

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Granit Kühlerreiniger 1L

Revision date: 19.06.2020

Product code: 1103237

Page 1 of 11

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

#### 1.1. Product identifier

Granit Kühlerreiniger 1L

#### 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

Company name:	Wilhelm Fricke SE	
Street:	Zum Kreuzkamp 7	
Place:	D-27404 Heeslingen	
Telephone:	+49 (4281) 712 – 488	Telefax: +49 (4281) 712 – 233
e-mail:	info@fricke.de	
Internet:	www.fricke.de	

**1.4. Emergency telephone number:** 111 NHS (National Health Service)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Regulation (EC) No. 1272/2008

Hazard categories:

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

Causes serious eye damage.

#### 2.2. Label elements

##### Regulation (EC) No. 1272/2008

##### Hazard components for labelling

tetrasodium ethylene diamine tetraacetate

**Signal word:** Danger

**Pictograms:**



##### Hazard statements

H318 Causes serious eye damage.

##### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.  
 P102 Keep out of reach of children.  
 P280 Wear eye protection/face protection.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310 Immediately call a POISON CENTER/doctor.  
 P501 Dispose of contents/container according to the official regulations.

#### 2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Granit Kühlerreiniger 1L

Revision date: 19.06.2020

Product code: 1103237

Page 2 of 11

### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
123-42-2	4-hydroxy-4-methylpentan-2-one, diacetone alcohol			3 - < 5 %
	204-626-7		01-2119473975-21	
	Eye Irrit. 2; H319			
64-02-8	tetrasodium ethylene diamine tetraacetate			3 - < 5 %
	200-573-9			
	Acute Tox. 4, Acute Tox. 4, Eye Dam. 1, STOT RE 2; H332 H302 H318 H373			
5064-31-3	trisodium nitrilotriacetate			0.1 - < 1 %
	225-768-6	607-620-00-6		
	Carc. 2, Acute Tox. 4, Eye Irrit. 2; H351 H302 H319			

Full text of H and EUH statements: see section 16.

#### Labelling for contents according to Regulation (EC) No 648/2004

5 % - < 15 % non-ionic surfactants, < 5 % EDTA and salts thereof, < 5 % anionic surfactants.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

First aider: Pay attention to self-protection! Remove persons to safety. Never give anything by mouth to an unconscious person or a person with cramps.

#### After inhalation

Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical advice.

#### After contact with skin

Wash with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In all cases of doubt, or when symptoms persist, seek medical advice.

#### After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

#### After ingestion

Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Call a physician in any case!

### 4.2. Most important symptoms and effects, both acute and delayed

Headache, nausea, dizziness, fatigue, skin irritation

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Call a POISON CENTER. Symptoms can occur only after several hours.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Water fog. Foam. Carbon dioxide (CO<sub>2</sub>). Extinguishing powder.

#### Unsuitable extinguishing media

High power water jet.

### 5.2. Special hazards arising from the substance or mixture

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Granit Kühlerreiniger 1L

Revision date: 19.06.2020

Product code: 1103237

Page 3 of 11

products such as CO, CO<sub>2</sub>, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

### **5.3. Advice for firefighters**

In case of fire and/or explosion do not breathe fumes. Move undamaged containers from immediate hazard area if it can be done safely. In case of fire: Wear self-contained breathing apparatus.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Remove all sources of ignition. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Wear personal protection equipment.

### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Ensure all waste water is collected and treated via a waste water treatment plant.

### **6.3. Methods and material for containment and cleaning up**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Clean contaminated articles and floor according to the environmental legislation.

### **6.4. Reference to other sections**

Safe handling: see section 7  
Personal protection equipment: see section 8  
Disposal: see section 13

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

#### **Advice on safe handling**

Observe instructions for use.  
Dust must be exhausted directly at the point of origin. Vapours/aerosols must be exhausted directly at the point of origin. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.  
When using do not eat, drink, smoke, sniff.  
Wear personal protection equipment (refer to section 8).

#### **Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking.

#### **Further information on handling**

Avoid contact with skin and eyes.

### **7.2. Conditions for safe storage, including any incompatibilities**

#### **Requirements for storage rooms and vessels**

Keep container tightly closed. Observe legal regulations and provisions.

#### **Hints on joint storage**

Do not store together with: Oxidizing agents. Pyrophoric or self-heating substances. Food and feedingstuffs.

#### **Further information on storage conditions**

Store in a cool dry place. Observe legal regulations and provisions.

### **7.3. Specific end use(s)**

No information available.

