400 mg/m ³ , 1000 ppm
REL	Long-term value: 590 mg/m ³ , 250 ppm
TLV	Short-term value: 1187 mg/m ³ , 500 ppm Long-term value: 594 mg/m ³ , 250 ppm BEI

106-97-8 butane

REL	Long-term value: 1900 mg/m ³ , 800 ppm
TLV	Short-term value: 2370 mg/m ³ , 1000 ppm

74-98-6 propane

PEL	Long-term value: 1800 mg/m ³ , 1000 ppm
REL	Long-term value: 1800 mg/m ³ , 1000 ppm
TLV	refer to Appendix F in TLVs and BEIs book

· **Ingredients with biological limit values:**

67-64-1 acetone

BEI	50 mg/L Medium: urine Time: end of shift Parameter: Acetone (nonspecific)
-----	--

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

· **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.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.

· **Breathing equipment:** Not required.

· **Protection of hands:**



Protective gloves

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

· **Material of gloves**

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

(Contd. on page 5)

US

Safety Data Sheet

acc. to OSHA HCS

Trade name: CHAIN CLEAN SPRAY (US)

(Contd. of page 4)

- **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.

- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Liquefied gas
Color:	Colorless
Odor:	green apple
Odor 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: < -20 °C (< -4 °F)

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 365 °C (689 °F) (DIN 51794)

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

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

· Explosion limits:

Lower:	2.6 Vol %
Upper:	13.0 Vol %

· Vapor pressure at 20 °C (68 °F): 240 hPa (180 mm Hg)

· Density at 20 °C (68 °F): 0.746 g/cm³ (6.225 lbs/gal) (ASTM D 4052)

· Relative density: Not determined.

· Vapor 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:

Dynamic:	Not determined.
Kinematic:	<1 mm ² /s @ 40 °C (DIN 51562-1)
VOC content:	77.0 %
	707.8 g/l / 5.91 lb/gl

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Trade name: CHAIN CLEAN SPRAY (US)

(Contd. of page 5)

· **Other information**

No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **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:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant
- **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior 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 2 (Self-classification according VwVwS, 17.05.1999): hazardous for 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.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Trade name: CHAIN CLEAN SPRAY (US)




· **Other adverse effects** No further relevant information available.

(Contd. of page 6)

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:**
Disposal must be made according to official regulations.
Discharged containers can contain flammable or explosive vapours.

14 Transport information

- | | |
|-------------------------------------|---|
| · UN-Number | |
| · DOT, ADR,ADN, IMDG, IATA | UN1950 |
| · UN proper shipping name | |
| · DOT, IATA | Aerosols, flammable |
| · ADR/ADN | 1950 Aerosols |
| · IMDG | AEROSOLS |
| · Transport hazard class(es) | |
| · DOT | |
| |  |
| · Class | 2.1 |
| · Label | 2.1 |
| · ADR/ADN | |
| |  |
| · Class | 2 5F Gases |
| · Label | 2.1 |
| · IMDG, IATA | |
| |  |
| · Class | 2.1 |
| · Label | 2.1 |
| · Packing group | |
| · DOT, ADR,ADN, IMDG, IATA | Void |
| · Environmental hazards: | |
| · Marine pollutant: | No |

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Trade name: CHAIN CLEAN SPRAY (US)

(Contd. of page 7)

<ul style="list-style-type: none"> · Special precautions for user · Danger code (Kemler): · EMS Number: · Stowage Code 	<p>Warning: Gases</p> <p>-</p> <p>F-D,S-U</p> <p>SW1 Protected from sources of heat.</p> <p>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.</p>
<ul style="list-style-type: none"> · Segregation Code 	<p>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.</p>
<ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	<p>Not applicable.</p>
<ul style="list-style-type: none"> · Transport/Additional information: 	
<ul style="list-style-type: none"> · ADR/ADN · Excepted quantities (EQ) 	<p>Code: E0</p> <p>Not permitted as Excepted Quantity</p>
<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) 	<p>1L</p> <p>Code: E0</p> <p>Not permitted as Excepted Quantity</p>
<ul style="list-style-type: none"> · UN "Model Regulation": 	<p>UN 1950 AEROSOLS, 2.1</p>

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

111-90-0 | 2-(2-ethoxyethoxy)ethanol

· **TSCA (Toxic Substances Control Act):**

67-64-1	acetone
106-97-8	butane
29911-27-1	Dipropylenglykol n-propylether
74-98-6	propane
75-28-5	isobutane
78-78-4	isopentane
1222-05-5	1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran
111-90-0	2-(2-ethoxyethoxy)ethanol

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Trade name: CHAIN CLEAN SPRAY (US)

(Contd. of page 8)

88-41-5	2-tert-Butylcyclohexylacetat
104-67-6	Undecan-4-olid
1191-16-8	3-Methyl-2-butenylacetat
123-68-2	allyl hexanoate
7727-37-9	nitrogen

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

67-64-1 | acetone

I

· **TLV (Threshold Limit Value established by ACGIH)**

67-64-1 | acetone

A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **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.

· **Department issuing SDS:** Abteilung Produktsicherheit

· **Date of preparation / last revision** 03/22/2016 / -

· **Abbreviations and acronyms:**

Flam. Gas 1: Flammable gases, Hazard Category 1

Flam. Aerosol 1: Flammable aerosols, Hazard Category 1

Press. Gas: Gases under pressure: Compressed gas

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

US