

SAFETY DATA SHEET

According to article 31 and Annex II of the EU REACH Regulation

Version: 2.0
Revision Date: 06.02.2012
Superseded date: 29.01.2009**DOW CORNING TORAY SH 44 M GREASE****1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY**

- 1.1 Product name** : DOW CORNING TORAY SH 44 M GREASE
- 1.2 Identified uses** : Lubricants and additives
- Uses advised against** : None known.
- 1.3 Company** : Dow Corning Europe S.A.
rue Jules Bordet - Parc Industriel - Zone C
B-7180 Seneffe
Belgium
- E-mail address (Safety Data Sheet)** : sdseu@dowcorning.com
- Customer Service** : English Tel: +49 611237507
Deutsch Tel: +49 611237500
Français Tel: +32 64511149
Italiano Tel: +32 64511170
Español Tel: +32 64511163
- Fax: +32 64888683
- 1.4 Emergency Phone Number** : Dow Corning (Barry U.K. 24h) Tel: +44 1446732350
Dow Corning (Wiesbaden 24h) Tel: +49 61122158
Dow Corning (Seneffe 24h) Tel: +32 64 888240

2. HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

According to EU Directives 67/548/EEC or 1999/45/EC:

Not hazardous.

2.2 Label elements**Labelling according to EEC Directive**

- S-phrases** : S24/25 Avoid contact with skin and eyes.
S51 Use only in well-ventilated areas.

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DOW CORNING TORAY SH 44 M GREASE**3. COMPOSITION / INFORMATION ON INGREDIENTS****Chemical characterization:** Silicone grease.**According to EU Directives 67/548/EEC or 1999/45/EC:**

Name	CAS-No.	EINECS/ ELINCS No.	REACH Registration Number	Conc. (% w/w)	Classification
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No hazardous ingredients.

According to Regulation (EC) No. 1272/2008:

Name	CAS-No.	EINECS/ ELINCS No.	REACH Registration Number	Conc. (% w/w)	Classification
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No hazardous ingredients.

CLP classifications are based on all current available data including from known international organizations. These classifications are subject to revision as more information becomes available.

4. FIRST AID MEASURES**4.1 Description of First Aid Measures:**

- On contact with eyes** : Flush with water.
- On skin contact** : Flush with water. If skin irritation persists, get medical attention.
- If inhaled** : Remove to fresh air.
- On ingestion** : No first aid should be needed.

5. FIRE-FIGHTING MEASURES

- 5.1 Suitable extinguishing media** : On large fires use dry chemical, foam or water spray (fog). On small fires use carbon dioxide (CO₂), dry chemical or water spray. Water can be used to cool fire exposed containers.
- Unsuitable extinguishing media** : None known.
- 5.2 Hazards during fire fighting** : None known.
- Hazardous Combustion Products** : Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Silica. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde.
- 5.3 Special protective equipment/procedures** : A self-contained respirator and protective clothing should be worn. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

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- 6.1 Personal precautions, protective equipment and emergency procedures** : Wear proper protective equipment.
- 6.2 Environmental precautions** : Do not allow large quantities to enter drains or surface waters.
- 6.3 Methods and materials for containment and cleaning up** : Scrape up and place in a container fitted with a lid. The spilled product produces an extremely slippery surface.

7. HANDLING AND STORAGE

- 7.1 Advice on safe handling** : General ventilation is recommended. Avoid skin and eye contact. Do not empty into drains.
- 7.2 Advice on storage** : Do not store with oxidizing agents.
Storage temperature: minimum 0 °C, maximum 32 °C
- 7.3 Specific uses** : Refer to technical data sheet available on request.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1 Control parameters**

Name	CAS-No.	Exposure Limits
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None of the components have assigned exposure limits.

8.2 Exposure controls

Engineering Controls : Ventilation : Refer to Section 7.1

Personal protection equipment

Respiratory protection : This product cannot normally be inhaled.

Hand protection : Chemical protective gloves should be worn where repeated or prolonged contact can occur: Silver shield(TM), 4H(TM). Regarding glove's breakthrough time, contact your chemical protective glove supplier.

Eye/face protection : Safety goggles should be worn.

