Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.02.2017 Version 17 Revision: 22.02.2017

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

- **1.1 Product identifier**

- **Trade name: Compound FC 120**

- **Article number:** 05000012000

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

- **Sector of Use** SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Product category**
PC14 Metal surface treatment products
PC15 Non-metal-surface treatment products
- **Process category**
PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
- **Environmental release category**
ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

- **Application of the substance / the mixture**
Process auxiliary for surface finishing
Industrial use

- **1.3 Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**
Rösler Oberflächentechnik GmbH
Hausen 1
D-96231 Bad Staffelstein
Tel.: +49/9533/924-0
Fax : +49/9533/924-300
info@rosler.com
www.rosler.com

- **Further information obtainable from:** Department of Product Control / E-Mail: sds@rosler.com

- **1.4 Emergency telephone number:**
Emergency number in case of toxication: University Hospital of Mainz +49 (0) 6131 - 19240
(information in German and English language)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**


GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.


GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.02.2017 Version 17 Revision: 22.02.2017

Trade name: Compound FC 120

(Contd. of page 1)

- **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**

GHS05

- **Signal word** Danger

- **Hazard-determining components of labelling:**
Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)
2,2'-iminodiethanol
Fatty acids, C8-18 and C18-unsatd.
- **Hazard statements**
H315 Causes skin irritation.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**

P280	Wear protective gloves/protective clothing/eye protection.
P273	Avoid release to the environment.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **2.3 PBT:** Not applicable.
- **2.3 vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterization: Mixture**
- **Description:**
Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**		
CAS: 102-71-6 EINECS: 203-049-8 Reg.nr.: 01-2119486482-31-xxxx	2,2',2''-nitrilotriethanol substance with a Community workplace exposure limit	10-30%
EC-number: 931-329-6 Reg.nr.: 01-2119490100-53-xxxx	Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl) Eye Dam. 1, H318; Aquatic Chronic 2, H411; Skin Irrit. 2, H315	5-10%
CAS: 5949-29-1 EINECS: 201-069-1 Reg.nr.: 01-2119457026-42-xxxx	citric acid monohydrate Eye Irrit. 2, H319	1-5%

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.02.2017 Version 17 Revision: 22.02.2017

Trade name: Compound FC 120

(Contd. of page 2)

CAS: 111-42-2 EINECS: 203-868-0 Reg.nr.: 01-2119488930-28-xxxx	2,2'-iminodiethanol STOT RE 2, H373; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Irrit. 2, H315	1-5%
CAS: 67701-05-7 EINECS: 266-929-0 Reg.nr.: 01-2119552480-44-xxxx	Fatty acids, C8-18 and C18-unsatd. Eye Dam. 1, H318; Skin Irrit. 2, H315	1-5%
CAS: 15763-76-5 EINECS: 239-854-6 Reg.nr.: 01-2119489411-37-xxxx	sodium p-cumenesulphonate Eye Irrit. 2, H319	1-5%

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Rinse out mouth with plenty of water.
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.
- **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:** Product will not burn.
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Nitrogen oxides (NOx)
Carbon monoxide and carbon dioxide
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Particular danger of slipping on leaked/spilled product.
- **6.2 Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Do not allow to penetrate the ground/soil.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.02.2017 Version 17 Revision: 22.02.2017

Trade name: Compound FC 120

(Contd. of page 3)

See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special measures required.
- **Information about fire - and explosion protection:** No special measures required.

- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
  Store at: +5 °C to +30 °C
  Durability: at least 2 years
- **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:**	
102-71-6 2,2',2''-nitrilotriethanol	
MAK (Germany)	Long-term value: 5E mg/m³
111-42-2 2,2'-iminodiethanol	
MAK (Germany)	Long-term value: 1E* mg/m³ *Dampf und Aerosol

- **DNELs**		
102-71-6 2,2',2''-nitrilotriethanol		
Dermal	DNEL long term exposure - systemic effects	6,3 mg/kg bw/day (Workers)
Inhalative	DNEL long-term exposure - local effects	5 mg/m³ (Workers)
	DNEL long term exposure - systemic effects	5 mg/m³ (Workers)
Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)		
Dermal	DNEL long term exposure - systemic effects	4,16 mg/kg bw/day (Workers)
	DNEL long term exposure - local effects	0,0936 mg/cm² (Workers)
Inhalative	DNEL long term exposure - systemic effects	73,4 mg/m³ (Workers)
111-42-2 2,2'-iminodiethanol		
Dermal	DNEL long term exposure - systemic effects	0,13 mg/kg bw/day (Workers)
Inhalative	DNEL long-term exposure - local effects	1 mg/m³ (Workers)
67701-05-7 Fatty acids, C8-18 and C18-unsatd.		
Dermal	DNEL long term exposure - systemic effects	10 mg/kg bw/day (Workers)
Inhalative	DNEL long term exposure - systemic effects	17,632 mg/m³ (Workers)
15763-76-5 sodium p-cumenesulphonate		
Dermal	DNEL long term exposure - systemic effects	7,6 mg/kg bw/day (Workers)
Inhalative	DNEL long term exposure - systemic effects	53,6 mg/m³ (Workers)

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.02.2017 Version 17 Revision: 22.02.2017

Trade name: Compound FC 120

(Contd. of page 4)

- **PNECs**	
102-71-6 2,2',2''-nitrilotriethanol	
PNEC aqua	0,32 mg/l (freshwater)
	0,032 mg/l (marine water)
PNEC STP	10 mg/l
PNEC sediment	1,7 mg/kg (freshwater)
	0,17 mg/kg (marine water)
PNEC soil	0,151 mg/kg
Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	
PNEC aqua	0,007 mg/l (freshwater)
	0,0007 mg/l (marine water)
PNEC STP	830 mg/l
PNEC sediment	0,195 mg/kg (freshwater)
	0,0195 mg/kg (marine water)
PNEC soil	0,0348 mg/kg
111-42-2 2,2'-iminodiethanol	
PNEC aqua	0,0022 mg/l (freshwater)
	0,00022 mg/l (marine water)
PNEC STP	100 mg/l
PNEC sediment	0,012 mg/kg (freshwater)
	0,0012 mg/kg (marine water)
PNEC soil	0,0011 mg/kg
67701-05-7 Fatty acids, C8-18 and C18-unsatd.	
PNEC aqua	0,031 mg/l (freshwater)
	0,0031 mg/l (marine water)
PNEC STP	912 mg/l
PNEC sediment	1,67 mg/kg (freshwater)
	0,167 mg/kg (marine water)
PNEC soil	0,314 mg/kg
15763-76-5 sodium p-cumenesulphonate	
PNEC aqua	0,23 mg/l (freshwater)
PNEC STP	100 mg/l

- **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.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Do not eat, drink, smoke or sniff while working.
- **Respiratory protection:**
Not necessary in case of intended use.
Use suitable respiratory protective device if vapors occur or aerosol is formed.
Filter A/P2

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.02.2017 Version 17 Revision: 22.02.2017

Trade name: Compound FC 120

(Contd. of page 5)

- **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
After use of gloves apply skin-cleaning agents and skin cosmetics.

- **Material of gloves**

e.g.
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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**

Tightly sealed goggles

- **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  Form: Fluid
  Colour: Green
- **Odour:** Characteristic

- **pH-value (at 20 °C):** 7,9 (± 0,3)
- **pH-value (0,5%, at 20 °C):** 7,6 (± 0,3)

- **Change in condition**
  Melting point/freezing point: Undetermined.
  Initial boiling point and boiling range: Undetermined.

- **Flash point:** Not determined

- **Flammability (solid, gas):** Not applicable.

- **Ignition temperature:** 305 °C

- **Decomposition temperature:** Not determined.

- **Auto-ignition temperature:** Product is not selfigniting.