## **SECTION 8: Exposure controls/personal protection**

### **8.1. Control parameters**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Granit Kühlerreiniger 1L

Revision date: 19.06.2020

Product code: 1103237

Page 4 of 11

#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
123-42-2	4-Hydroxy-4-methyl-pentan-2-one	50	241		TWA (8 h)	WEL
		75	362		STEL (15 min)	WEL

#### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
123-42-2	4-hydroxy-4-methylpentan-2-one, diacetone alcohol			
Worker DNEL, long-term		inhalation	systemic	32,6 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	local	240 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	467 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	5,8 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	167 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	1,67 mg/kg bw/day

#### PNEC values

CAS No	Substance	Value
123-42-2	4-hydroxy-4-methylpentan-2-one, diacetone alcohol	
Freshwater		2 mg/l
Freshwater (intermittent releases)		1 mg/l
Marine water		0,2 mg/l
Freshwater sediment		7,4 mg/kg
Marine sediment		0,74 mg/kg
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		0,31 mg/kg

#### Additional advice on limit values

- a no restriction
- b End of exposure or end of shift
- c at long term exposure: after several previous shifts
- d before next shift

blood (B)  
Urine (U)

#### 8.2. Exposure controls

##### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used.

##### Protective and hygiene measures

Avoid exposure. Wear suitable protective clothing. Draw up and observe skin protection programme.

##### Eye/face protection

Suitable eye protection: Tightly sealed safety glasses.  
DIN EN 166

##### Hand protection

Protect skin by using skin protective cream. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Granit Kühlerreiniger 1L

Revision date: 19.06.2020

Product code: 1103237

Page 5 of 11

chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Suitable material: NBR (Nitrile rubber) Breakthrough time (maximum wearing time) 480min

Thickness of the glove material 0,45 mm

EN ISO 374

#### Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing and wash it before reuse.

#### Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

When exceeding the relevant workplace exposure limits, note the following:

Suitable respiratory protective equipment: Combination filter device (DIN EN 141)..

Filtering device with filter or ventilator filtering device of type: A

Observe the wear time limits as specified by the manufacturer.

Observe legal regulations and provisions.

#### Environmental exposure controls

Observe legal regulations and provisions.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	colorless, turbid
Odour:	characteristic

	Test method
pH-Value (at 20 °C):	10,25 DIN 19268

#### Changes in the physical state

Melting point:	not determined
----------------	----------------

Initial boiling point and boiling range:	100 °C
--	--------

Flash point:	> 100 °C ISO 3679
--------------	-------------------

#### Flammability

Solid:	not applicable
--------	----------------

Gas:	not applicable
------	----------------

Lower explosion limits:	not determined
-------------------------	----------------

Upper explosion limits:	not determined
-------------------------	----------------

#### Auto-ignition temperature

Solid:	not applicable
--------	----------------

Gas:	not applicable
------	----------------

Decomposition temperature:	not determined
----------------------------	----------------

#### Oxidizing properties

Not oxidising.

Vapour pressure:	not determined
------------------	----------------

Density (at 20 °C):	1,03 g/cm <sup>3</sup> DIN 51757
---------------------	----------------------------------

Water solubility:	easily soluble
-------------------	----------------

#### Solubility in other solvents

not determined

Partition coefficient:	not determined
------------------------	----------------

Viscosity / dynamic:	DIN 53019-1
----------------------	-------------

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Granit Kühlerreiniger 1L

Revision date: 19.06.2020

Product code: 1103237

Page 6 of 11

Viscosity / kinematic:  
(at 40 °C) DIN EN ISO 3104

Flow time:  
(at 20 °C) DIN EN ISO 2431

Vapour density: not determined

Evaporation rate: not determined

### 9.2. Other information

Solid content: not determined

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

### 10.2. Chemical stability

The product is stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

### 10.4. Conditions to avoid

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Take precautionary measures against static discharges.

### 10.5. Incompatible materials

Oxidizing agents. Pyrophoric or self-heating substances.

### 10.6. Hazardous decomposition products

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO<sub>2</sub>, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

### **Further information**

Do not mix with other chemicals.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### **Toxicokinetics, metabolism and distribution**

There are no data available on the mixture itself.

#### **Acute toxicity**

Based on available data, the classification criteria are not met.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Granit Kühlerreiniger 1L

Revision date: 19.06.2020

Product code: 1103237

Page 7 of 11

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
123-42-2	4-hydroxy-4-methylpentan-2-one, diacetone alcohol				
	oral	LD50 mg/kg 3002	Rat	Study report (1978)	OECD Guideline 401
	dermal	LD50 mg/kg 13630	Rabbit		
64-02-8	tetrasodium ethylene diamine tetraacetate				
	oral	LD50 mg/kg 1780	Rat		
5064-31-3	trisodium nitrilotriacetate				
	oral	ATE mg/kg 500			

#### Irritation and corrosivity

Causes serious eye damage.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

#### Sensitising effects

Based on available data, the classification criteria are not met.

#### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

No indications of human carcinogenicity exist.

No indications of human germ cell mutagenicity exist.

No indications of human reproductive toxicity exist.

#### 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

Based on available data, the classification criteria are not met.