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Skin protection	:	Wear impervious overalls in circumstances where significant skin contact can occur.
Hygiene measures	:	Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.
Additional information	:	These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.
<u>Environmental exposure controls</u>	:	Refer to section 6 and 12.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	Grease
Colour	:	Translucent-colorless to pale yellow
Odour	:	None
Explosive properties	:	No
Specific Gravity	:	1.0
Oxidizing properties	:	No

The above information is not intended for use in preparing product specifications. Contact Dow Corning before writing specifications.

10. STABILITY AND REACTIVITY

10.1 Reactivity	:	None known.
10.2 Stability	:	Stable under normal usage conditions.
10.3 Possibility of hazardous reactions	:	None known.
10.4 Conditions to avoid	:	None established.
10.5 Materials to avoid	:	Can react with strong oxidising agents.
10.6 Hazardous decomposition products	:	Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Silica. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde.

11. TOXICOLOGICAL INFORMATION**Acute toxicity:**

On contact with eyes	:	Slightly irritating.
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- On skin contact** : Slightly irritating.
- If inhaled** : No adverse effects are normally expected.
- On ingestion** : May cause slight mucous membranes irritation.

Chronic toxicity:

- On skin contact** : Can irritate on prolonged or repeated skin contact.
- If inhaled** : No adverse effects are normally expected.
- On ingestion** : Repeated swallowing may cause gastrointestinal irritation and disturbance.

Toxicokinetics, metabolism and distribution : No specific information is available.

Other Health Hazard Information : This product contains (a) powder(s) hazardous by inhalation. This is not relevant to the current physical form of the product, which is not in a respirable form. Product may emit formaldehyde vapour at temperatures above 150°C in the presence of air. Formaldehyde vapour is a suspected carcinogen, toxic by inhalation and irritating to eyes and the respiratory system. Exposure limits should be strictly respected.

¹ Based on product test data.

² Based on test data from similar products.

12. ECOLOGICAL INFORMATION**12.1 Ecotoxicity effects**

No adverse effects on aquatic organisms are predicted.

12.2 Persistence and degradability

Solid material, insoluble in water. No adverse effects are predicted.

12.3 Bioaccumulation

No bioaccumulation potential.

12.4 Release to waters / Mobility in soil**Fate and effects in waste water treatment plants:**

No adverse effects on bacteria are predicted.

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Product and packaging disposal : 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.

14. TRANSPORT INFORMATION**Road / Rail (ADR/RID)**

Not subject to ADR/RID.

Sea transport (IMDG)

Not subject to IMDG code.

Air transport (IATA)

Not subject to IATA regulations.

15. REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Status**

AICS : All ingredients listed, exempt or notified.

DSL : All ingredients listed or exempt.

IECSC : All ingredients listed or exempt.

EINECS : All ingredients listed, exempt or notified (ELINCS).

ENCS/ISHL : All ingredients listed, exempt or notified.

KECL : All ingredients listed, exempt or notified.

PICCS : All ingredients listed, exempt or notified.

TSCA : All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

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DOW CORNING TORAY SH 44 M GREASE**16. OTHER INFORMATION**

This product safety data sheet was prepared in compliance with article 31 and Annex II of the EU REACH Regulation as well as its relevant amendments, on the approximation of laws, regulations and administrative provisions relative to the classification, packaging and labelling of dangerous substances and preparations.

It is the responsibility of persons in receipt of this Product Safety Data Sheet to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces a formulation containing the Dow Corning product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from the Dow Corning Product Safety Data Sheet to their own Product Safety Data Sheet in compliance with article 31 and Annex II of the EU REACH Regulation.

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS. Dow Corning shall not be held responsible for any defect in the product covered by this SDS, should the existence of such defect not be detectable considering the current state of scientific and technical knowledge.

As stated above, this Safety Data Sheet has been prepared in compliance with applicable European law. If you purchase this material outside Europe, where compliance laws may differ, you should receive from your local Dow Corning supplier a SDS applicable to the country in which the product is sold and intended to be used. Please note that the appearance and content of the SDS may vary - even for the same product - between different countries, reflecting the different compliance requirements. Should you have any question, please refer to your local Dow Corning supplier.

