

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87084 KSG 350 Z Silicone Gel

Page 1

Revised edition: 23.06.2023

Version: 3

Printed: 27.06.2023

1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Product Name: KSG 350 Z Silicone Gel
Article No.: 87084
UFI: --

1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:
Industrial application
Cosmetic additive

Uses advised against:

1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company: Kremer Pigmente GmbH & Co. KG
Address: Hauptstr. 41-47, 88317 Aichstetten, Germany
Tel./Fax.: Tel +49 7565 914480, Fax +49 7565 1606
Internet: www.kremer-pigmente.com
EMail: info@kremer-pigmente.com
Importer: --

1.4. Emergency No.

Emergency No.: +49 7565 914480 (Mon-Fri 8:00 - 17:00)

1.4.2 Poison Center:

2. Hazards Identification

2.1. Classification of the Substance or Mixture

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

This product does not require classification and labelling as hazardous according to CLP/GHS.

Possible Environmental Effects:

2.2. Label Elements

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

No classification required according to the CLP/GHS guidelines.

Hazard designation:

Not applicable.

Signal word:

Hazard designation:

Safety designation:

Hazardous components for labelling:

2.3. Other Hazards

3. Composition/Information on Ingredients

next page: 2

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87084 KSG 350 Z Silicone Gel

Page 2

Revised edition: 23.06.2023

Version: 3

Printed: 27.06.2023

3.1. Substance

3.2. Mixture

Chemical Characterization: Preparation of polysiloxanes and decamethylcyclopentasiloxane

Information on Components / Hazardous Ingredients:

Decamethylcyclopentasiloxane, REACH Reg. No. 70 - 80 %
01-2119511367-43

CAS-Nr: 541-02-6
EINECS-Nr: 208-764-9
EC-Nr:

Modified organopolysiloxane

20 - 30 %

CAS-Nr: Vertraulich/Proprietary
EINECS-Nr:
EC-Nr:

Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

Seek medical attention in case of complaints.

After inhalation:

Supply fresh air and seek medical advice in case of complaints.

After skin contact:

*Wash off immediately with soap and plenty of water.
If symptoms persist, consult a physician.*

After eye contact:

*Rinse open eyes with plenty of water for at least 15 minutes.
Seek medical attention if irritation persists.*

After ingestion:

*Rinse mouth with plenty of water.
Never give anything by mouth to an unconscious person.*

4.2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

None known.

Effects:

4.3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

Treat symptomatically.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

Foam, carbon dioxide (CO₂), extinguishing powder, water mist.

Unsuitable extinguishing media:

Water with full jet.

next page: 3

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87084 KSG 350 Z Silicone Gel

Page 3

Revised edition: 23.06.2023

Version: 3

Printed: 27.06.2023

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

In case of fire: hazardous gases/vapors may be released.

5.3. Advice for Firefighters

Protective equipment:

Wear suitable protective clothing.

Wear self-contained respiratory protective device.

Further information:

Avoid contamination of sewage system, open water ways and ground water.

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Wear protective clothing.

Avoid contact with eyes and skin.

Do not breathe vapors/dust.

6.2. Environmental Precautions

Environmental precautions:

Prevent contamination of soil, drains and surface waters.

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

Take up mechanically and collect in suitable containers for disposal.

6.4. Reference to other Sections

Protective clothing, see Section 8.

Dispose of contaminated material according to Section 13.

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

Provide adequate ventilation.

Avoid contact with eyes and skin.

Hygienic measures:

Do not eat or drink during work. Do not smoke.

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

Store in tightly sealed containers in a dry and well ventilated location.

Protect against heat and direct sunlight.

Requirements for storage areas and containers:

Keep container tightly closed.

Information on fire and explosion

next page: 4

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87084 KSG 350 Z Silicone Gel

Page 4

Revised edition: 23.06.2023

Version: 3

Printed: 27.06.2023

protection:

Keep away from sources of heat and ignition - do not smoke.

Storage class:

Further Information:

7.3. Specific End Use(s)

Further information:

No information available.

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

No occupational exposure limits known.

