

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

Printing date 10.06.2020

V - 8.1

Revision: 10.06.2020

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

- **1.1 Product identifier**
- **Trade name:** *S100 Chain Cleaner*
- **Article number:** 2360, 3454
- **1.2 Relevant identified uses of the substance or mixture and uses advised against** Void
- **Application of the substance / the mixture** *Cleaning agent/ Cleaner*
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Dr.O.K.Wack Chemie GmbH
Bunsenstrasse 6
D - 85053 Ingolstadt
Tel. +49 841-6350 Fax +49 841-63558
www.wackchem.com
wack.info@wackchem.com
- **Further information obtainable from:** *Safety department*
- **1.4 Emergency telephone number:** *During business hours: +49 841 63523*

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.
Eye Dam. 1	H318	Causes serious eye damage.
STOT SE 3	H336	May cause drowsiness or dizziness.
Aquatic Chronic 2	H411	Toxic 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 GHS05 GHS07 GHS09

- **Signal word** *Danger*
- **Hazard-determining components of labelling:**
2-Propylheptanoethoxilate
Hydrocarbons, C10 aromatics
- **Hazard statements**
H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H318 Causes serious eye damage.
H336 May cause drowsiness or dizziness.
H411 Toxic 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.
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.
P260 Do not breathe spray.
P271 Use only outdoors or in a well-ventilated area.

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

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:**

EUH066 Repeated exposure may cause skin dryness or cracking.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**

- **Description:** Mixture of the substances with nonhazardous additions.

- **Dangerous components:**

CAS: 64742-94-5 EC number: 918-811-1 Reg.nr.: 01-2119463583-34-xxxx	Hydrocarbons, C10 aromatics Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H336	≥25-≤50%
CAS: 74-98-6 EINECS: 200-827-9	propane Flam. Gas 1A, H220; Press. Gas (Comp.), H280	<20%
CAS: 106-97-8 EINECS: 203-448-7	butane Flam. Gas 1A, H220; Press. Gas (Comp.), H280	<20%
CAS: 68439-50-9 NLP: 500-213-3 Reg.nr.: 01-2119487984-16-xxxx	Alcohols, C12-14, ethoxylated Aquatic Acute 1, H400; Aquatic Chronic 3, H412	5-10%
CAS: 160875-66-1	2-Propylheptanoethoxilate Eye Dam. 1, H318	≥3-≤5%
CAS: 126-92-1 EINECS: 204-812-8 Reg.nr.: 01-2119971586-23-xxxx	Natriumetasulfat Eye Dam. 1, H318; Skin Irrit. 2, H315 Specific concentration limits: Eye Dam. 1; H318: C ≥ 20 % Eye Irrit. 2; H319: 10 % ≤ C < 20 %	1-5%
CAS: 111-87-5 EINECS: 203-917-6 Reg.nr.: 01-2119486978-10-xxxx	1-Octanol Eye Irrit. 2, H319; Aquatic Chronic 3, H412	≥1-<2.5%

- **SVHC** None

- **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**

- **General information:**

Take affected persons out into the fresh air.

If symptoms persist consult doctor.

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

- **After skin contact:**

After contact with skin, wash immediately with plenty of water.

If skin irritation continues, consult a doctor.

- **After eye contact:**

Rinse opened eye for several minutes under running water.

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- Seek immediate medical advice.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Hazards** If swallowed or in case of vomiting, danger of entering the lungs.
- **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 fire with alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Cool endangered receptacles with water spray.
Danger of bursting.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Keep away from ignition sources.
Ensure adequate ventilation.
- **6.2 Environmental precautions:**
Do not allow to penetrate the ground/soil.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
- **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**
Use only in well ventilated areas.
Avoid contact with skin and eyes.
- **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.

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- **7.2 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 pressurised containers.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
 Protect from heat and direct sunlight.
 Store in a cool place.
- **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:**
 The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· DNELs

64742-94-5 Hydrocarbons, C10 aromatics

Oral	DNEL system. effects (long-term)	7.5 mg/kg KG/Tag (Consumer)
Dermal	DNEL system. effects (long-term)	7.5 mg/kg KG/Tag (Consumer)
		12.5 mg/kg KG/Tag (Worker)
Inhalative	DNEL system. effects (long-term)	32 mg/m ³ (Consumer)
		151 mg/m ³ (Worker)

68439-50-9 Alcohols, C12-14, ethoxylated

Oral	DNEL system. effects (long-term)	25 mg/kg (Consumer)
Dermal	DNEL system. effects (long-term)	1,250 mg/kg (Consumer)
		2,080 mg/kg (Worker)
Inhalative	DNEL system. effects (long-term)	87 mg/m ³ (Consumer)
		294 mg/m ³ (Worker)

126-92-1 Natriumetasulfat

Oral	DNEL system. effects (long-term)	24 mg/kg (Consumer)
Dermal	DNEL system. effects (long-term)	4,060 mg/kg (Worker)
Inhalative	DNEL system. effects (long-term)	85 mg/m ³ (Consumer)
		285 mg/m ³ (Worker)