- **Explosive properties:** Product does not present an explosion hazard.

- **Explosion limits:**
  Lower: Not determined.
  Upper: Not determined.

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.02.2017 Version 17 Revision: 22.02.2017

Trade name: Compound FC 120

(Contd. of page 6)

- **Vapour pressure at 20 °C:** 23 hPa

- **Density (at 20 °C):** 1,059 (± 0,010) g/cm³

- **Relative density** Not determined.
- **Vapour density** Not determined.
- **Evaporation rate** Not determined.

- **Solubility in / Miscibility with water:** Fully miscible.

- **Partition coefficient: n-octanol/water:** Not determined.

- **Viscosity:**
  Kinematic: Not determined.
  Dynamic (at 22 °C): 16 - 23 mPa.s

- **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No dangerous reactions in case of intended use.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions in case of intended use.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** None in case of intended use and storage.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**
  The values of calculation of the acute oral, dermal and inhalation toxicity of this mixture lie above the concentration limits for classification according to Regulation (EC) No 1272/2008.

- **LD/LC50 values relevant for classification:**		
111-42-2 2,2'-iminodiethanol		
Oral	LD50	1600 mg/kg (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
  This product has to be classified using the calculation set out according to Regulation (EC) No 1272/2008.
  Causes skin irritation.
- **Serious eye damage/irritation**
  This product has to be classified using the calculation set out according to Regulation (EC) No 1272/2008.
  Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
  Regarding all rateable information this produkt is not cancerogenic, mutagenic or toxic for reproduction.

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.02.2017 Version 17 Revision: 22.02.2017

Trade name: Compound FC 120

(Contd. of page 7)

- **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** 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.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**
This product has to be classified using the calculation set out according to Regulation (EC) No 1272/2008.
Harmful to aquatic life with long lasting effects.

- **Values for aquatic toxicity relevant for classification :**	
Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	
chron. NOEC	0,07 mg/l (Daphnia magna) (OECD 211, 21 d)

- **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.
- **Additional ecological information:**
- **COD-value (5 g/L water):** 3400 mg/L
- **General notes:**
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.
Avoid transfer into the environment.

- **Results of PBT and vPvB assessment**
The product contains no substance which is considered to be persistent, bioaccumulative or toxic (PBT) or as very persistent and very bioaccumulative (vPvB).
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **European waste catalogue**	
16 03 05*	organic wastes containing hazardous substances

- **Uncleaned packaging:**
- **Recommendation:**
Not complete empty packaging should be disposed of as packaging with hazardous residues.
15 01 10*: packaging containing residues of or contaminated by dangerous substances.

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
- **Recommended cleansing agents:** Water

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.02.2017 Version 17 Revision: 22.02.2017

Trade name: Compound FC 120

(Contd. of page 8)

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, ADN, IMDG, IATA** Void
- **14.2 UN proper shipping name**
- **ADR, ADN, IMDG, IATA** Void
- **14.3 Transport hazard class(es)**

- **ADR, ADN, IMDG, IATA**
- **Class** Void
- **14.4 Packing group**
- **ADR, IMDG, IATA** Void
- **14.5 Environmental hazards:** 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** Not applicable.

- **Transport/Additional information:** Not dangerous according to the above specifications.

- **UN "Model Regulation":** Void

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge and refers to the product in its conditions as delivered. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Existing laws and regulations have to be observed by the receiver on its own responsibility.

- **Relevant phrases**
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

- **Department issuing SDS:**
Rösler Oberflächentechnik GmbH
Department of Product Control

- **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association

(Contd. on page 10)

Safety data sheet

according to 1907/2006/EC, Article 31

(Contd. of page 9)

GHS: Globally Harmonised 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: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
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 RE 2: Specific target organ toxicity (repeated exposure) – Category 2
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

- **Sources**
For the preparation of this MSDS information from our suppliers, information on chemicals from the European Chemicals Agency (ECHA) and data from the GESTIS database were used.