

Trade name :	Vacuum Grease	Revision date :	07.10.2015
Part number :	214-237	Date of print : Version	11.10.2016 1.3

#### Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product Identifier

1

Trade Name: Vacuum Grease / DOW CORNING(R) HIGH VACUUM GREASE

# 1.2 Relevant identified uses of the substance or mixture and uses advised against relevant identified uses (Product categories [PC]

Use: Lubricants and lubricant additives.

#### **1.3** Details of the supplier of the safety data sheet

Supplier:	INFICON AG
Street:	Alte Landstrasse 6
Postal code/city:	LI-9496 Balzers
Phone:	00423 / 388 3111
E-Mail:	reach.liechtenstein@inficon.com

#### 1.4 Emergency Telephone Number (worldwide)

Tox Info Suisse +41 44 251 51 51 (24 hours)

#### 2 Hazards identification

2.1	Classification of the substance or mixture
	Classification (REGULATION (EC) No. 1272/2008)
	Not a hazardous substance or mixture.
2.2	Label elements
	Labelling (REGULATION (EC) No. 1272/2008)
	Not a hazardous substance or mixture.
2.3	Other hazards
	None known.



#### 3 Composition/information on ingredients

#### 3.1 Mixtures

**Chemical nature:** 

Silicone compound

Hazardous ingredients

No hazardous ingredients

#### 4 First aid measures

#### 4.1 Description of first aid measures

#### **General information**

No special precautions are necessary for first aid responders.

#### After inhalation

If inhaled, remove to fresh air. Get medical attention if symptoms occur.

#### In case of skin contact

Wash with water and soap as a precaution. Get medical attention if symptoms occur.

#### After eye contact

Flush eyes with water and soap as a precaution. Get medical attention if irritation develops and persists.

#### After ingestion

If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

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

None known.

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

Treatment: Treat symptomatically and supportively.



#### 5 Firefighting measures

#### 5.1 Extinguishing media

#### Suitable extinguishing media

Water spray, alcohol-resistant foam, carbon dioxide (CO2), dry chemical.

#### Unsuitable extinguishing media

None known.

#### 5.2 Special hazards arising from the substance or mixture

#### Specific hazards during firefighting

Exposure to combustion products may be a hazard to health.

#### Hazardous combustion products

Carbon oxides, silicon oxides, formaldehyde, boron oxides.

#### 5.3 Advice for firefighters

#### Special protective equipment for firefighters

Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.

#### Specific extinguishing methods

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate Area.

#### 6 Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Follow safe handling advice and personal protective equipment recommendations.

#### 6.2 Environmental precautions

Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

#### 6.3 Methods and material for containment and cleaning up

Soak up with inert absorbent material. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.



#### 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

#### 7 Handling and storage

#### 7.1 Precautions for safe handling

Technical measures:	See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Local/Total ventilation:	Use only with adequate ventilation.
Advice on safe handling:	Handle in accordance with good industrial hygiene and safety practice. Take care to prevent spills, waste and minimize release to the environment.
Hygiene measures:	Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

#### 7.2 Conditions for safe storage, including any incompatibilities

#### **Requirements for storage areas and containers:**

Keep in properly labelled containers. Store in accordance with the particular national regulations.

#### Advice on common storage:

Do not store with the following product types: Strong oxidizing agents.

#### 7.3 Specific end use(s)

These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

#### 8 Exposure controls/personal protection

#### 8.1 Control parameters

#### **Occupational Exposure Limits**

Components	CAS-No	Value type (Form of exposure)	Control parameters	Basis
Silicon dioxide	7631-86-9	TWA (inhalable dust)	6 mg/m³ (Silica)	GB EH40



Further information	For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS 14/3. Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.
	TWA (Respirable dust)2.4 mg/m³ (Silica)GB EH40
Further information	For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS 14/3. Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.



#### 8.2 Exposure controls

#### **Engineering measures**

Processing may form hazardous compounds (see section 10). Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations.

