

Printing date 23.03.2025 Version number 1 Revision: 23.03.2025

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

- · 1.1 Product identifier
- · Trade name: RF 20-0
- 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture Polishing agent/ Burnishing compound
- · 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

OTEC Präzisionsfinish GmbH Heinrich-Hertz-Straße 24 75334 STRAUBENHARDT Germany msds@otec.de www.otec.de Tel. + 49 7082 491120 Fax + 49 7082 4911141

- · Further information obtainable from: Product safety department
- · 1.4 Emergency telephone number:

Members of the public seeking specific information on poisons should contact:

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

2 Hazards identification

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



GHS08 health hazard

Repr. 1A H360 May damage fertility or the unborn child.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

- · 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

Hazard pictograms





GHS05

GHS08

Revision: 23.03.2025 Printing date 23.03.2025 Version number 1

Trade name: RF 20-0

· Signal word Danger

(Contd. of page 1)

· Hazard-determining components of labelling:

Isotridecanol Ethoxylated, 3-5 EO

Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics

Triethanolamine

Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cycloalkanes, <0.03% aromatics

Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

H360 May damage fertility or the unborn child.

H304 May be fatal if swallowed and enters airways.

· Precautionary statements

IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P301+P310

Specific treatment (see on this label). P321

P331 Do NOT induce vomiting.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

Additional information:

Contains Triethanolamine. May produce an allergic reaction.

Restricted to professional users.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· **PBT:** Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:		
EC number: 920-107-4 Reg.nr.: 01-2119453414-43-xxxx	Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics Specific Asp. Tox. 1, H304	>5-≤25%
EC number: 934-954-2 Reg.nr.: 01-2119826592-36-xxxx	Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cycloalkanes, <0.03% aromatics Asp. Tox. 1, 11304	>5-≤25%
CAS: 107-21-1 EINECS: 203-473-3 Index number: 603-027-00-1 Reg.nr.: 01-2119456816-28-xxxx	ethanediol Acute Tox. 4, H302	>10-≤25%
CAS: 69011-36-5	Isotridecanol Ethoxylated, 3-5 EO ♦ Eye Dam. 1, H318	>10-≤25%
CAS: 68608-26-4 Reg.nr.: 01-2119527859-22-XXXX	Alkyl sulfonate sodium salt (i) Eye Irrit. 2, H319	>5-<10%
CAS: 160875-66-1	ROKAnol® GA8W ♦ Eye Dam. 1, H318; ♦ Acute Tox. 4, H302	≥3-≤5%
EINECS: 287-494-3 Reg.nr.: 01-2119490234-40-XXXX	MAS C10-13 Sulfonsäure Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Aquatic Chronic 3, H412	≥3-<5%
CAS: 121617-08-1 Reg.nr.: 01-2119971970-28	Benzenesulfonic acid, C10-13-sec-alkylderivs., compds. with triethanolamine Eye Dam. 1, H318	>1-≤2.5%
CAS: 102-71-6 Reg.nr.: 01-211-9486482-31-xxxx	Triethanolamine Repr. 1A, H360; Eye Irrit. 2, H319; Skin Sens. 1B, H317	≥0.3-<1%

(Contd. on page 3)

Printing date 23.03.2025 Version number 1 Revision: 23.03.2025

Trade name: RF 20-0

· Additional information: For the wording of the listed hazard phrases refer to section 16.

(Contd. of page 2)

4 First aid measures

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:

If symptoms persist consult doctor.

IF SWALLOWED: Immediately call a doctor.

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.

5 Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to section 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.

7 Handling and storage

- 7.1 Precautions for safe handling Open and handle receptacle with care.
- Information about fire and explosion protection: Keep respiratory protective device available.
- · 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: Keep container tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · 8.1 Control parameters
- · Additional information about design of technical facilities: No further data; see section 7.

