ASONIC[®] GHY 72

Synthetic lubricating grease for long-term or lifetime lubrication of rolling bearings



Description:

The high performance ASONIC GHY 72 is due to its optimised mix of product components: ester oil, polyurea thickener, a special additive package, combined in a special and clean manufacturing environment. This ensures the extraordinary features of ASONIC GHY 72 for use in rolling bearings:

- high purity
- low noise
- long shelf life
- high resistance to water
- good corrosion protection

Application:

ASONIC GHY 72 is particularly beneficial for the long-term or lifetime lubrication of parts exposed to a wide service temperature range, e.g. ball bearings in electric motors, fans, air conditioners, automobile generators, computers, CD drives as well as household appliances and office equipment.

Application notes:

The lubricant is applied by means of a spatula, brush, grease gun or grease cartridge. For use in automatic lubricating systems, the pumpability of the lubricant should be checked.

Certain polyurea greases solidify during elongated periods of storage. Normally, such increase in consistency does not affect the performance of the lubricating grease and is reversible when the grease is subjected to shearing or working stress.

Pack sizes:

400-g cartridge 1-kg can 25-kg bucket

ASONIC GHY 72

- Wide service temperature range
- Long service life
- Synthetic lubricant
- Low noise

Behaviour towards elastomers and plastics

The following elastomers were statically tested for resistance to ASONIC GHY 72.

Medium	Material	Time/temp. h / °C	Change in volume (%)	Shore hard- ness A	Tensile strength (%)	Elonga- tion at break (%)
ASONIC GHY 72	70 ACM 121433	168 / 150	14	- 14	- 15	- 29
ASONIC GHY 72	75 FKM 585	168 / 150	1.7	-2	- 8	- 35
ASONIC GHY 72	72 NBR 902	168 / 100	12	-6	16	3
ASONIC GHY 72	81 VMQ 542	168 / 100	4	- 6	- 12	- 14

Prior to series application we recommend testing the compatibility of the grease and the pertinent materials.

(Our test results were obtained with random samples and cannot substitute your own in-house tests.)

Product data:

Base oil / thickener	Ester oil / polyurea		
Service temperature range*, °C	- 40 to 180		
Colour	beige		
Drop point, DIN ISO 2176, °C	> 250		
Worked penetration, DIN ISO 2137, at 25 °C; 0.1 mm	250 to 280		
Apparent dynamic viscosity, Klüber viscosity grade**	L		
Water resistance, DIN 51 807, pt. 1, 3 h / 90 °, rating level	0 – 90		
Corrosion protection of lubricating greases, DIN 51 802, (SKF-Emcor), test duration: 1 week, distilled water, degree of corrosion	0/1		
Kinematic viscosity of base oil, DIN 51 562, pt. 01, Ubbelohde at 40 °C, mm²/s, approx. at 100 °C, mm²/s, approx.	70 9.4		
Speed factor*** for deep groove ball bearings, (n x d _m) mm/min. approx.	700,000		
Low-temperature torque in acc. with IP 186/93 at – 40 °C Starting torque, Nmm Running torque, Nmm	< 1,000 < 100		
SKF-ROF test rig for rolling bearing grease 10,000 min ⁻¹ , F_a = 100 N, F_r = 50 N, 170 °C, F_{50} in h	> 1,000		

^{*} Service temperatures are guide values which depend on the lubricant's composition, the intended use and the application method. Lubricants change their consistency, apparent dynamic viscosity or viscosity depending on the mechanodynamical loads, time, pressure and temperature. These changes in product characteristics may affect the function of a component.

^{**} Klüber viscosity grades: EL = extra-light lubricating grease; L = light lubricating grease; M = medium lubricating grease; S = heavy lubricating grease; ES = extra-heavy lubricating grease

^{***} Speed factors are guide values which depend on the type an size of the rolling bearing type and the local operating conditions, which is why they have to be confirmed in tests carried out by the user in each individual case.