Source of information: Internal data and publically available information

DOW CORNING TORAY SH 44 M GREASE**1. PRODUCT AND COMPANY IDENTIFICATION**

Dow Corning Corporation
South Saginaw Road
Midland, Michigan 48686

24 Hour Emergency Telephone: (989) 496-5900

Customer Service: (989) 496-6000

Product Disposal Information: (989) 496-6315

CHEMTREC: (800) 424-9300

MSDS No.: 02485320

Revision Date: 2012/02/01

Generic Description: Silicone grease.

Physical Form: Grease

Color: Translucent-colorless to pale yellow

Odor: Odorless

NFPA Profile: Health 0 Flammability 1 Instability/Reactivity 0

Note: NFPA = National Fire Protection Association

2. HAZARDS IDENTIFICATION**POTENTIAL HEALTH EFFECTS****Acute Effects**

Eye: Direct contact may cause temporary redness and discomfort.

Skin: No significant irritation expected from a single short-term exposure.

Inhalation: No significant effects expected from a single short-term exposure.

Oral: Low ingestion hazard in normal use.

Prolonged/Repeated Exposure Effects

Skin: Repeated or prolonged exposure may cause irritation.

Inhalation: No known applicable information.

Oral: No known applicable information.

Signs and Symptoms of Overexposure

No known applicable information.

Medical Conditions Aggravated by Exposure

No known applicable information.

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The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

None present. This is not a hazardous material as defined in the OSHA Hazard Communication Standard.

4. FIRST AID MEASURES

Eye:	If irritation occurs, flush eye(s) with lukewarm gently flowing water for 5 minutes. Obtain medical attention.
Skin:	No health effects expected. If irritation does occur flush with lukewarm, gently flowing water for 5 minutes. If irritation persists, obtain medical advice.
Inhalation:	If symptoms are experienced remove source of contamination or move victim to fresh air. If irritation persists, obtain medical advice.
Oral:	If irritation or discomfort occur, obtain medical advice.
Notes to Physician:	Treat according to person's condition and specifics of exposure.

5. FIRE FIGHTING MEASURES

Flash Point:	Not applicable.
Autoignition Temperature:	Not determined.
Flammability Limits in Air:	Not determined.
Extinguishing Media:	On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO ₂), dry chemical or water spray. Water can be used to cool fire exposed containers.
Fire Fighting Measures:	Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.
Unusual Fire Hazards:	None.

6. ACCIDENTAL RELEASE MEASURES

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Containment/Clean up: Observe all personal protection equipment recommendations described in Sections 5 and 8. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and 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 federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

Note: See Section 8 for Personal Protective Equipment for Spills. Call (989) 496-5900, if additional information is required.

7. HANDLING AND STORAGE

Use with adequate ventilation. Traces of benzene (carcinogen) may form if heated in air above 300°F (149°C). Provide ventilation to control vapor exposure within inhalation guidelines when handling at elevated temperatures. Review the OSHA benzene regulation for detailed information on safe handling requirements. Avoid eye contact. Avoid skin contact.

Use reasonable care and store away from oxidizing materials. This material in its finely divided form presents an explosion hazard. Follow NFPA 654 (for chemical dusts) or 484 (for metal dusts) as appropriate for managing dust hazards to minimize secondary explosion potential.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Component Exposure Limits**

There are no components with workplace exposure limits.

Engineering Controls

Local Ventilation: None should be needed.
General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling

Eyes: Use proper protection - safety glasses as a minimum.

Skin: Washing at mealtime and end of shift is adequate.

Suitable Gloves: Avoid skin contact by implementing good industrial hygiene practices and procedures. Select and use gloves and/or protective clothing to further minimize the potential for skin contact. Consult with your glove and/or personnel protective equipment manufacturer for selection of appropriate compatible materials.

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Inhalation: No respiratory protection should be needed.

Suitable Respirator: None should be needed.

Personal Protective Equipment for Spills

Eyes: Use proper protection - safety glasses as a minimum.

Skin: Washing at mealtime and end of shift is adequate.

Inhalation/Suitable Respirator: No respiratory protection should be needed.

Precautionary Measures: Avoid eye contact. Avoid skin contact. Use reasonable care.

