

HIWIN G05 SDS

(Safety Data Sheet)

Features

1. Well wear resistance under general conditions
2. Low friction resistance under general conditions
3. Long-life
4. Stable to oxidation
5. Water-resistant
6. Protects against corrosion

Pack sizes



Basic properties

HIWIN G05		
Consistency enhancer	Lithium soap	
Color	Brown	
Basic oil	Mineral	
Service temperature range (°C)	-15 to 120	
NLGI Grade	2	
Viscosity (cst/40°C)	200	
Drop point (°C)	190	
4-ball test	Wear scar diameter (µm) (ASTM D2266)	291
	Welding load (N) (DIN 51350-4)	2600/2800
Origin	Germany	

1. Identification of the substance/mixture and of the company/undertaking

- ◆ **Product details**

Trade name: HIWIN G05

Application of the substance / the preparation: Grease

Manufacturer/Supplier: HIWIN TECHNOLOGIES CORP.

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2. Hazards identification

- ◆ **Classification of the substance or mixture**

Classification according to 67/548/EEC, 1999/45/EC

Additional hints

The product does not require a hazard warning label in accordance with EC directives/German regulations on dangerous substances.

- ◆ **Label elements**

Labelling according to 1999/45/EC

Remarks for labelling

The product does not require a hazard warning label in accordance with EC directives/German regulations on dangerous substances. Although this product does not require a hazard warning label, we recommend that the safety advice should be observed.

- ◆ **Other hazards**

Information pertaining to special dangers for human and environment

none at appropriate handling and storage

3. Composition/information on ingredients

◆ **Chemical characterization**

Components	CAS-No.	EC-No.	Concentration[%]	GHS
Synthetic hydrocarbon SHC, polymerized	68037-01-4	500-183-1	20-50%	–
Ester oil	28472-97-1	249-044-4	20-50%	–
Lithium soap	7620-77-1	231-536-5	20-50%	–
Mineral oil	72623-87-1	276-738-4	<=5.0%	–
additive	597-82-0	209-909-9	<=2,0%	H413
additive	68411-46-1	270-128-1	<=0,5%	H412
additive	41484-35-9	255-392-8	<=0,5%	H413
additive	80939-62-4	279-632-6	<=0,5%	H315,H319,H411

◆ **Mixtures**

Description

Thickening system and additives in highly refined mineral oil.

Additional advice

No hazardous material resp. below level of consideration according to RL 67/548 EWG.

4. First-aid measures

◆ **Description of first aid measures**

General information

Remove contaminated soaked clothing immediately, don't leave to dry.

In case of inhalation

Call doctor in case of indisposition. Ensure of fresh air.

(may be relevant for vapours of superheated product)

In case of skin contact

In case of contact with skin wash off with soap and water. Don't use organic solvents

Consult a doctor if skin irritation persists.

In case of eye contact

In case of contact with eyes rinse with plenty of water carefully. In the event of persistent symptoms seek medical treatment.

In case of ingestion

Call doctor in case of indisposition

- ◆ **Most important symptoms and effects, both acute and delayed**

Physician's information / possible symptoms

No symptoms known so far.

Physician's information / possible dangers

Aspiration hazard when vomiting after swallow up.

Indication of any immediate medical attention and special treatment needed Treatment

(Advice to doctor)

Treat symptoms.

5. Fire-fighting measures

- ◆ **Extinguishing media**

Suitable extinguishing media

Alcohol-resistant foam

Dry fire-extinguishing substance

Carbon dioxide

Water spray jet

Unsuitable extinguishing media

Full water jet

- ◆ **Special hazards arising from the substance or mixture**

Fire gas of organic material has to be classed invariably as respiratory poison.

- ◆ **Advice for firefighters**

Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply.

Additional information

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

6. Accidental release measures

- ◆ **Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel

Avoid contact with skin and eyes

High risk of slipping due to leakage/spillage of product.

- ◆ **Environmental precautions**

Do not discharge into the drains/surface waters/groundwater.

Do not discharge into the subsoil/soil.

- ◆ **Methods and material for containment and cleaning up**

Take up mechanically and send for disposal.

Additional Information

Informations for disposal see chapter 13.

- ◆ **Reference to other sections**

No information available.

7. Handling and storage

- ◆ **Precautions for safe handling**

Advice on safe handling

Take the usual precautions when handling with chemicals.

General protective measures

Avoid contact with eyes and skin

Do not inhale gases/vapours/aerosols.

Hygiene measures

Cloths contaminated with product should not be kept in trouser pockets.

Follow general rules of industrial hygiene for safe handling of chemical products

At work do not eat, drink and smoke.

Use barrier skin cream.

Advice on protection against fire and explosion

The product is combustible.

Pay attention to general rules of internal fire prevention.

- ◆ **Conditions for safe storage, including any incompatibilities**

Requirements for storage rooms and vessels

Prevent penetration into the ground.

Advice on storage compatibility

Do not store together with food.

Further information on storage conditions

Keep container tightly closed and store at cool and aired place.

Recommended storage temperature: room temperature.

Storage group: 11

Fire class: B

- ◆ **Specific end use(s)**

No information available.

