

Grotanol® SR 1



Schülke & Mayr

TECHNICAL LEAFLET

SR1

DISINFECTANT CLEANER FOR PRODUCTION PLANTS

- Excellent cleaning and disinfectant effect
- Broad, balanced spectrum of effect against bacteria, yeasts and moulds
- Good immediate effect
- Anti-corrosion properties
- Does not affect the AOX value

Technical data

		CAS-Nr.
Actives	α,α',α'' -Trimethyl-1,3,5-triazine-1,3,5-(2H,4H,6H)-triethanol Sodium hydroxide Pyridine-2-thiol-1-oxide, Sodium salt	25254-50-6 1310-73-2 3811-73-2
Other ingredients	< 5 % anionic surfactants 5 % - < 15 % non-ionic surfactants	
Appearance	Yellow liquid	
Density (20 °C)	1.063 – 1.083 g/ml	
Viscosity (DIN 53 211)	Flow time < 15 sec (20 °C)	
Odour	Characteristic (amine-like)	
Refractive index (20 °C)	1.376 – 1.388	
Boiling point	Approx. 100 °C	
Flashpoint (ISO 2719)	> 100 °C	

Use concentration

	Recommended dosage	Remarks
Metalworking fluid plants, production plants, circulating systems and equipment	10 – 30 g/kg (1 – 3 %) in aqueous solution	The details refer to the total amount in each case. The values given are recommended guidelines. The optimum use-concentration depends on the degree of soiling. Use biocides safely. Always read the label and product information before use.

Instructions on application

Depending on the degree of soiling, **Grotanol® SR 1** is used 1 – 3 % in an aqueous solution. In order to achieve an optimum cleaning effect, a contact time of at least 6 – 24 hours is recommended. In metalworking fluid systems **Grotanol® SR 1** can be added to the emulsion before the last shift begins and allowed to circulate. In general, work can be continued while the system cleaner is being used. Emulsifiers carry away the “tramp” oil and loosened dirt in the system. To prevent blockages, inspection of filters and overflows is advisable.

Together with the microbiological decontamination, i.e. destruction of microorganisms in the system, there is a very good cleaning effect. After only 6 – 24 hours the decontamination is finished. Please note that in cases of especially heavy contamination it is advisable to combine chemical and mechanical system cleaning.

At the end of the residence time, which usually lasts for one shift, the metalworking fluid dilution containing the system cleaner can be discharged, split and disposed of as usual. Due to the alkaline cleaners, over-alkalinisation can occur for a short time, therefore the amount of acid must be increased in cases of acidic breakdown.

Grotanol® SR 1 is compatible with ultra-filtration-plants.

Microbiological efficacy

Due to the combination of bactericidal and fungicidal active agents, **Grotanol® SR 1** acts as a disinfectant cleaner with a broad spectrum against bacteria, moulds and yeasts.

Compatibility

Material compatibility (Aqueous dilution 1 %)	On contact with copper or copper-containing alloys, discolouration of the surface wetted with Grotanol® SR 1 can occur if the coolants do not contain a copper corrosion inhibitor. From the available test results, it can be concluded that the addition of Grotanol® SR 1 has virtually no influence on the medium to be preserved. When selecting sealing materials, piping systems, collection baths, etc., the presence of Grotanol® SR 1 as the disinfectant in the recommended use-concentration can be disregarded.
Plastics (Aqueous dilution 1 %)	In the laboratory tests, Grotanol® SR 1 proved to have good material compatibility with plastics. No significant difference to tap-water was observable.
Sealants (Aqueous dilution 1 %)	The sealing materials tested were virtually unaffected by Grotanol® SR 1 , so all common sealing materials can be used when using Grotanol® SR 1 .
Corrosion (Aqueous dilution 1 %)	In the recommended use concentration, Grotanol® SR 1 causes no corrosion to steel or stainless steels. In the case of copper, brass and zinc there is a slight effect, and discolouration occurs on the surface of the metals. Due to the high pH-value, in case of aluminium there is a conspicuous effect on the material. Therefore we do not recommend Grotanol® SR 1 in contact with aluminium.