#### Personal protection equipment

#### Eye / face protection

Wear safety glasses

#### Skin protection

Skin should be washed after contact.

#### Hand protection

Wash hands before breaks and at the end of workday.

#### **Respiratory protection**

No personal respiratory protective equipment normally required.

#### 9 Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Appearance:	Grease
Colour:	white, translucent
Odour:	none
Odour Threshold:	No data available
pH:	Not applicable
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	Not applicable
Flash point:	> 300°C Method: closed cup
Evaporation rate:	Not applicable
Flammability (solid, gas):	Not classified as a flammability hazard
Upper explosion limit:	No data available
Lower explosion limit:	No data available



Vapour pressure:	No data available
Relative vapour density:	No data available
Relative density:	1.1
Water solubility:	No data available
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity, kinematic:	2'000'000 cSt
Explosive properties:	Not explosive
Oxidizing properties:	The substance or mixture is not classified as oxidizing.
Other information	
Molecular weight	No data available

#### 10 Stability and reactivity

9.2

10.1 Reactivity

Not classified as a reactivity hazard.

#### 10.2 Chemical stability

Stable under normal conditions.

#### 10.3 Possibility of hazardous reactions

Use at elevated temperatures may form highly hazardous compounds. Can react with strong oxidizing agents. Hazardous decomposition products will be formed at elevated temperatures.

#### 10.4 Conditions to avoid

None known



#### 10.5 Incompatible materials

Oxidizing agents

#### 10.6 Hazardous decomposition products

Thermal decomposition: Formaldehyde

#### **11** Toxicological information

#### **11.1** Information on toxicological effects

Information on likely routes of exposure: Skin contact, ingestion, eye contact.

#### Acute toxicity

Not classified based on available information.

#### Skin corrosion/irritation

Not classified based on available information.

#### Serious eye damage/eye irritation

Not classified based on available information.

#### **Respiration or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

#### Germ cell mutagenicity

Not classified based on available information.

#### Carcinogenicity

Not classified based on available information

#### **Reproductive toxicity**

Not classified based on available information

STOT – single exposure

Not classified based on available information

#### STOT – repeated exposure

Not classified based on available information

#### Aspiration toxicity

Not classified based on available information



#### 12 Ecological information

#### 12.1 Toxicity

No data available

#### 12.2 Persistence and degradability

No data available

## 12.3 Bioaccumulative potential

No data available

#### **12.4 Mobility in soil** No data available

## 12.5 Results of PBT and vPvB assessment

No data available

#### 12.6 Other adverse effects

No data available

#### **13** Disposal considerations

#### 13.1 Waste treatment methods

#### Product:

Dispose of in accordance with local regulations. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

#### **Contaminated packaging:**

Empty containers should be taken to an approved waste handling site for recycling or disposal. If not otherwise specified: Dispose of as unused product.



#### 14 Transport information

#### 14.1 UN number

Not regulated as a dangerous good.

#### 14.2 UN proper shipping name

Not regulated as a dangerous good.

14.3 Transport hazard class (-es) Not regulated as a dangerous good

#### 14.4 Packing group

Not regulated as a dangerous good

#### 14.5 Environmental hazards

Not regulated as a dangerous good

- 14.6 Special precautions for user Not applicable
- **14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Remarks: Not applicable for product as supplied.