(Contd. on page 4)

Printing date 23.03.2025 Version number 1 Revision: 23.03.2025

Trade name: RF 20-0

Ingredients with limit values that require monitoring at the workplace:

CAS: 107-21-1 ethanediol

WEL Short-term value: 104** mg/m³, 40** ppm
Long-term value: 10* 52** mg/m³, 20** ppm
Sk *particulate **vapour

DNELs

CAS: 102-71-6 Triethanolamine

Dermal DNEL 6.3 mg/kg (Worker (D))

Inhalative DNEL 5 mg/m³ (Worker (I))

• PNECs

CAS: 102-71-6 Triethanolamine

PNEC aqua 0.32 mg/l (freshwater)

0.032 mg/l (marine water)

PNEC sediment 0.195 mg/kg (freshwater)

0.0195 mg/kg (marine 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:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

- Respiratory protection: Not required.
- Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

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:



Tightly sealed goggles

· Body protection: Protective work clothing

9 Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Fluid

Colour: According to product specification

Odour: Characteristic

(Contd. on page 5)

Printing date 23.03.2025 Version number 1 Revision: 23.03.2025

Trade name: RF 20-0

	(Contd. of page
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition Melting point/freezing point: Initial boiling point and boiling range	Undetermined. : 197 °C
Flash point:	>100 °C
Flammability	Not applicable.
Auto-ignition temperature:	410 °C
Decomposition temperature:	Not determined.
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Explosion limits: Lower: Upper:	3.2 Vol % 53 Vol %
Vapour pressure at 20 °C:	0.1 hPa
Density: Relative density Vapour density Evaporation rate	Not determined. Not determined. Not determined. Not determined.
Solubility in / Miscibility with water:	Fully miscible.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity: Dynamic: Kinematic:	Not determined. Not determined.
Solvent content: Organic solvents: VOC (EC)	14.5 % 13.56 %
Solids content:	4.8 %
9.2 Other information	No further relevant information available.

10 Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:				
ATE (Acı	ATE (Acute Toxicity Estimates)			
Oral	LD50	8,154 mg/kg		
Hydrocai	Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics			
Oral	LD50	>15,000 mg/kg (rat)		
Dermal		>5,000 mg/kg (rabbit)		

(Contd. on page 6)

Printing date 23.03.2025 Version number 1 Revision: 23.03.2025

Trade name: RF 20-0

			Contd. of page
Inhalative	LC50/4 h	mg/I (Worker (I))	
		>4.951 mg/l (rat)	
	LC50/4h	>9.3 mg/l //m³ (rat)	
Hydrocark	ons, C13-	C16, n-alkanes, isoalkanes, cycloalkanes, <0.03% aromatics	
Oral	LD50	>5,000 mg/kg (rat)	
Dermal	LD50	>3.16 mg/kg (rabbit)	
CAS: 107-	21-1 ethan	ediol	
Oral	LD50	5,840 mg/kg (rat)	
Dermal	LD50	9,530 mg/kg (rabbit)	
CAS: 690'	11-36-5 Iso	tridecanol Ethoxylated, 3-5 EO	
Dermal	LD50	>2,000 mg/kg (rab)	
	LC50/96 h	>1-10 mg/l (Cyprinus carpio)	
		2.18 mg/l /OECD 203 (Oncorhynchus Mykiss)	
CAS: 6860	08-26-4 Alk	yl sulfonate sodium salt	
Dermal	LD50	5,000 mg/kg (rabbit)	
CAS: 1608	375-66-1 RG	DKAnol® GA8W	
Oral	LD50	>1,234,567 mg/kg (rat)	
MAS C10-	13 Sulfons	äure	
Oral	LD50	1,350 mg/kg (rat)	
CAS: 102-	71-6 Trieth	anolamine	
Oral	LD50	>2,000 mg/kg (rat)	
Dermal	LD50	>2,000 mg/kg (rabbit)	
	LC50/96 h	11,800 mg/l (Pimephales promelas)	

- Primary irritant effect:
- Skin corrosion/irritation

Causes skin irritation.

