

HARMONIC GREASE® SK-3

Safety Data Sheet

according to Regulation (EU) No. 2015/830

Date of issue: 01/06/2017

Revision date: 21/04/2023

Version: 4.0

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

1.1. Product identifier

Product name : HARMONIC GREASE® SK-3
Product code : Not available

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

1.2.1. Relevant identified uses

Main use category : Consumer use, Industrial use
Uses advised against : No specific uses advised against are identified.
Use of the substance/mixture : Lubricating grease

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Harmonic Drive SE
Hoenbergstrasse 14
65555 Limburg - Germany
T +49-6431-5008-0
F +49-6431-5008-119
customercare@harmonicdrive.de

1.4. Emergency telephone number

Emergency number : +49-6431-5008-0

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

2.3. Other hazards

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.2. Mixture

No hazardous ingredients.

Additional information:

Refined mineral base oil (Note L applies to the refined mineral base oil. Note L - The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346.)

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact : If irritation occurs, flush skin with plenty of water. Get medical attention if irritation persists.
First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.
First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Never give anything by mouth to an unconscious person.

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

Symptoms/injuries after inhalation : May cause respiratory tract irritation.
Symptoms/injuries after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

HARMONIC GREASE® SK-3

Safety Data Sheet

according to Regulation (EU) No. 2015/830

- Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
- Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

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

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam, Dry chemical, Carbon dioxide.
- Unsuitable extinguishing media : Do not use water jet.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon. Oxides of sulfur.

5.3. Advice for firefighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Environmental precautions

Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.

6.3. Methods and material for containment and cleaning up

- For containment : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Vacuum or sweep material and place in a disposal container. Provide ventilation.

6.4. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing vapour or mist. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke.
- Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool and well-ventilated area. Protect from sunlight.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

- Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
- Hand protection : Wear suitable gloves.
- Eye protection : Safety glasses or goggles are recommended when using product.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Environmental exposure controls : Maintain levels below Community environmental protection thresholds.
- Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

HARMONIC GREASE® SK-3

Safety Data Sheet

according to Regulation (EU) No. 2015/830

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Smooth semi-solid
Colour	: Yellow.
Odour	: Bland.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 160 °C (> 320 °F) (SETA)
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 0.92 at 25 °C (77 °F)
Solubility	: Water: Negligible.
Partition coefficient: n-octanol/water	: No data available
Viscosity, kinematic	: > 20 mm ² /s at 40 °C (104 °F)
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Heat. Incompatible materials. Sources of ignition.

10.5. Incompatible materials

Acids. Oxidizing agent. Hydrogen peroxide. Permanganates. Perchlorates. Halogens. Halogenated compounds.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Oxides of sulfur.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified.

HARMONIC GREASE® SK-3	
LD50 oral rat	> 2000 mg/kg(Base oil)
LD50 dermal rabbit	> 2000 mg/kg(Base oil)
LC50 inhalation rat	No data available

Skin corrosion/irritation	: No further relevant information available.
Serious eye damage/irritation	: No further relevant information available.
Respiratory or skin sensitisation	: No further relevant information available.
Germ cell mutagenicity	: No further relevant information available.
Carcinogenicity	: No further relevant information available.

HARMONIC GREASE® SK-3

Safety Data Sheet

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Reproductive toxicity	: No further relevant information available.
Specific target organ toxicity (single exposure)	: No further relevant information available.
Specific target organ toxicity (repeated exposure)	: No further relevant information available.
Aspiration hazard	: No further relevant information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No further relevant information available.

12.2. Persistence and degradability

HARMONIC GREASE® SK-3

Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

HARMONIC GREASE® SK-3

Bioaccumulative potential	Not established.
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

SECTION 14: Transport information

In accordance with ADR

14.1. UN number

DOT,ADR,IMDG,IATA : Not regulated

14.2. UN proper shipping name

DOT,ADR,IMDG,IATA : Not regulated

14.3. Transport hazard class(es)

DOT,ADR,IMDG,IATA : Not regulated

14.4. Packing group

DOT,ADR,IMDG,IATA : Not regulated

14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available.

14.6. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions
Contains no REACH candidate substance.
Contains no REACH Annex XIV substances
Contains no CLP regulation substances

15.1.2. National regulations

HARMONIC GREASE® SK-3

Safety Data Sheet

according to Regulation (EU) No. 2015/830

Germany

Water hazard class (WGK) : 1 - low hazard to waters

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Indication of changes:

Formulation Revision

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

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