Parameters to be controlled:

Derived No-Effect Level (DNEL):

Decamethylcyclopentasiloxane (541-02-6):

24.2 mg/m³ (worker, inhalation, long-term/short-term exposure - local effects)

97.3 mg/m³ (worker, inhalation, long-term/short-term exposure - systemic effects)

4.3 mg/m³ (Consumer, inhalation, long-term/short-term exposure - local effects)

17.3 mg/m³ (Consumer, inhalation, long-term/short-term exposure - systemic effects)

5 mg/kg bw/d (consumer, swallowing, long-term/short-term exposure - systemic effects)

Predicted No-Effect Concentration (PNEC):

Decamethylcyclopentasiloxane (541-02-6):

Fresh water: 1.2 µg/l

Sea water: 0.12 µg/l

Fresh water sediment: 11 mg/kg

Sea water sediment: 1.1 mg/kg

Soil: 1.27 mg/kg

Secondary poisoning: 16 mg/kg

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Personal Protection

General protective measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection:

Required in case of insufficient ventilation.

Hand protection:

Chemical protective gloves (EN 374 (Europe), F739 (US))

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87084 KSG 350 Z Silicone Gel

Page 5

Revised edition: 23.06.2023

Version: 3

Printed: 27.06.2023

Protective glove material:

The glove material must be sufficiently impermeable and resistant against the product.

Eye protection:

Safety glasses with protective shields (EN 166).

Body protection:

Protective clothing.

Environmental precautions:

Avoid contamination of sewage system, open water ways and ground water.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

<i>Form:</i>	<i>paste</i>
<i>Color:</i>	<i>Colorless, translucent</i>
<i>Odor:</i>	<i>light</i>
<i>Odor threshold:</i>	<i>no information available</i>
<i>pH-Value:</i>	<i>not available</i>
<i>Melting temperature:</i>	<i>not available</i>
<i>Boiling temperature:</i>	<i>210°C (410°F)</i>
<i>Flash point:</i>	<i>77°C (170.6°F)</i>
<i>Evaporation rate:</i>	<i>No information available.</i>
<i>Flammability (solid, gas):</i>	<i>not available</i>
<i>Upper explosion limit:</i>	<i>no information available</i>
<i>Lower explosion limit:</i>	<i>no information available</i>
<i>Vapor pressure:</i>	<i>0.13 kPa (20°C)</i>
<i>Vapor density:</i>	<i>> 1</i>
<i>Density:</i>	<i>0.96 (25°C)</i>
<i>Solubility in water:</i>	<i>insoluble</i>
<i>Auto-ignition temperature:</i>	<i>No information available.</i>
<i>Decomposition temperature:</i>	<i>No data available.</i>

next page: 6

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87084 KSG 350 Z Silicone Gel

Page 6

Revised edition: 23.06.2023

Version: 3

Printed: 27.06.2023

Viscosity, dynamic:

not available

Explosive properties:

not available

Oxidizing properties:

no information available

Bulk density:

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic:

Burning class:

Solvent content:

Solid content:

Particle size:

Other information:

10. Stability and Reactivity

10.1. Reactivity

Stable if used according to specifications.

10.2. Chemical Stability

Stable if used according to specifications.

10.3. Possibility of Hazardous Reactions

Unknown.

10.4. Conditions to Avoid

Conditions to avoid:

Avoid contact with heat, sparks and open fire.

Thermal decomposition:

10.5. Incompatible Materials

None known.

10.6. Hazardous Decomposition Products

Carbon monoxide and dioxide, silicon dioxide, formaldehyde, fumes.

10.7. Further Information

11. Toxicological Information

11.1. Information on Hazard Classes as defined in Regulation (EC) No. 1272/2008

Acute Toxicity

Exposure to the substance or mixture can be harmful.