· 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:
- · CMR effects (carcinogenity, 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

May damage fertility or the unborn child.

- · 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

May be fatal if swallowed and enters airways.

12 Ecological information

· 12.1 Toxicity

· Aquatic toxici	· Aquatic toxicity:		
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics			
LL50/24h	>1,000 mg/l (fish)		
EL50/24h	>1,000 mg/l (aquatic invertebrates)		
Hydrocarbons	s, C13-C16, n-alkanes, isoalkanes, cycloalkanes, <0.03% aromatics		
EC50	>100 mg/l /3h (microorganisms)		
LL50/96h	>1.028 mg/l (fish)		
LL50/24h	>3.193 mg/l (aquatic invertebrates)		
EL50/72h	>10,000 mg/l (algae)		
CAS: 69011-3	CAS: 69011-36-5 Isotridecanol Ethoxylated, 3-5 EO		
EC50/48h	2.94 mg/l /OECD 202 (daphnia)		
	>1-10 mg/l (daphnia)		
EC50/72h	>1-10 mg/L (Desmodesmus Subspicatus)		
	(Contd. on page 7)		

(Contd. of page 6)

Safety data sheet according to UK REACH

Printing date 23.03.2025 Version number 1 Revision: 23.03.2025

Trade name: RF 20-0

ERC50/72h (static) 0.11 mg/l /OECD 201 (Pseudokirchneriella subcapitata)

CAS: 102-71-6 Triethanolamine

EC50/48h 2,038 mg/l (daphnia)

- 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:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

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.

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.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

14 transport information			
· 14.1 UN-Number · ADR/RID/ADN, IMDG, IATA	not regulated		
· 14.2 UN proper shipping name · ADR/RID/ADN, IMDG, IATA	not regulated		
14.3 Transport hazard class(es)			
· ADR/RID/ADN, ADN, IMDG, IATA · Class	not regulated		
· 14.4 Packing group · ADR/RID/ADN, IMDG, IATA	not regulated		
· 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.			
· UN "Model Regulation":	not regulated		
·	·		

15 Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Poisons Act
- Regulated explosives precursors

None of the ingredients is listed.

Regulated poisons

None of the ingredients is listed.

· Reportable explosives precursors

None of the ingredients is listed.

(Contd. on page 8)

Version number 1 Revision: 23.03.2025 Printing date 23.03.2025

Trade name: RF 20-0

(Contd. of page 7)

Reportable poisons

None of the ingredients is listed.

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

Hazard pictograms





· Signal word Danger

· Hazard-determining components of labelling:

Isotridecanol Ethoxylated, 3-5 EO

Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics

Triethanolamine

Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cycloalkanes, <0.03% aromatics

Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

H360 May damage fertility or the unborn child.

H304 May be fatal if swallowed and enters airways.

Precautionary statements

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P321 Specific treatment (see on this label).

P331 Do NOT induce vomiting.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

Take off contaminated clothing and wash it before reuse. P362+P364

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Directive 2012/18/EU

- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H360 May damage fertility or the unborn child.

H412 Harmful to aquatic life with long lasting effects.

· Department issuing SDS: Product safety department

Contact: Nadine Waltenberger

Abbreviations and acronyms:

ADR: Accord relatif au transport international 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

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)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (UK REACH)
PNEC: Predicted No-Effect Concentration (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

(Contd. on page 9)

Page 9/9

Safety data sheet according to UK REACH

Revision: 23.03.2025 Printing date 23.03.2025 Version number 1

Trade name: RF 20-0

vPvB: very Persistent and very Bioaccumulative
ATE: Acute toxicity estimate values
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
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
Skin Sens. 1B: Skin sensitisation – Category 1B
Repr. 1A: Reproductive toxicity – Category 1A
Asp. Tox. 1: Aspiration hazard – Category 1
Aguatic Chronic 3: Hazardous to the aguatic environment – Ic

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

(Contd. of page 8)