#### Specific effects in experiment on an animal

No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

The product is not: Ecotoxic.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Granit Kühlerreiniger 1L

Revision date: 19.06.2020

Product code: 1103237

Page 8 of 11

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
123-42-2	4-hydroxy-4-methylpentan-2-one, diacetone alcohol					
	Acute fish toxicity	LC50 > 100 mg/l	96 h	Oryzias latipes	REACH Registration Dossier	OECD Guideline 203
	Acute algae toxicity	ErC50 > 1000 mg/l	72 h	Pseudokirchneriella subcapitata	REACH Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 > 1000 mg/l	48 h	Daphnia magna	Study report (1997)	OECD Guideline 202
	Algae toxicity	NOEC 1000 mg/l	3 d	Pseudokirchneriella subcapitata		
	Crustacea toxicity	NOEC 100 mg/l	14 d	Daphnia magna	REACH Registration Dossier	OECD Guideline 211
	Acute bacteria toxicity	(> 1000 mg/l)	3 h	activated sludge, domestic	Study report (2012)	OECD Guideline 209
64-02-8	tetrasodium ethylene diamine tetraacetate					
	Acute fish toxicity	LC50 121 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50 2,7 mg/l	72 h	Selenastrum capricornutum		
	Acute crustacea toxicity	EC50 600 mg/l	48 h	Daphnia magna (Big water flea)		

#### 12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
123-42-2	4-hydroxy-4-methylpentan-2-one, diacetone alcohol				
	OECD 301 A	98,51%	28		
	Easily biodegradable (concerning to the criteria of the OECD)				

#### 12.3. Bioaccumulative potential

The product has not been tested.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
123-42-2	4-hydroxy-4-methylpentan-2-one, diacetone alcohol	-0,09

#### 12.4. Mobility in soil

The product has not been tested.

#### 12.5. Results of PBT and vPvB assessment

The product has not been tested.

#### 12.6. Other adverse effects

No information available.

#### Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

### SECTION 13: Disposal considerations



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Granit Kühlerreiniger 1L

Revision date: 19.06.2020

Product code: 1103237

Page 9 of 11

#### 13.1. Waste treatment methods

##### **Disposal recommendations**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

##### **List of Wastes Code - residues/unused products**

070704 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; other organic solvents, washing liquids and mother liquors; hazardous waste

##### **List of Wastes Code - used product**

070704 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; other organic solvents, washing liquids and mother liquors; hazardous waste

##### **List of Wastes Code - contaminated packaging**

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

##### **Contaminated packaging**

Water (with cleaning agent). Completely emptied packages can be recycled.

#### **SECTION 14: Transport information**

##### **Land transport (ADR/RID)**

<b><u>14.1. UN number:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.2. UN proper shipping name:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.3. Transport hazard class(es):</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.4. Packing group:</u></b>	No dangerous good in sense of this transport regulation.

##### **Inland waterways transport (ADN)**

<b><u>14.1. UN number:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.2. UN proper shipping name:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.3. Transport hazard class(es):</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.4. Packing group:</u></b>	No dangerous good in sense of this transport regulation.

##### **Marine transport (IMDG)**

<b><u>14.1. UN number:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.2. UN proper shipping name:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.3. Transport hazard class(es):</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.4. Packing group:</u></b>	No dangerous good in sense of this transport regulation.
Marine pollutant:	no

##### **Air transport (ICAO-TI/IATA-DGR)**

<b><u>14.1. UN number:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.2. UN proper shipping name:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.3. Transport hazard class(es):</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.4. Packing group:</u></b>	No dangerous good in sense of this transport regulation.

##### **14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

##### **14.6. Special precautions for user**

No dangerous good in sense of this transport regulation.

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

No dangerous good in sense of this transport regulation.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Granit Kühlerreiniger 1L

Revision date: 19.06.2020

Product code: 1103237

Page 10 of 11

#### SECTION 15: Regulatory information

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

###### EU regulatory information

2010/75/EU (VOC): No information available.

2004/42/EC (VOC): No information available.

###### Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

###### National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

#### SECTION 16: Other information

##### Changes

This data sheet contains changes from the previous version in section(s): 2,3,4,5,6,7,8,9,10,11,13,15,16.

##### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA: International Air Transport Association

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL/DMEL: Derived No Effect Level / Derived Minimal Effect Level

WEL (UK): Workplace Exposure Limits

TWA (EC): Time-Weighted Average

ATE: Acute Toxicity Estimate

STEL (EC) Short Term Exposure Limit

LC50: Lethal Concentration

EC50: half maximal Effective Concentration

ErC50: means EC50 in terms of reduction of growth rate

##### Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Eye Dam. 1; H318	Calculation method

##### Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

##### Further Information

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]:  
Calculation method.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Granit Kühlerreiniger 1L

Revision date: 19.06.2020

Product code: 1103237

Page 11 of 11

processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

---

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*