

Product information CC 4 (cleaner - oil)

Use

CC 4 reconditioning agent is a highly effective reconditioning treatment to remove oil, grease and organic fouling.

Features

The surface active ingredients are in accordance to the EC regulation No. 648/2004 of the European detergent regulation.

- Compatible with most construction materials
- Safe handling
- Increased equipment life-time
- Reconditioned equipment requires less water and energy, thus reducing emissions of harmful greenhouse gases.

Benefits

Schutzbrille tragen. Bei Kontakt mit den Augen gründlich spülen (Wasser) und umgehend einen Arzt aufsuchen. Weitere Informationen sind dem Sicherheitsdatenblatt zu entnehmen.

Weitere Hinweise sind dem Sicherheitsdatenblatt zu entnehmen.

Dosing

CC 4 can be applied as a 0,5-10% water solution, depending upon the characteristics and severity of the scale or fouling to be removed. By applying a correct temperature, agitation and contact time, the dosages of the reconditioning agent can be optimized. In case of foaming please use the defoaming agent ES 1.

Öl / application	temperature		
	25°C	45°C	60°C
Lubricating oil mineral oil		x	
Maschine oil synthetic			x
Base oil		x	x
Hydraulic oil	x		x
Mineral oil	x	x	x
Synthetic	x	x	x
Cooling lubricant Highly refined mineral oil		x	x
Corrosion inhibitor wax			x

Handling precautions

gwk maintains Material Safety Data Sheets on all of its chemical products. Material Safety Data Sheets contain health and safety information relevant for your development of appropriate product handling procedures to protect your employees and customers. Our Material Safety Data Sheets should be read and understood by all of your supervisory personnel and employees before using gwk products in your facilities.

Disposal handling

The environmental impact depends on what has to be cleaned. The used reconditioning solution may be classified as environmentally hazardous waste. Such waste must be managed in accordance with official requirements for the type of waste in question. The product itself does not constitute environmentally hazardous waste, and as such reduces the amount of waste handling and optimizes the overall disposal cost.

Important Information

Typical Properties: Refer to MSDS.

Regulatory Information: Please refer to the MSDS or contact your sales representative for any additional regulatory and environmental information.

Shelf life

2 years in originally sealed containers.

6 months in opened containers.

Storage conditions: cool (5°C – 20°C), frost-free, dark and dry.

Packaging

CC 4 is packed in 10 kg and 25 kg pails and 200 kg drums.

All statements, information and data presented herein are believed to be accurate and reliable but are not to be taken as a guarantee, express warranty or implied warranty of merchantability of fitness for a particular purpose, or representation, express or implied, for which seller assumes legal responsibility, and they are offered solely for your consideration, investigation and verification. Statements or suggestions concerning possible use of this product are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent.

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Conforms to EU Regulation 1907/2006/EC as amended. - SDSGHS_DE

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

1.1 Product identifier

Trade name : cc 4

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : Cleaner.

1.3 Details of the supplier of the safety data sheet gwk Gesellschaft Wärme Kältetechnik mbH Scherl 10 D-58540 Meinerzhagen Deutschland info@gwk.com	1.4 Emergency telephone number emergency telephone number Berlin +49 (0) 30 30686700 Product Information Contact your local gwk representative
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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Serious eye damage, Category 1 **H318: Causes serious eye damage.**

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : **Danger**

Hazard statements : **H318** **Causes serious eye damage.**

Precautionary statements : **Prevention:**
P280 **Wear eye protection/ face protection.**

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Response:

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Hazardous components which must be listed on the label:

C9-11 alcohol polyethoxylate

Poly(oxy-1,2-ethanediyl), a-(2-propylheptyl)-w-hydroxy-

2.3 Other hazards

Additional advice

No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
C9-11 alcohol polyethoxylate	68439-46-3	Acute Tox.4; H302 Eye Dam.1; H318	>= 5 - < 10
Poly(oxy-1,2-ethanediyl), a-(2-propylheptyl)-w-hydroxy-	160875-66-1	Acute Tox.4; H302 Skin Irrit.2; H315 Eye Dam.1; H318 Eye Dam.1; H318	>= 1 - < 2,5

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : If breathed in, move person into fresh air.
If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get

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medical attention.
 If on skin, rinse well with water.
 Wash contaminated clothing before re-use.