Safety & Labelling

R- and S-Phrases	R 34, 43 S 24, 26, 37/39, 45
Labelling	C (Corrosive)
	For further hazard instructions and safety advice please refer to the current material safety data sheet.

Environmental information

At a sufficient dilution, all components of **Grotanol® SR 1** are completely biodegradable. Experience has shown that dilutions of **Grotanol® SR 1** do not interfere with the operation of municipal sewage treatment plants. **Grotanol® SR 1** contains no organic chlorine compounds, so that there is no effect on the AOX value in waste water as a result of **Grotanol® SR 1**. **Grotanol® SR 1** contains no organic solvents. The canisters and drums used by Schülke & Mayr are made of polyethylene (HDPE) and are labelled accordingly. The 1000 kg - containers are covered by a return scheme that in Europe ensures collection of the used containers free of charge and appropriate re-use. The labels are made of PE. S&M packaging materials contain no PVC and can be recycled. For further information please ask for our detailed environmental report.

Listings and approvals of active ingredients

EINECS / ELINCS (Europe)
Fulfils the requirements of the TRGS 611 (Germany)

Shelf life / Transport / Storage

Shelf life	24 months from date of production
Dangerous good	UN 1824
Package sizes	10 kg, 200 kg, 1000 kg
Storage	Protect from frost, heat and sunlight. Store at room temperature in the original container.

Schülke & Mayr subsidiaries in:

Belgium

S.A. Schülke & Mayr
Belgium N.V.
B-1830 Machelen
Telephone +32-02-479 73 35
Telefax +32-02-479 99 66

China

Schülke & Mayr GmbH
Shanghai Representative Office
Shanghai 200041
Telephone +86-21-62 17 29 95
Telefax +86-21-62 17 29 97

Italy

Schülke & Mayr Italia S.r.l.
20148 Milano
Telephone +39-02-402 18 20
Telefax +39-02-402 18 29

Malaysia

Schülke & Mayr Asia Sdn Bhd
46000 Petaling Jaya
Telephone +60-3-77 83 56 98
Telefax +60-3-77 84 79 31

Netherlands

Schülke & Mayr Benelux B.V.
2003 LM-Haarlem
Telephone +31-23-535 26 34
Telefax +31-23-536 79 70

New Zealand

Schülke & Mayr Asia Pacific
Representative Office
Auckland
Telephone +64-09-424 0959
Telefax +64-09-424 0376

Singapore

Schülke & Mayr Asia Pte Ltd
Singapore 768767
Telephone +65-62 57 23 88
Telefax +65-62 57 93 88

Switzerland

Schülke & Mayr AG
8001 Zürich
Telephone +41-1-252 98 02
Telefax +41-1-252 98 27

United Kingdom

Schülke & Mayr UK Ltd.
Sheffield S9 1AT
Telephone +44-1142-54 35 00
Telefax +44-1142-54 35 01

Other Distributors in:

Argentina · Australia · Austria · Belarus · Benin · Brazil · Bulgaria · Canada · Croatia · Czech Republic · Denmark · Egypt · Estonia · Finland · France · Ghana · Greece · Hong Kong · Hungary · India · Indonesia · Iran · Israel · Japan · Jordan · Korea · Kuwait · Latvia · Lebanon · Lithuania · Macedonia · Malaysia · Nigeria · Norway · Oman · Philippines · Poland · Portugal · Russia · Saudi Arabia · Slovakia · Slovenia · South-Africa · Spain · Sweden · Syria · Taiwan · Thailand · Turkey · Ukraine · United Arab Emirates · USA · Vietnam · Yemen · Yugoslavia



Our recommendations regarding our products are based on in-depth scientific testing in our Research Department, they are given in good faith, but no liability can be derived from them. In other respects our Conditions of Sale and Supply apply.

Schülke & Mayr GmbH
22840 Norderstedt
GERMANY
Telephone +49 40 521 00 0
Telefax +49 40 521 00 244
www.schuelke-mayr.com
sai@schuelke-mayr.com