



MATERIAL SAFETY DATA SHEET

TOYOTA SILICONE SPRAY

MSDS No.:TCI-10248

Page 1 of 6

MSDS Revision Date (dd/mm/yyyy): 17/09/2012

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION






Product identifier : TOYOTA SILICONE SPRAY

Trade Name : Toyota Silicone Spray

Chemical Name : See ingredients listed in section 2.

Product Use : Automotive - Lubricant

Part No : C0009-10450

Chemical response card (CRC) number			A6	
RESPONSE TEAM PPE				
WHMIS				
TDG				

Manufacturer's name and address:

Shrader Canada Ltd.
830 Progress Crt.
Oakville, ON, Canada
L6L 6K1
Phone: (905) 847 0222

Supplier's / Distributor's name and Address:

TOYOTA CANADA INC.
1 Toyota Place
Toronto, ON, Canada
M1H 1H9
Phone: (416) 438 6320

Emergency Tel : CANUTEC (613) 996-6666

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredients</u>	<u>CAS #</u>	<u>% (weight)</u>	<u>OSHA PEL</u>		<u>ACGIH TLV</u>	
			<u>PEL</u>	<u>STEL</u>	<u>TWA</u>	<u>STEL</u>
Petroleum gases, liquefied, sweetened	68476-86-8	15.0 - 40.0	N/Av	N/Av	N/Av	N/Av

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Colourless aerosol spray. Contents under pressure. Contains flammable gas. Causes eye irritation. At high concentrations, vapours are irritating and anaesthetic. Mild odour.

Routes of Entry: *Inhalation:* YES *Skin Absorption:* YES *Skin & Eyes:* YES *Ingestion:* YES

Signs and symptoms of short-term (acute) exposure

Inhalation: Irritating to respiratory system.

Skin: Not an expected route of entry..

Eyes: Direct contact causes eye irritation.

Ingestion: Nausea, vomiting and diarrhea.

Potential acute health effects

Eyes: Causes eye irritation.

Skin: Not an expected route of entry..

Inhalation: At high concentrations, vapours are irritating and anaesthetic.

Ingestion: Ingestion of large amounts may cause stomach irritation. Nausea, vomiting and diarrhea may occur. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal.

Potential chronic health effects

: None known.

Target organs : None reported by the manufacturer.

Toxicological data : See Section 11.

Medical conditions aggravated by overexposure

: None known.

Other important hazards : Refer to Section 11 for carcinogenic status. Refer to Section 12 for environmental hazards.

SECTION 4 - FIRST AID MEASURES



MATERIAL SAFETY DATA SHEET

TOYOTA SILICONE SPRAY

MSDS No.:TCI-10248

Page 2 of 6

MSDS Revision Date (dd/mm/yyyy): 17/09/2012

- Inhalation** : Not a hazard under normal conditions of use. If inhaled, move to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. Get medical attention.
- Skin** : Wash affected areas with soap and water. Remove and wash contaminated clothing before re-use. If irritation persists, seek prompt medical attention.
- Eyes** : Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, seek prompt medical attention.
- Ingestion** : Do NOT induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.
- First aid notes to physician** : If symptoms such as convulsions or unconsciousness occur before vomiting, gastric lavage should be considered. Hemodialysis should be considered in severe acute intoxications.

SECTION 5 - FIRE FIGHTING MEASURES

Flash point : > 93°C **Flash point (Method)** : TCC (liquid component)

Auto-ignition Temperature : Not available.

Upper flammable limit (% by vol.) : Not available. **Lower flammable limit (% by vol.)** : Not available.

Unusual fire and explosion hazards : Aerosol has a flame projection of greater than 45 cm. NFPA Classification Aerosol, Level 2. Contents under pressure. Containers may explode if heated. Do not use on vehicles unless cool.

Means of extinction : Alcohol foam or water fog for large fires. Carbon dioxide or dry chemical for small fires.

Special fire-fighting procedures/equipment : Use water to cool fire-exposed containers. Do not use a direct stream of water.

Conditions of flammability : Flammable aerosol. Sprayed product will project a flame on contact with an ignition source. Vapours are heavier than air, and may travel or be moved along the ground to an ignition source at locations distant from material handling. Extremely flammable.

Sensitivity to mechanical impact/static discharge : Sensitive to static discharge. Contents under pressure. Protect against physical damage.

Hazardous combustion products : Burning can release carbon dioxide, carbon monoxide and other potentially irritating or toxic organic compounds.

Oxidizing properties : None.

OSHA Classification : Flammable aerosol.

NFPA : *Health: 2 Fire: 4 Instability: 1 Other Hazards: None*

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Spill response/cleanup : Contain spilled material. Follow applicable explosion and fire precautions during the response. Stop the spill at source if it is safe to do so. For large spills, dike the area to prevent spreading. Pump excess material to a salvage container. Absorb residues and small spills with a non-flammable absorbent material and collect adsorbate for disposal.

Personal precautions : Wear suitable protective clothing (see Section 8).

Environmental precautions : Avoid contamination of natural waterways.

Prohibited materials : Use non-flammable absorbent only.