In case of eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 Continue rinsing eyes during transport to hospital.
 Remove contact lenses.
 Protect unharmed eye.

If swallowed : Obtain medical attention.
 Do NOT induce vomiting.
 Do not give milk or alcoholic beverages.
 Never give anything by mouth to an unconscious person.
 If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:
 stomach or intestinal upset (nausea, vomiting, diarrhea)
 irritation (nose, throat, airways)

Risks : Causes serious eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No hazards which require special first aid measures.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
 Water spray
 Foam
 Carbon dioxide (CO₂)
 Dry chemical

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

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Hazardous combustion products : carbon dioxide and carbon monoxide

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Specific extinguishing methods : Product is compatible with standard fire-fighting agents.

Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
Comply with all applicable federal, state, and local regulations.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up


Methods for cleaning up : Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours/dust.
Container hazardous when empty.
Avoid contact with skin and eyes.
Smoking, eating and drinking should be prohibited in the application area.
For personal protection see section 8.
Dispose of rinse water in accordance with local and national regulations.

		
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Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : Wash hands before breaks and at the end of workday. When using do not eat or drink. When using do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.

Storage class (TRGS 510) : 12, Non Combustible Liquids

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Eye protection : Wear chemical splash goggles and face shield when there is potential for exposure of the eyes or face to liquid, vapor or mist.
Maintain eye wash station in immediate work area.

Hand protection

Remarks : Nitrile rubber butyl-rubber

The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : Wear as appropriate:

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Impervious clothing
 Safety shoes
 Choose body protection according to the amount and concentration of the dangerous substance at the work place.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: Aqueous solution
Colour	: yellow
Odour	: No data available
Odour Threshold	: No data available
pH	: ca. 5,4, (20 °C)
Melting point/freezing point	: Not applicable
Boiling point/boiling range	: 100 °C (1.013,333333 hPa) Calculated Phase Transition Liquid/Gas
Flash point	: Not applicable
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: 23,3333333 hPa (20 °C) Calculated Vapor Pressure
Relative vapour density	: No data available
Relative density	: 1 (20 °C)
Density	: 1 g/cm ³ (20 °C)
Solubility(ies)	
Water solubility	: completely soluble
Solubility in other solvents	: No data available

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Partition coefficient: n-octanol/water : No data available

Thermal decomposition : No data available

Viscosity
Viscosity, dynamic : Not applicable

Viscosity, kinematic : No data available

Oxidizing properties : No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Product will not undergo hazardous polymerization.

10.4 Conditions to avoid

Conditions to avoid : Exposure to moisture

10.5 Incompatible materials

Materials to avoid : aluminum
Copper
Copper alloys
Strong bases
Strong oxidizing agents
Do not use with aluminum equipment at temperatures above 49C or 120 degrees F.

10.6 Hazardous decomposition products

Hazardous decomposition products : carbon dioxide and carbon monoxide

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of exposure : Inhalation
Skin contact
Eye Contact
Ingestion

Acute toxicity

Not classified based on available information.

Components:

ALCOHOLS, C9-11, ETHOXYLATED:

Acute oral toxicity : LD 50 (Rat): 500 - 2.000 mg/kg

Acute dermal toxicity : LD 50 (Rabbit): > 5 g/kg

Skin corrosion/irritation

Not classified based on available information.

Components:

ALCOHOLS, C9-11, ETHOXYLATED:

Result: Mild to Moderately Irritating

POLYMER:

Species: Rabbit

Method: OECD Test Guideline 404

Result: Irritating to skin

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks: May cause irreversible eye damage.

Components:

ALCOHOLS, C9-11, ETHOXYLATED:

Result: Corrosive to eyes

POLYMER:

Species: Rabbit

Method: OECD Test Guideline 405

Result: Corrosive to eyes

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

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Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration hazard

Not classified based on available information.