ASONIC® GHY 72

Safety Data Sheet

1.1 Product name: ASONIC GHY 72 094 049

Code-No.:

08.03.2000

1.2 Klüber Lubrication München KG Geisenhausenerstraße 7

Emergency telephone no.: ++49 - 89 7876 - 0

D-81379 München

Tel. ++49 - 89 78 76 - 0 telephone exchange

Fax: ++49 - 89 78 76 - 333

Composition / information on ingredients

Chemical characterization (preparation): Ester oil, polyurea

Hazards identification

No particular hazards known

First aid measures

After inhalation: Not applicable

After contact with skin: Wash off with soap and plenty of water

After contact with eyes: Rinse with plenty of water

After ingestion: Do not induce vomiting. Obtain medical attention

Advice to doctor: Treat symptomatically

Fire-fighting measures

Suitable extinguishing media: Water spray, foam, dry powder, carbon dioxide (CO₂)

Unsuitable extinguishing media: High volume water jet

Special Hazards: In case of fire the following can be released: Carbon monoxide. hydrocarbons

Special protective equipment for firefighters: Standard procedure for chemical fires

Additional information: Water mist may be used to cool closed containers. In the event of fire and/or explosion do not breathe fumes

Accidental release measures

Personal precautions: Not required

Environmental precautions: Do not flush into surface water or sanitary sewer system

Methods for cleaning up / taking up: Use mechanical handling equipment. Dispose of absorbed material in accordance with the regulations Additional information: None

Handling and storage

Advice on safe handling: No special handling advice required Advice on protection against fire and explosion: No special precautions

Requirements on storage rooms and vessels: No special storage conditions required

Incompatible materials: Incompatible with oxidizing agents. Do not store together with food

Further information on storage conditions: Store at room temperature in the original container

Exposure controls / personal protection

Additional advice on system design: Not applicable Ingredients and specific control parameters: None

Respiratory protection: No special protective equipment required Hand protection: No special protective equipment required Eye protection: No special protective equipment required Body protection: No special protective equipment required Other protection measures: No special protective equipment required General protection and hygiene measures: Avoid prolonged and/or repeated contact with skin. Remove soiled or soaked clothing

immediately. Clean skin thoroughly after work; apply skin cream

Freudenberg Klüber Lubrication München KG, a member of the Freudenberg group

Physical and chemical properties

Form paste Colour beige Odour characteristic

Drop point > 250 °C, DIN ISO 2176 > 200 °C (base oil) Flash point Flammability not applicable not applicable Ignition temperature not applicable Autoflammability Lower explosion limit not applicable Upper explosion limit not applicable Vapour pressure-first not applicable

approx. 0.96 g/cm³, 20 °C Density

Water solubility insoluble pH value not applicable Kinematic viscosity not applicable

Further information none

10. Stability and reactivity

Conditions to avoid: None

Materials to avoid: Strong oxidizing agents

Hazardous decomposition products: None under normal use

Additional information: None

11. Toxicological information

The toxicological data has been taken from products of similar composition

Acute toxicity: LD50/oral/rat = > 2 g/kg (literature data)

Chronic toxicity: None

Human experience: Prolonged skin contact may cause skin irritation

and/or dermatitis

12. Ecological information

Information on elimination (persistence and degradability): Product is insoluble in water. May be separated out mechanically in purification plants

Behaviour in environmental compartments: Ecological injuries are not known or expected under normal use

Ecotoxic effects: Aquatic toxicity is unlikely due to low solubility Additional information: Should not be released into the environment

13. Advice on Disposal

Disposal: Can be incinerated when in compliance with local, state and federal regulations

Dispose of contaminated packaging and recommended cleaning: Offer rinsed packaging material to local recycling facilities

14. Transport information

GGVS / GGVE: not applicable not applicable ADN / ADNR: IMDG-Code not applicable ICAO / IATA-DGR: not applicable

Further information: Not classified as dangerous in the meaning of

transport regulations

15. Regulatory information

Labelling according to EU-guidelines: The product does not require a hazard warning label in accordance with EC-directives/German regulations on dangerous substances

National regulations

16. Other information

Issue-department of Safety Data Sheet: Chemical Documentation, Tel.: ++49 - 89 7876 - 564

The data in this product information 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. It constitutes neither an assurance of product properties nor does it release the user from the obligation of performing preliminary tests with the selected product. We recommend contacting our Technical Consulting Staff to discuss your specific application. If required and possible we will be pleased to provide a sample for testing. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this product information at any time without notice.