Technical Data



Chainguard 280

High temperature chain and conveyor lubricant

Product Overview

ROCOL[®] CHAINGUARD 280 is an ester based high temperature chain oil specifically formulated for the lubrication of all drive and transport chains and bearings at temperatures up to 280°C.

The oil is formulated from a combination of synthetic esters and a special antioxidant package which ensures the highest performance in terms of thermal stability, low evaporation loss and minimal deposit formation.

The low evaporation of the product gives extended re-lubrication intervals and good economy in use.

Features and Benefits

- Wide operating temperature range from 0°C to +280°C.
- Special antioxidant combination gives longer wet film life with lower deposit and varnish formation.
- Keeps oil-ways clear for more efficient lubrication.
- Excellent anti-wear properties at high temperature gives reduced wear and longer chain life.
- Penetrates into links and pins lubricating in the highest potential wear areas.
- Excellent frictional properties give reduced power consumption on chain drive units.
- Low evaporation and usage gives good economy in use.
- Low fuming provides a clean and safe working environment.

Directions for Storage and Use

- Product should be stored unopened in the original container.
- Storage temperature should be between +1°C and +40°C.
- If stored in accordance with the above guidelines, shelf life is 3 years from date of manufacture.
- ROCOL[®] CHAINGUARD 280 has been designed for application by automatic lubricators and should be used in accordance with the lubricator manufacturer's instructions.
- Can be applied directly to the chain by brush or oilcan if required.
- Compatible with most ester based oils.

Typical Applications

- ROCOL CHAINGUARD 280 is ideal for applications such as paint stoving ovens, bakery oven chains, conveyors, stenters etc.
- ROCOL CHAINGUARD 280 has been designed with an optimum viscosity which is ideal for automatic lubrication systems where small amounts are accurately applied to the lubrication point.

Pack Sizes

Pack Size	Part Code
5L	22235
20L	22236

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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

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BS EN ISO 14001 OHSAS 18001 ificate No. FIMS 67596 Certificate No. OHS 78173





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Property	Test Method	Result
Colour	Visual	Yellow liquid
Base Oil Type	N/A	Synthetic ester mixture
Kinematic Viscosity:		
cSt @ 40°C	IP 71 (ASTM D445)	225
cSt @ 100°C	IP 71 (ASTM D445)	19.7
Viscosity Index	ASTM D2270	100
Temperature range	N/A	0°C to +280°C
Moisture Content (ppm)	N/A	<250
Density (g/cm ³)	N/A	0.97
Flash Point (°C) COC	ASTM D93	>300
Copper Corrosion	IP 112 – ASTM D130	1b
Evaporation Test 200°C % Loss	N/A	2.6
Oxidation Test DSC Onset (°C)	N/A	325

Values quoted above are typical and do not constitute a specification.

Safety Data Sheets

Safety data sheets are available for download from our website www.rocol.com or may be obtained from your usual ROCOL contact.

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. Issue: 1 Date: 01-11

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

1.1. Product identifier

Product name: CHAINGUARD 280

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

Use of substance / mixture: Chain Lubricant.

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: This product has no classification under CHIP.

2.2. Label elements

Label elements under CHIP:

Hazard symbols: No significant hazard.

Precautionary phrases: Safety data sheet available for professional user on request.

2.3. Other hazards

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

Section 3: Composition/information on ingredients

3.2. Mixtures

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Hazardous ingredients:

TRIPHENYL PHOSPHATE

EINECS	CAS	CHIP Classification	CLP Classification	Percent
204-112-2	115-86-6	N: R50/53	-	<1%

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.

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. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

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

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Do not use water. Alcohol or polymer foam. Dry chemical powder.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

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. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

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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. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep away from direct sunlight.

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

Hazardous ingredients:

TRIPHENYL PHOSPHATE

Workplace exposure limits:			Respirable dust		
	State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
	UK	3 mg/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.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State:	Liquid	
Colour:	Pale yellow	
Odour:	Barely perceptible odour	
Evaporation rate:	Negligible	
Oxidising:	Non-oxidising (by EC criteria)	
Solubility in water:	Insoluble	
Viscosity:	Oily	
Kinematic viscosity:	240 cSt	
Viscosity test method:	Kinematic viscosity in 10-6 m2/s at 40°C (ISO 3104/3105)	
Boiling point/range°C:	> 200 Melting point/range	e°C: < 0
Flash point°C:	* 300 Autoflammability	/°C: >400
Relative density:	0.98	

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9.2. Other information

Other information: Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Conditions to avoid: Heat. Direct sunlight.

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

Toxicity values: Not applicable.

Symptoms / routes of exposure

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

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

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 bioaccumulation potential.

12.4. Mobility in soil

Mobility: Non-volatile. Insoluble in water. Readily absorbed into soil.

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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

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.
	Compiled in accordance with REACH.
Phrases used in s.2 and 3:	R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the
	aquatic environment.
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.