Further information

Product:

Remarks: No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

C9-11 alcohol polyethoxylate

Toxicity to fish : LC 50 (Fathead minnow (*Pimephales promelas*)): 8,5 - 17 mg/l
 Exposure time: 96 h
 Test Type: Renewal

Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (*Daphnia magna*)): 2,9 - 8,5 mg/l
 Exposure time: 48 h
 Test Type: semi-static test

12.2 Persistence and degradability

Components:

C9-11 alcohol polyethoxylate

Biodegradability : Result: Readily biodegradable

Remarks: This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

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12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: The bioaccumulation potential cannot be determined.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic life.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

SECTION 14: Transport information

14.1 UN number

ADR: Not dangerous goods

ADNR: Not dangerous goods

RID: Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods

14.2 UN proper shipping name

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ADR: Not dangerous goods
ADNR: Not dangerous goods
RID: Not dangerous goods
INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods
INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods
INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods

14.3 Transport hazard class(es)

ADR: Not dangerous goods
ADNR: Not dangerous goods
RID: Not dangerous goods
INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods
INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods
INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods

14.4 Packing group

ADR: Not dangerous goods
ADNR: Not dangerous goods
RID: Not dangerous goods
INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods
INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods
INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods

14.5 Environmental hazards

ADR: Not applicable
ADNR: Not applicable
RID: Not applicable
INTERNATIONAL MARITIME DANGEROUS GOODS: Not applicable
INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not applicable
INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not applicable


14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Ship Type: Not applicable Hazard
 code(s): Not applicable Pollutant
 Category: Not applicable

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

		
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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 57) : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.
Not applicable

Water contaminating class (Germany) : WGK 2 water endangering

TA Luft List (Germany) : Total dust, Not applicable
: Inorganic substances in powdered form, Not applicable
: Inorganic substances in vapour or gaseous form, Not applicable
: Organic Substances, Class 1 < 0,01 %
: Carcinogenic substances, Not applicable
: Mutagenic, Not applicable
: Toxic to reproduction, Not applicable

The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

DSL : This product contains one or more components that are not on the Canadian DSL and have annual quantity limits.

AUSTR : Not in compliance with the inventory

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ENCS	Not in compliance with the inventory
KECL	Not in compliance with the inventory
PHIL	Not in compliance with the inventory
IECSC	Not in compliance with the inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECL (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Further information

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Full text of H-Statements referred to under section 3.

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.

Further information

Other information : The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

Sources of key data used to compile the Safety Data Sheet

Key literature references and sources of data

SOLENIS Internal data

SOLENIS internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists

BEI : Biological Exposure Index

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CAS : Chemical Abstracts Service (Division of the American Chemical Society).
 CMR : Carcinogenic, Mutagenic or Toxic for Reproduction
 FG : Food grade
 GHS : Globally Harmonized System of Classification and Labeling of Chemicals.
 H-statement : Hazard Statement
 IATA : International Air Transport Association.
 IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
 ICAO : International Civil Aviation Organization
 ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"
 IMDG : International Maritime Code for Dangerous Goods
 ISO : International Organization for Standardization
 logPow : octanol-water partition coefficient
 LCxx : Lethal Concentration, for xx percent of test population
 LDxx : Lethal Dose, for xx percent of test population.
 ICxx : Inhibitory Concentration for xx of a substance
 Ecxx : Effective Concentration of xx
 N.O.S.: Not Otherwise Specified
 OECD : Organization for Economic Co-operation and Development
 OEL : Occupational Exposure Limit
 P-Statement : Precautionary Statement
 PBT : Persistent , Bioaccumulative and Toxic
 PPE : Personal Protective Equipment
 STEL : Short-term exposure limit
 STOT : Specific Target Organ Toxicity
 TLV : Threshold Limit Value
 TWA : Time-weighted average
 vPvB : Very Persistent and Very Bioaccumulative
 WEL : Workplace Exposure Level

ABM : Water Hazard Class for the Netherlands
 ADR : Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADNR: Regulation for the Carriage of Dangerous Substances on the Rhine
 CLP : Classification, Labelling and Packaging
 CSA : Chemical Safety Assessment
 CSR : Chemical Safety Report
 DNEL : Derived No Effect Level.
 EINECS : European Inventory of Existing Commercial Chemical Substances.
 ELINCS : European List of Notified Chemical Substances
 PEC : Predicted Effect Concentration
 PEL : Permissible Exposure Limits
 PNEC : Predicted No Effect Concentration
 REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals
 RID : Regulation Concerning the International Transport of Dangerous Goods by Rail
 WGK : German Water Hazard Class