LD50, oral:

*Decamethylcyclopentasiloxane: LD50: > 5000 mg/kg (rat);
NOAEL: > 1000 mg/kg bw/d (90 days; OECD 408)*

LD50, dermal:

next page: 7

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87084 KSG 350 Z Silicone Gel

Page 7

Revised edition: 23.06.2023

Version: 3

Printed: 27.06.2023

	<i>Decamethylcyclopentasiloxane: LD50: > 2000 mg/kg bw/d (rabbit); NOAEL: > 1600 mg/kg (28 days, rat; OECD 401)</i>
<i>LC50, inhalation:</i>	<i>Decamethylcyclopentasiloxane: LD50: 8670 mg/m³ (4h; rat); NOAEC: > 160 ppm (2 years; OECD 453)</i>
<i>Primary effects</i>	
<i>Irritant effect on skin:</i>	<i>Decamethylcyclopentasiloxane: non irritating Modified organopolysiloxane: mild irritation</i>
<i>Irritant effect on eyes:</i>	<i>Decamethylcyclopentasiloxane: no irritant effect Modified organopolysiloxane: slight irritant effect</i>
<i>Inhalation:</i>	<i>No information available.</i>
<i>Ingestion:</i>	<i>No information available</i>
<i>Sensitization:</i>	<i>Decamethylcyclopentasiloxane: non sensitizing (LLNA)</i>
<i>Mutagenicity:</i>	<i>Decamethylcyclopentasiloxane: Mammalian micronucleus test (rat, swallowing; OECD 474): negative Modified organopolysiloxane: Not mutagenic: Bacterial Reverse Mutation Test (Ames-Test, S. typhimurium; OECD 471) In vitro genetic toxicity: negative (ovaries of the chinese hamster, OECD 473)</i>
<i>Reproductive toxicity:</i>	<i>Decamethylcyclopentasiloxane: Two generation study: NOAEL (P): > 160 mg/kg; NOAEL (F1): > 160 mg/kg; NOAEL (F2): > 160 mg/kg</i>
<i>Carcinogenicity:</i>	<i>Decamethylcyclopentasiloxane: No carcinogenic effects relevant to humans in a two-year inhalation combined chronic toxicity and carcinogenicity study in rats (EPA OPPTS 870.4300)</i>
<i>Teratogenicity:</i>	<i>No relevant data found.</i>
<i>Specific target organ toxicity (STOT):</i>	<i>Single exposure: no organospecific toxicity expected. Decamethylcyclopentasiloxane: Repeated inhalation or oral exposure of mice and rats to decamethylcyclopentasiloxane produced an increase in liver size. No gross histopathological or significant clinical chemistry effects were observed. An increase in liver metabolizing enzymes, as well</i>

next page: 8

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87084 KSG 350 Z Silicone Gel

Page 8

Revised edition: 23.06.2023

Version: 3

Printed: 27.06.2023

as a transient increase in the number of normal cells (hyperplasia) followed by an increase in cell size (hypertrophy) were determined to be the underlying causes of the liver enlargement.

The biochemical mechanisms producing these effects are highly sensitive in rodents, while similar mechanisms in humans are insensitive.

Aspiration hazard:

No information available.

11.2. Information on other Hazards

Endocrine Disrupting Properties:

This substance/mixture does not contain any components with endocrine disrupting properties in a percentage of 0.1 or greater, according to Article 57(f) of the REACH Regulation (EC) No. 1907/2006 or the Delegated Regulation (EC) 2017/2100 or the Delegated Regulation (EC) 2018/605.

12. Ecological Information

12.1. Aquatic Toxicity

Fish toxicity:

Decamethylcyclopentasiloxan: LC50: > 16 µg/l (96h, *Oncorhynchus mykiss*); NOEC: > 14.4 µg/l (90d, *Oncorhynchus mykiss*)

Daphnia toxicity:

Decamethylcyclopentasiloxane: EC50: > 2.9 µg/l (48h, *Daphnia magna*); NOEC: > 15 µg/l (21d)

Bacteria toxicity:

No data available.