Comments: Traces of benzene (carcinogen) may form if heated in air above 300°F (149°C). Provide ventilation to control vapor exposure within inhalation guidelines when handling at elevated temperatures. Review the OSHA benzene regulation for detailed information on safe handling requirements.

When heated to temperatures above 150 degrees C in the presence of air, product can form formaldehyde vapors. Formaldehyde is a potential cancer hazard, a known skin and respiratory sensitizer, and an irritant to the eyes, nose, throat, skin, and digestive system. Safe handling conditions may be maintained by keeping vapor concentrations within the OSHA Permissible Exposure Limit for formaldehyde.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Grease
 Color: Translucent-colorless to pale yellow
 Odor: Odorless
 Specific Gravity @ 25°C: 1.0
 Viscosity: Not determined.
 Freezing/Melting Point: Not determined.
 Boiling Point: Not determined.
 Vapor Pressure @ 25°C: Not determined.
 Vapor Density: Not determined.
 Solubility in Water: Not determined.
 pH: Not determined.
 Volatile Content: Not determined.
 Flash Point: Not applicable.
 Autoignition Temperature: Not determined.
 Flammability Limits in Air: Not determined.

Note: The above information is not intended for use in preparing product specifications. Contact Dow Corning before writing

DOW CORNING TORAY SH 44 M GREASE

specifications.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable.

Hazardous Polymerization: Hazardous polymerization will not occur.

Conditions to Avoid: None.

Materials to Avoid: Oxidizing material can cause a reaction.

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Metal oxides. Formaldehyde.

11. TOXICOLOGICAL INFORMATION

Special Hazard Information on Components

No known applicable information.

12. ECOLOGICAL INFORMATION

Environmental Fate and Distribution

Complete information is not yet available.

Environmental Effects

Complete information is not yet available.

Fate and Effects in Waste Water Treatment Plants

Complete information is not yet available.

Ecotoxicity Classification Criteria

Hazard Parameters (LC50 or EC50)	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	<=1	>1 and <=100	>100
Acute Terrestrial Toxicity	<=100	>100 and <= 2000	>2000

This table is adapted from "Environmental Toxicology and Risk Assessment", ASTM STP 1179, p.34, 1993.

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

DOW CORNING TORAY SH 44 M GREASE**13. DISPOSAL CONSIDERATIONS****RCRA Hazard Class (40 CFR 261)**

When a decision is made to discard this material, as received, is it classified as a hazardous waste? No

State or local laws may impose additional regulatory requirements regarding disposal. Call (989) 496-6315, if additional information is required.

14. TRANSPORT INFORMATION**DOT Road Shipment Information (49 CFR 172.101)**

Not subject to DOT.

Ocean Shipment (IMDG)

Not subject to IMDG code.

Air Shipment (IATA)

Not subject to IATA regulations.

Call Dow Corning Transportation, (989) 496-8577, if additional information is required.

15. REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings**Section 302 Extremely Hazardous Substances (40 CFR 355):**

None.

Section 304 CERCLA Hazardous Substances (40 CFR 302):

None.

Section 311/312 Hazard Class (40 CFR 370):

Acute: No
Chronic: No
Fire: No

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Pressure: No

Reactive: No

Section 313 Toxic Chemicals (40 CFR 372):

None present or none present in regulated quantities.

Note: Chemicals are listed under the 313 Toxic Chemicals section only if they meet or exceed a reporting threshold.

Supplemental State Compliance Information**California**

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None known.

Massachusetts

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
4485-12-5	10.0 - 30.0	Lithium stearate
20466-33-5	3.0 - 7.0	Lithium palmitate

New Jersey

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
63148-52-7	70.0 - 90.0	Dimethyl, phenylmethyl siloxane, trimethyl-terminated
4485-12-5	10.0 - 30.0	Lithium stearate
20466-33-5	3.0 - 7.0	Lithium palmitate

Pennsylvania

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
63148-52-7	70.0 - 90.0	Dimethyl, phenylmethyl siloxane, trimethyl-terminated
4485-12-5	10.0 - 30.0	Lithium stearate
20466-33-5	3.0 - 7.0	Lithium palmitate

DOW CORNING TORAY SH 44 M GREASE**16. OTHER INFORMATION**

Prepared by: Dow Corning Corporation

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

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