8. Exposure controls/personal protection

- ◆ **Control parameters**

Additional advice

This product as such does not contain any relevant ingredients with to be observed limited values.

As basis for this information served the valid references.

- ◆ **Exposure controls**

Respiratory protection

Not required at determined application.

Hand protection

As the product is a preparation of several substances, the actual resistance of the materials used for gloves cannot be scientifically calculated; it is therefore mandatory to check this before using the product.

The break through time depends on the mechanical stress imposed and must therefore be checked individually.

nitrile gloves

Eye protection

safety goggles

Other protection measures

Usual working clothes for chemical industries

Appropriate engineering controls

Care for good room ventilation, exhaust system at workshop place if necessary

9. Physical and chemical properties

♦ **Information on basic physical and chemical properties**

Appearance

Physical state: solid

Form: Paste

Color: Yellow

Odor: characteristic

Odor Threshold: Not applicable for mixtures

Melting point : > 180°C

Freezing point : No data available

Boiling point : Value not relevant for classification

Flammability (solid, gas): Value not relevant for classification

Upper explosion limit / Upper flammability limit : Not applicable for mixtures

Lower explosion limit / Lower flammability limit : Not applicable for mixtures

Flash point : > 230°C

Auto-ignition temperature : Value not relevant for classification

Decomposition temperature : Value not relevant for classification

pH : Not applicable

Viscosity, dynamic : No data available

Viscosity, kinematic : Not applicable

Solubility(ies)

Solubility in Water: Insoluble in water

Solubility (other): No data available

Partition coefficient n-octanol/water (Log Kow) : No data available

Vapor pressure: Not applicable for mixtures

Vapor density (air=1): Not applicable for mixtures

Density : 0.90 g/cm³(25 °C)

Particle size : Not available

Particle size distribution : Not available

Particle shape : Not available

Particle aspect ratio : Not available

Particle aggregation state : Not available

Particle agglomeration state : Not available

Particle specific surface area : Not available

Particle dustiness : Not available

NLGI: 2

Explosive properties: Value not relevant for classification

Oxidizing properties: Value not relevant for classification

- ◆ **Other information:** No data available

10. Stability and reactivity

- ◆ **Reactivity**

No information available.

- ◆ **Chemical stability**

No information available.

- ◆ **Possibility of hazardous reactions**

No information available.

- ◆ **Conditions to avoid**

No information available.

- ◆ **Incompatible materials**

Materials to avoid

No hazardous reactions known.

- ◆ **Hazardous decomposition products**

No hazardous decomposition products known.

Thermal decomposition

Remark: No decomposition if used as directed.

11. Toxicological information

- ◆ **Information on toxicological effects**

Acute toxicity/Irritability/Sensitization

	Value/Validation	Species	Method	Remark
LD50 acute oral				not determined
Irritability skin	no irritating effects known			
Irritability eye	no irritating effects known			
Skin sensitization	no irritating effects known			

Experiences made from practice

no harmful effects at appropriate handling and determined usage

Additional information

No toxicological data available.

The product was classified on the basis of the calculation procedure of the directive 67/548/EEC (conventional method).

- ◆ **Information on other hazards**

No data available

12. Ecological information

- ◆ **Toxicity**

Ecotoxicological effects

	Value	Species	Method	Validation
Fish				not determined

- ◆ **Persistence and degradability. Biological degradability**

Biological

degradability

- ◆ **Bioaccumulative potential**

No information available.

- ◆ **Mobility in soil**

No information available.

- ◆ **Results of PBT and vPvB assessment**

No information available.

- ◆ **Other adverse effects**

Behaviour in sewage plant

Product swims on (waste-) water surface

General regulation

Do not allow uncontrolled leakage of product into the environment.

- ◆ **Endocrine disrupting properties:**

No data available.

- ◆ **Other adverse effects**

No data available.

Water Hazard Class (WGK): WGK 1: slightly water-endangering

13. Disposal considerations

- ◆ **Waste treatment methods**

Recommendations for the product

Waste disposal in accordance with the relevant regulations.

Recommendations for packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

General information

Ultimately responsible for correct classification is the waste producer, as the EWC names different codes for different origins of same waste

14. Transport information

- ◆ **UN number or ID number**
None.
- ◆ **UN proper shipping name**
None.
- ◆ **Transport hazard class(es)**
Non-dangerous goods.
- ◆ **Packing group**
None.
- ◆ **Environmental hazards**
None.
- ◆ **Special precautions for user**
None.
- ◆ **Maritime transport in bulk according to IMO instruments**
Not applicable.

15. Regulatory information

- ◆ **Safety, health and environmental regulations/legislation specific for the substance or mixture**
VOC standard
VOC content: 0 %
National regulations
Water hazard class: 1 Mixture-WGK according to VwVwS (GER)
- ◆ **Chemical Safety Assessment**
No information available.

16. Other information

Training advice

Use information in this MSDS

Recommended uses and restrictions

usage only according to instructions for use and observance of warning notes
National and local regulations concerning chemicals shall be observed.

Further information

The information given in this MSDS is based on the present state of knowledge and is intended to describe our products from the point of view of safety requirements only. Substantial changes to the former version are marked by "!" on the left margin of the paper. All the raw materials in this product are listed in TSCA.

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