# PARALIQ<sup>®</sup> GA 351 Food Grade Lubricant



## Description

PARALIQ GA 351 is a food grade lubricant offering good wear protection. It is authorized in accordance with USDA-H1 and meets the German and European food regulations. It is suitable for all friction points where an incidental, technically unavoidable contact with the food product cannot be excluded.

PARALIQ GA 351 has no smell or taste and is not harmful to health if applied as directed. It is resistant to all ambient media commonly found in the food processing industry, e.g. alcohol, milk and dairy products or water. Owing to its consistency, PARALIQ GA 351 is readily pumpable in centralized lubrication systems even at low temperatures (see diagram).

## Application

PARALIQ GA 351 is generally suitable for all lubrication points in the food processing industry where there might be an incidental, technically unavoidable contact with the food product. We recommend, however, to apply PARALIQ GA 351 to all friction points to avoid unintentional spreading.

Application examples:

- Metering pistons in cup filling and sealing machines
- Plain bearings in fish filleting machines
- Rolling bearings in fruit presses
- Rolling and plain bearings in cellarage installations
- Guide rods and ball-type bushings in packaging machines
- Dies in tablet presses
- Cylindrical roller bearings in rotary autoclaves
- Tubular tracks in slaughterhouses

## Application notes

Clean all bearings lubricated with a different grease before applying PARALIQ GA 351.

If the greases are miscible, relubrication with PARALIQ GA 351 is sufficient. Rolling bearings should be cleaned prior to the initial application of the lubricant. The lubricant is applied by spatula, grease gun or cartridge, or via a centralized lubrication system. Avoid over-lubrication. The friction points can be cleaned with a commercial cleaning agent.

## Storage

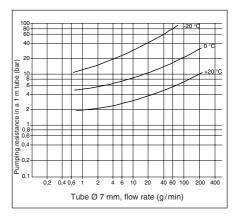
The storage period of PARALIQ GA 351 is 2 years if stored in the original closed container in a dry place. Once opened, close the container thoroughly to protect the grease against contamination.

### Pack sizes

400 g grease cartridge 1 kg can 25 kg bucket

# PARALIQ GA 351

- Authorized in accordance with USDA-H1
- Excellent wear protection
- Pumpable in centralized lubrication systems even at low temperatures
- Resistant to all ambient media found in the food processing industry, e.g. alcohol, milk and dairy products



## Product data

Colour	beige, almost transparent
Texture	fibred, almost homogeneous
Flow pressure, DIN 51 805 at -30 °C	< 1000 mbar
Water resistance, DIN 51 807 3 h at 50 °C, rating 3 h at 90 °C, rating	1 – 50 1 – 90
Consistency, NLGI grade, DIN 51 818	1
Service temperature range	-40 to 120 °C
Speed factor $(n \cdot d_m)$	approx. 3 · 10⁵

# PARALIQ<sup>®</sup> GA 351 Material Safety Data Sheet

#### Section I

Manufacturer's name: Klüber Lubrication München KG Chemical name and synonyms: Lubricating grease Trade name and synonyms: PARALIQ GA 351 Chemical family: Paraffinic mineral oil, synthetic hydrocarbon oil, Al complex soap Formula: Proprietary; authorized by USDA-H1

# Section II – Hazardous Ingredients

Paints, preservatives, solvents		
	%	TLV (units)
Pigments	-	-
Catalyst	-	_
Vehicle	-	_
Solvents	-	-
Additives	-	-
Others	_	-
Alloys and metallic coatings		
Alloys and metallic coatings	%	TLV (units)
Alloys and metallic coatings Base metal	%	TLV (units) –
	%  	TLV (units) _ _
Base metal	%  	TLV (units) _ _ _
Base metal Alloys	%   	TLV (units) - - -

### Hazardous mixtures of other liquids, solids, or gases

### Section III – Physical Data

Boiling point:	n/a	
Vapor pressure (mm Hg):	n/a	
Vapor density (air=1):	n/a	
Solubility in water:	not soluble	
Specific gravity (H <sub>2</sub> O=1):	approx. 0.90	
Percent, volatile by volume (%): 0		
evaporation rate ( = 1):	n/a	
Appearance and odor:	beige, neutral	

### Section IV – Fire and Explosion Hazard Data

Flash point (base oil): >220 °C ASTM D-92 Flammable limits: — Lel: Uel: Extinguishing media: Water fog, foam, dry chemical, CO<sub>2</sub> Special fire fighting procedures: Use self-contained breathing apparatus, cool fire exposed areas and equipment. Unusual fire and explosion hazards: Do not use direct stream of water, material may float and reignite.

n/a = not applicable

### Section V – Health Hazard Data

Threshold limit value: n/a Effects of overexposure: Eyes: Mild irritation Skin: Mild irritation, may cause dermititis, oil acne or folliculitis with repeated contact. Ingestion: No more than slightly toxic if swallowed. Inhalation: n/a Emergency and first aid procedures: Eyes: Flush with large amount of water. Skin: Remove contaminated clothing, wash skin with soap and water, launder clothing prior to reuse. Ingestion: Contact doctor for directions. Never give anything by mouth to an unconscious person. Section VI – Reactivity Data Stability: stable Incompatibility (materials to avoid): Strong oxidizing materials, such as pure oxygen Hazardous decomposition products: n/a Hazardous polymerization: will not occur Section VII - Spill or Leak Procedures Steps to be taken in case material is released or spilled: Eliminate all sources of ignition. Collect lubricating grease. Keep product out of waterways. Waste disposal method: Incinerate material or dispose of it in accordance with your local, state and federal regulations. Section VIII – Special Protection Information Respiratory protection (specify type): n/a Ventilation: n/a Local exhaust: recommended Protective gloves: n/a Eye protection: n/a Other protective equipment: no

### Section IX – Special Precautions

Precautions to be taken in handling and storing: Minimize skin contact with all lubricants. Wash with soap and water prior to eating, drinking, smoking or using sanitary facilities. Other precautions:

All chemical products should be handled as to prevent constant or repeated contact.

The data in this brochure is based on our general experience and knowledge at the time of printing and is intended to give information of possible applications to a reader with technical experience without, however, constituting an assurance of properties for specific cases. We recommend contacting our Technical Consulting Staff for information regarding specific applications. If required and possible we will be pleased to provide a sample for testing.



Klüber Lubrication, a member of the Freudenberg group of companies