#### 15 Regulatory Information

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

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	:Not applicable
REACH – Candidate List of Substances of Very High Concern for Authorisation (Article 59)	:Not applicable
Regulation (EC) No 1005/2009 on substances that : deplete the ozone layer	Not applicable
Regulation (EC) No 850/2004 on persistent : organic pollutants	Not applicable
Seveso III: Directive 2012/18/EU of the European : Parliament and of the Council on the control of major-accident hazard involving dangerous substances	Not applicable



NZIoC	:	All ingredients listed or exempt.
REACH	:	All ingredients (pre-) registered or exempt.
TSCA	:	All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.
PICCS	:	All ingredients listed or exempt.
KECI	:	All ingredients listed, exempt or notified.
ENCS/ISH	<b>1∟</b> :	All components are listed on ENCS/ISHL or exempted from inventory listing.
IECSC	:	All ingredients listed or exempt.
AICS	:	All ingredients listed or exempt.
DSL		This product contains one or more substances which are not on the
		Canadian Domestic Substances List (DSL). Import of this product into Canada has volume limitations. For volume limits please consult Dow Corning Regulation Compliance.

#### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

#### 16 Other informations

#### Full text of other abbreviations

GB EH40 GB EH40 / TWA ADN	:	UK. EH40 WEL – Workplace Exposure Limits Long-term exposure limit (8-hour TWA reference period) European Agreement concerning the international Carriage of Dangerous Goods by Inland Waterways
ADR	:	European Agreement concerning the International Carriage of Dangerous Goods by Road
AICS	:	Australian Inventory of Chemical Substances
ASTM	:	American Society for the Testing of Materials
bw	:	Body weight
CLP	:	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
CMR	:	Carcinogen, Mutagen or Reproductive Toxicant
DIN	:	Standard of the German Institute for Standardisation
DSL	:	Domestic Substances List (Canada)
ECHA	:	European Chemicals Agency
EC-Number	:	European Community number
ECx	:	Concentration associated with x% response



ELx	:	Loading rate associated with x% response
EmS	:	Emergency Schedule
ENCS	:	Existing and New Chemical Substances (Japan)
ErCx	:	Concentration associated with x% growth rate response
GHS	:	Globally Harmonized System
GLP	:	Good Laboratory Practice
IARC	:	International Agency for Research on Cancer
IATA	:	International Air Transport Association
IBC	:	International Code for the Construction and Equipment of Ships
		carrying Dangerous Chemicals in Bulk
IC50	:	Half maximal inhibitory concentration
ICAO	:	International Civil Aviation Organization
IECSC	:	Inventory of Existing Chemical Substances in China
IMDG	:	International Maritime Dangerous Goods
IMO	:	International Maritime Organization
ISHL	:	Industrial Safety and Health Law (Japan)
ISO	÷	International Organisation for Standardization
KECI	÷	Korea Existing Chemicals Inventory
LC50		Lethal Concentration to 50% of a test population
LD50		Lethal Dose to 50% of a test population (Median Lethal Dose)
MARPOL		International Convention for the Prevention of Pollution from Ships
n.o.s.		Not Otherwise Specified
NO(A)EC		No Observed (Adverse) Effect Concentration
NO(A)EL		No Observed (Adverse) Effect Level
NOELR		No Observable Effect Loading Rate
NZIOC		New Zeeland Inventory of Chemicals
OECD		Organization for Economic Co-operation and Development
OPPTS		
	÷	Office of Chemical Safety and Pollution Prevention
PBT	·	Persistent, Bioaccumulative and Toxic substance
PICCS		Philippines Inventory of Chemicals and Chemical Substances
(Q)SAR	:	(Quantitative) Structure Activity Relationship
REACH	:	Regulation (EC) No 1907/2006 of the European Parliament and of the
		Council concerning the Registration, Evaluation, Authorisation and
		Restriction of Chemicals
RID	:	Regulations concerning the International Carriage of Dangerous Goods
		by Rail
SADT	:	Self-Accelerating Decomposition Temperature
SDS	:	Safety Data Sheet
TCSI	:	Taiwan Chemical Substance Inventory
TRGS	:	Technical Rule for Hazardous Substances
TSCA	:	Toxic Substances Control Act (United States)
UN	:	United Nations
vPvB	:	Very Persistent and Very Bioaccumulative



#### 16.1 Additional information

#### Sources of key data used to compile the Safety Data Sheet:

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, http://echa.europa.eu/

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.