111-87-5 1-Octanol

Oral	DNEL system. effects (long-term)	75 mg/kg KG/Tag (Consumer)
Dermal	DNEL system. effects (long-term)	75 mg/kg KG/Tag (Consumer)
		125 mg/kg KG/Tag (Worker)
Inhalative	DNEL system. effects (long-term)	65 mg/m ³ (Consumer)
		220 mg/m ³ (Worker)
	DNEL local effects (short-term)	65 mg/m ³ (Consumer)
		220 mg/m ³ (Worker)

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· PNECs	
68439-50-9 Alcohols, C12-14, ethoxylated	
PNEC	0.0437 mg/l (Meerwasser) 0.0437 mg/l (fresh water)
126-92-1 Natriumetasulfat	
PNEC	0.0136 mg/l (Meerwasser) 0.1357 mg/l (fresh water)
111-87-5 1-Octanol	
PNEC	0.02 mg/l (Meerwasser) 0.2 mg/l (fresh water)

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

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Be sure to clean skin thoroughly after work and before breaks.

Avoid contact with the eyes and skin.

Use skin protection cream for skin protection.

· **Respiratory protection:** Not necessary if room is well-ventilated.

· **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**

Nitrile rubber, NBR

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.

· **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:** Safety glasses

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Aerosol

Colour: Yellow

· **Odour:** Product specific

· **Odour threshold:** Not determined

· **pH-value:** Void

· **Change in condition**

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: -44 °C

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· Flash point:	-97 °C
· Flammability (solid, gas):	Not applicable.
· Ignition temperature:	365 °C
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Heating may cause an explosion. 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:	Not determined.
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with water:	Fully miscible.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· 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:**
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Reacts with strong oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Store away from oxidising agents.
- **10.6 Hazardous decomposition products:**
No decomposition if used and stored according to specifications.
In case of fire, the following can be released:
Carbon monoxide and carbon dioxide

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:		
64742-94-5 Hydrocarbons, C10 aromatics		
Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50	>2-20 mg/l (rat)
106-97-8 butane		
Inhalative	LC50/4 h	658 mg/l (rat)
68439-50-9 Alcohols, C12-14, ethoxylated		
Oral	LD50	>2,000 mg/kg (rabbit)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	>1.6 mg/l (rat)
111-87-5 1-Octanol		
Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)

- **Specific symptoms in biological assay:** Not determined
- **Primary irritant effect:**
- **Skin corrosion/irritation**
Repeated exposure may cause skin dryness or cracking.
Strong irritant with the danger of severe eye injury.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:** Vapours may cause drowsiness and dizziness.
- **CMR effects (carcinogenicity, 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**
May cause drowsiness or dizziness.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

64742-94-5 Hydrocarbons, C10 aromatics		
	LC50	>1-≤10 mg/l (Fish) >1-≤10 mg/l (algae)
68439-50-9 Alcohols, C12-14, ethoxylated		
Inhalative	LC50/96h	0.88 mg/l (danio rerio)
	EC50/72h	0.41 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
	EC50/48h	0.39 mg/l (daphnia magna)
160875-66-1 2-Propylheptanoethoxilate		
	LC50/96h	>1-10 mg/l (oncorhynchus mykiss)
	EC50/48h	>1-10 mg/l (daphnia magna)

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111-87-5 1-Octanol

LC50/96h	>10-100 mg/l (Pimephales promelas)
EC50/24h	>10-100 mg/l (daphnia magna)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
 The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
 Also poisonous for fish and plankton in water bodies.
 Toxic for aquatic organisms
 Water hazard class 2 (German Regulation) (Self-assessment): 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.
- **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** Disposal must be made according to official regulations.

· **European waste catalogue**

16 00 00	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 05 00	gases in pressure containers and discarded chemicals
16 05 04*	gases in pressure containers (including halons) containing hazardous substances

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN1950
- **14.2 UN proper shipping name**
- **ADR** 1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS
- **IMDG** AEROSOLS (Alkyl(C3-C8)benzenes), MARINE POLLUTANT
- **IATA** AEROSOLS, flammable
- **14.3 Transport hazard class(es)**
- **ADR**
- **Class** 2 5F Gases.
- **Label** 2.1

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· IMDG, IATA	
· Class	2.1
· Label	2.1
· 14.4 Packing group	
· ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	Product contains environmentally hazardous substances: Alkyl(C3-C8)benzenes
· Marine pollutant:	Yes
· Special marking (ADR):	Symbol (fish and tree) Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Gases.
· Hazard identification number (Kemler code):	-
· EMS Number:	F-D, S-U
· Stowage Code	SW1 Protected from sources of heat. SW2 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	
· 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, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category**
P3a FLAMMABLE AEROSOLS
E2 Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 150 t

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- **Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t**
- **15.2 Chemical safety assessment: A Chemical Safety Assessment has 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.

- **Relevant phrases**

- H220 Extremely flammable gas.
- H280 Contains gas under pressure; may explode if heated.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H400 Very toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

- **Classification according to Regulation (EC) No 1272/2008 Calculation method**

- **Abbreviations and acronyms:**

- Flam. Gas 1A: Flammable gases – Category 1A
- Aerosol 1: Aerosols – Category 1
- Press. Gas (Comp.): Gases under pressure – Compressed gas
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- Asp. Tox. 1: Aspiration hazard – Category 1
- Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic 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

- *** Data compared to the previous version altered.**