Special spill response procedures : For large quantities, refer to the environmental authorities.

SECTION 7 - HANDLING AND STORAGE

General Hygiene Procedures : Wear suitable protective clothing (see Section 8). Use good personal hygiene. Avoid eating, drinking and smoking while handling. Wash with soap and water after handling.

Storage requirements : Keep out of the reach of children. Store in a cool, dry, well-ventilated area. Storage temperatures should not exceed 35 °C.



MATERIAL SAFETY DATA SHEET

- Handling procedures** : Flammable. Keep away from excessive heat, open flames, sparks and other possible sources of ignition. Do not use on vehicles unless cool. Use with adequate ventilation. Avoid breathing vapours. Avoid contact with skin and eyes. Containers of this material may still retain hazardous residues even when emptied.
- Special provisions** : Contents under pressure. Protect against physical damage.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ventilation and engineering measures

- : Use sufficient mechanical ventilation to maintain exposures below the TLV. Under normal conditions of use, general ventilation should be sufficient. Local ventilation is recommended if the product is misted or used in a confined space, or if the TLV is exceeded. Make-up air should always be supplied to balance exhaust air.

Physical protection

- Respiratory:** Not normally required. If the TLV is exceeded, a NIOSH/MSHA-approved respirator is advised.
- Eye:** Safety glasses with side shields should be used with this product. Do not wear contact lenses. Contact lenses may contribute to the severity of eye injury.
- Hand:** Nitrile rubber gloves recommended.
- Other:** Wear sufficient clothing to prevent skin contact. Emergency showers and eyewash facilities should be nearby.

The selection of personal protective equipment will vary depending on the conditions of use.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- | | |
|---|--|
| Physical state : Aerosol | Odour : Mild odour. |
| Odour threshold : Not available. | Appearance : colourless |
| Specific gravity : 0.90 @ 15 °C | Solubility in water : Negligible |
| Vapour pressure (mmHg @ 20 C / 68 F) | Vapour density (Air = 1) |
| : Not available. | : > 1 |
| Boiling point : Not available. | Melting/Freezing point : Not available. |
| Evaporation rate (n-Butyl acetate = 1) | pH : Not available. |
| : Not available. | |
| Coefficient of water/oil distribution | Volatiles (% by weight) : 30 |
| : Not available. | |
| Molecular Weight : Not applicable. | Viscosity : Not available. |

SECTION 10 - REACTIVITY AND STABILITY DATA

- Stability and reactivity** : Stable at ambient temperatures and pressures.
- Hazardous polymerization** : Will not occur.
- Conditions to avoid** : Open flames, sparks, high heat and close proximity to incompatible substances.
- Hazardous decomposition products** : Similar to hazardous combustion products.
- Materials To Avoid And Incompatibility** : Avoid strong oxidizers.
Hydrogen peroxide
oleum
Nitric acid

SECTION 11 - TOXICOLOGICAL INFORMATION

<u>Ingredients</u>	LC50	LD50	
	<u>inh. rat</u>	<u>dermal. rabbit</u>	<u>oral. rat</u>
Petroleum gases, liquefied, sweetened	N/Av	N/Av	N/Av

- Carcinogenic status** : No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.
- Reproductive effects** : Not expected to have other reproductive effects.
- Teratogenicity** : Not expected to be a teratogen.
- Mutagenicity** : Not expected to be mutagenic in humans.



MATERIAL SAFETY DATA SHEET

TOYOTA SILICONE SPRAY

MSDS No.:TCI-10248

Page 4 of 6

MSDS Revision Date (dd/mm/yyyy): 17/09/2012

- Sensitization to material** : Contains no known skin or respiratory sensitizers.
- Synergistic materials** : Not available.
- Embryotoxicity** : Not expected to be embryotoxic.
- Irritancy of product** : May be mildly irritating to skin, eyes and respiratory system.
- Biological exposure indices** : Not available.
- Medical recommendations** : Treat symptomatically.
- Special remark other toxic effects** : None.

SECTION 12 - ECOLOGICAL INFORMATION

- Persistence** : Bioaccumulative potential is not known.
- Plant animal effects** : The manufacturer has not reported any plant or animal effects.
- Aquatic toxicity** : The manufacturer has not reported any aquatic life effects.
- Other Adverse Environmental Effects** : None known.

SECTION 13 - DISPOSAL CONSIDERATIONS

- Handling for Disposal** : See Section 7 (Handling and Storage) for further details.
- Methods of Disposal** : Reuse or recycling should be given priority over disposal. Do not dump unused contents into sewers, on the ground or into any body of water. Dispose of in accordance with federal, provincial and local hazardous waste laws.
- Special consideration** : Contents under pressure. Do not puncture, incinerate or expose to heat even when empty.

SECTION 14 - TRANSPORTATION INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label	Additional information
TDG	UN1950	AEROSOLS, flammable	Limited Quantity 1950	none		May be shipped as LIMITED QUANTITY when transported in containers no larger than 1.0 Litre, in packages not exceeding 30 kg gross mass.
ICAO/IATA	UN1950	Aerosols, flammable	2.1 (LQ air)	none		Refer to ICAO/IATA Packing Instruction Y203 or 203.
49CFR/DOT	UN1950	Aerosols, flammable	2.1	none		

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.
 SARA Section 313: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical Constituents above de minimus concentrations.

