

ULTRACUT® 320

Extreme Pressure Long Life Semi-Synthetic Cutting Fluid

ULTRACUT® 320 is an extreme pressure semi-synthetic water mix cutting fluid formulated to give a long and predictable sump life. It provides extra performance in medium/severe cutting operations on a wide range of ferrous and non-ferrous metals. The combination of extreme pressure performance and long sump life permits increased machining rates and true cost efficiency.

ULTRACUT® 320 can be used as a grinding fluid enabling the user to rationalise to one fluid for both cutting and grinding operations.

Features

- Extends tool life.
- Promotes excellent surface finish.
- Suitable for cutting and grinding operations.
- Suitable for medium/severe cutting operations.
- Long and predictable sump life.
- Inherently resistant to degradation.
- Suitable for use with a wide range of ferrous and non-ferrous metals.
- Inhibits corrosion and staining.
- Resists foaming.
- Emulsifies tramp oil.
- Translucent emulsion gives good view of work piece.
- Pleasant and safe to use.

Directions for Use

Recommended dilution: ULTRACUT® 320 should be used between 20:1 and 40:1 for cutting and between 40:1 and 60:1 for grinding, depending on the severity of operation, workpiece material and water hardness. To ensure dilution accuracy, it is preferable to use a ROCOL® Automatic Fluid Mixer.

For manual mixing, add the concentrate to water at the recommended dilution ratio, stirring continuously.

It is advisable to use the appropriate ROCOL® ULTRAGUARD® Machine Tool Care product at fluid changeovers. Optimum fluid life is obtained by adequate initial machine cleaning, correct dilution control and regular maintenance of fluid, particularly prior to weekends and shutdown periods.

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www.rocol.com

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Registered Company No. 559693 VAT No. 742 0531 67
Registered Office: Admiral House, St Leonard's Road, Windsor, Berkshire SL4 3BL

ROCOL A division of **ITW** Ltd



BS EN ISO 9001
Certificate No. FM 12448



BS EN ISO 14001
Certificate No. EMS 67596



OHSAS 18001
Certificate No. OHS 78173



INVESTOR IN PEOPLE

The information in this publication is based on our experience and reports from customers.
There are many factors outside our control or knowledge which affect the use and performance
of our products, for which reason it is given without responsibility.

Technical Data

ROCOL®

Performance you can trust

ULTRACUT® 320

Appearance	Dark blue concentrate forming a translucent blue emulsion
Odour	Mild
pH	9.3 at 15:1
Density at 20°C	1.02 g/cm ³
Storage	Store at normal ambient temperature (5°C to 30°C)
Pack Sizes – Part Codes	20 ltr - 51323 200 ltr - 51329

Refractometer Calibration:

Dilution ratio	10:1	20:1	30:1	40:1	50:1	60:1	70:1
Refractometer reading	8.6	4.6	2.9	2.4	1.8	1.5	1.3

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SAFETY DATA SHEET

ULTRACUT 320

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Compilation date: 17/01/2012

Revision No: 6

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

1.1. Product identifier

Product name: ULTRACUT 320

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

Use of substance / mixture: Water miscible metalworking fluid

1.3. Details of the supplier of the safety data sheet

Company name: ROCOL

ROCOL House

Swillington

Leeds

West Yorkshire

LS26 8BS

ENGLAND

Tel: +44 (0) 113 232 2700

Fax: +44 (0) 113 232 2740

Email: customer-service@rocol.com

1.4. Emergency telephone number

Emergency tel: +44 (0) 113 232 2600

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CHIP: Xi: R36

Most important adverse effects: Irritating to eyes.

2.2. Label elements

Label elements under CHIP:

Hazard symbols: Irritant.



Risk phrases: R36: Irritating to eyes.

Safety phrases: S25: Avoid contact with eyes.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S60: This material and its container must be disposed of as hazardous waste.

[cont...]

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2.3. Other hazards

PBT: This substance is not identified as a PBT substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

NAPHTHENIC MINERAL OIL

EINECS	CAS	CHIP Classification	CLP Classification	Percent
265-155-0	64742-52-5	-	-	30-50%

FATTY ACID ALKANOLAMIDE

202-281-7	93-83-4	Xi: R36/38	-	1-10%
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BORIC ACID COMPOUND WITH 2,2'AMINOBI[ETHANOL]

267-886-0	67952-33-4	Xi: R36	-	1-10%
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BORIC ACID COMPOUND WITH 2-AMINOETHANOL

247-421-8	26038-87-9	Xi: R36	-	1-10%
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ETHOXYLATED FATTY ALCOHOL

500-236-9	68920-66-1	Xi: R38	-	1-10%
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SODIUM PYRITHIONE

223-296-5	3811-73-2	Xn: R20/22; Xi: R36; N: R50	-	<1%
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Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so.

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

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: There may be coughing and a sore throat.

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

Immediate / special treatment: Show this safety data sheet to the doctor in attendance.

[cont...]

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Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Use water spray to cool containers. Suitable extinguishing media for the surrounding fire should be used.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Section 8: Exposure controls/personal protection

8.1. Control parameters

[cont...]

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Hazardous ingredients:

NAPHTHENIC MINERAL OIL

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	5mg/m3	10mg/m3	-	-

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Respiratory protection not normally required.

Hand protection: Protective gloves.

Eye protection: Safety glasses with side-shields.

Skin protection: Protective clothing.

Environmental: No special requirement.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Green-blue

Odour: Characteristic odour

Evaporation rate: Negligible

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Soluble

Viscosity: Viscous

Boiling point/range°C: 100

Flash point°C: > 100

Autoflammability°C: > 200

Relative density: 1

9.2. Other information

Other information: Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

[cont...]

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10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong reducing agents.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

Section 11: Toxicological information

11.1. Information on toxicological effects

Relevant effects for mixture:

Effect	Route	Basis
Irritation	OPT	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: There may be coughing and a sore throat.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: Not applicable.

12.2. Persistence and degradability

Persistence and degradability: Only slightly biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: Non-volatile. Absorbed only slowly into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This substance is not identified as a PBT substance.

12.6. Other adverse effects

Section 13: Disposal considerations

[cont...]

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13.1. Waste treatment methods

Disposal of packaging: Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

Phrases used in s.2 and 3: R20/22: Harmful by inhalation and if swallowed.

R36/38: Irritating to eyes and skin.

R36: Irritating to eyes.

R38: Irritating to skin.

R50: Very toxic to aquatic organisms.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.