Algae toxicity:

Decamethylcyclopentasiloxane: EC50: > 12 µg/l (72h, *Pseudokirchneriella subcapitata*); NOEC: > 12 µg/l

12.2. Persistency and Degradability

Decamethylcyclopentasiloxane: Photolysis, Half-Life (Photolysis-Atmospheric): 10.4 days, indirekt photolysis

Hydrolysis, Half-Life (Hydrolysis): 73.4 days, (pH 7, 25°C)

Biodegradability: Not readily biodegradable (OECD 301); 0.08 days Half-Life in soil (22°C in tropical Wahiawa soil in closed systems)

12.3. Bioaccumulation

Decamethylcyclopentasiloxane: The substance does not biomagnify in food-webs. Trophic Magnification Factor (TMF) < 1 (field studies)

12.4. Mobility

Decamethylcyclopentasiloxane: log Kow: 8.02 (25.3°C); Bioconcentration factor (BCF): 16200 lipid-normalized, kinetic (*Pimephales promelas*)

Adsorption: Soil/Sediment sorption - Log Kd: 5.34 (average); Soil/sediment sorption - Log Koc: 5.17 (average)

Henry's law: 3.13 (indicating high potential of volatilization from water)

next page: 9

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87084 KSG 350 Z Silicone Gel

Page 9

Revised edition: 23.06.2023

Version: 3

Printed: 27.06.2023

12. 5. Results of PBT- und vPvP Assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).

12. 6. Endocrine Disrupting Properties

This substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) No. 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1 % or higher.

12. 7. Other Adverse Effects

Water hazard class:

Behaviour in sewage systems:

Further ecological effects:

AOX Value:

No data available.

13. Disposal Considerations

13. 1. Waste Treatment Methods

Product:

This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Disposal methods: Incinerate. Incinerator should be appropriately equipped for silica and other fine powder which the product will generate in incineration. Workers should wear appropriate personal protective equipment(s) such as respirator. Contract with a disposal operator licensed by the Law on Disposal and Cleaning.

Dispose of contents/container in accordance with local/regional/national/international regulations.

European Waste Code (EWC):

Uncleaned packaging:

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Waste Code No.:

14. Transport Information

14. 1. UN Number

ADR, IMDG, IATA

14. 2. UN Proper Shipping Name

ADR/RID:

No hazardous goods according to ADR / DOT (US) (land transportation).

IMDG/IATA:

Not hazardous goods

next page: 10

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87084 KSG 350 Z Silicone Gel

Page 10

Revised edition: 23.06.2023

Version: 3

Printed: 27.06.2023

14.3. Transport Hazard Classes

ADR Class:

not applicable

Hazard no.:

Classification code:

Tunnel restriction code:

IMDG Class (sea):

not applicable

Hazard no.:

EmS No.:

IATA Class:

not applicable

Hazard no.:

14.4. Packaging Group

ADR/RID:

not applicable

IMDG:

IATA:

14.5. Environmental Hazards

Not classified as environmentally hazardous.

14.6. Special Precautions for User

Not classified as a dangerous good under transport regulations.

14.7. Maritime Transport in Bulk according to IMO Instruments

not applicable

14.8. Further Information

Not classified as a dangerous good under transport regulations.

15. Regulatory Information

15.1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

1, slightly hazardous for water (German Regulation, self-assessment)

Local regulations on chemical accidents:

*Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances (Seveso III):
Not listed.*

Employment restrictions:

Restriction and prohibition of application:

EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles: Decamethylcyclopentasiloxane (CAS 541-02-6)

next page: 11

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



87084 KSG 350 Z Silicone Gel

Page 11

Revised edition: 23.06.2023

Version: 3

Printed: 27.06.2023

EU. Directive 2004/37/EC: On the Protection of Workers from the Risk related to Exposure to Carcinogens or Mutagens at Work: not listed

Technical instructions on air quality:

15. 2. Chemical Safety Assessment

A Chemical Safety Assessment is not necessary for this product.

15. 3. Further Information

Regulation (EC) 1005/2009 - Substances that Deplete the Ozone Layer: not regulated / not applicable

Regulation (EU) 2019/1021 - Persistent organic pollutants: not regulated / not applicable

Regulation (EC) 649/2012 concerning the export and import of dangerous chemicals: Not applicable

Regulation (EC) No. 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register (PRTR): Not listed

EC. REACH, Annex XIV, Candidate List of Substances of very High Concern (SVHC): not regulated / not applicable

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.