US State Right to Know Laws:

California Proposition 65: To the best of our knowledge, this product does not contain any chemicals known to the State of California to cause cancer or reproductive harm.

Canadian Information:

Canadian WHMIS Classification: A, B5
 Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).
 This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and this MSDS contains all the information required by the CPR.



MATERIAL SAFETY DATA SHEET

SECTION 16 - OTHER INFORMATION

Terms & Definitions:

Please see the concluding page of the Material Safety Data Sheet.

Disclaimer:

This Material Safety Data Sheet complies with Health Canada's Workplace Hazardous Materials Information System (WHMIS) and U.S. OSHA Hazard Communication Standard, 29 CFR §1910.1200. To the best of ICC or Toyota Canada's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either expressed or implied are provided. The information contained herein relates only to the specific product. Contact the manufacturer for additional information.

Preparation Date (dd/mm/yyyy)

: 06/01/2006

MSDS Reviewed Date (dd/mm/yyyy)

: 17/09/2012

Revision No.

: 6

Revision Information

- : (M)SDS sections updated
- 2. Composition/information on ingredients
- 14. Transport information

<p>Prepared for: Toyota Canada, Inc. Parts Operations Department 1 Toyota Place Toronto, ON, Canada M1H 1H9 Phone: 1-416-438-6320 Hours of operation: 8:15 - 5:00 EST, Mon-Fri</p>	
<p>Prepared by: ICC The Compliance Center Inc. http://www.thecompliancecenter.com</p>	



MATERIAL SAFETY DATA SHEET

TOYOTA SILICONE SPRAY

MSDS No.:TCI-10248

Page 6 of 6

MSDS Revision Date (dd/mm/yyyy): 17/09/2012

DEFINITION OF TERMS

A large number of abbreviations and acronyms appear on a MSDS. Some of these that are commonly used include the following:

GENERAL INFORMATION:

CAS No. Chemical Abstract Service Number

EXPOSURE LIMITS IN AIR:

ACGIH American Conference on Governmental Industrial Hygienists
 TLV Threshold Limit Value
 OSHA U.S. Occupational Safety and Health Administration
 PEL Permissible Exposure Limit
 IDLH Immediately Dangerous to Life and Health

FLAMMABILITY LIMITS IN AIR:

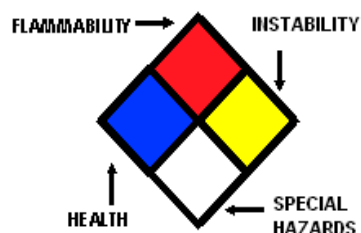
Autoignition Temperature Minimum temperature required to initiate combustion in air with no other source of ignition
 LEL Lower Explosive Limit- lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source
 UEL Upper Explosive Limit - highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source
 TCC Tagliabue Closed Cup
 COC Cleveland Open Cup

FIRST AID MEASURES:

CPR Cardiopulmonary resuscitation - method in which a person whose heart has stopped receives manual chest compressions and breathing to circulate blood and provide oxygen to the body.

NFPA HAZARD RATINGS:

0 Minimal Hazard
 1 Slight Hazard
 2 Moderate Hazard
 3 Severe Hazard
 4 Extreme Hazard



W Water Reactive
 OX Oxidizer

PERSONAL PROTECTION SYMBOLS:



Note: the dotted circle indicates that this respiratory protective equipment is required for high concentrations or for large volume spills or releases of product.

TOXICOLOGICAL INFORMATION:

LD50 Lethal Dose (solids & liquids) which kills 50% of the exposed animals
 LC50 Lethal concentration (gases) which kills 50% of the exposed animals
 ppm Concentration expressed in parts of material per million parts
 TDLo Lowest dose to cause a symptom
 TCLo Lowest concentration to cause a symptom
 LDlo, LClo Lowest dose (or concentration) to cause lethal or toxic effects
 IARC International Agency for Research on Cancer
 MSHA Mine Safety and Health Administration
 NIOSH National Institute for Occupational Safety and Health
 NTP National Toxicology Program
 RTECS Registry of Toxic Effects of Chemical Substances
 BCF Bioconcentration Factor
 TLm Median threshold limit
 log KOW or log KOC Coefficient of Oil/Water Distribution

OTHER STANDARD ABBREVIATIONS:

N/Av Not Available
 N/Ap Not Applicable
 NR No Results
 NE Not Established
 ND Not Determined
 ML Maximum Limit
 SCBA Self-Contained Breathing Apparatus

REGULATORY INFORMATION:

WHMIS Canadian Workplace Hazardous Material Information System
 DOT U.S. Department of Transportation
 TC Transport Canada
 EPA U.S. Environmental Protection Agency
 DSL Canadian Domestic Substance List
 NDSL Canadian Non-Domestic Substance List
 TSCA U.S. Toxic Substance Control Act
 TDG Transportation of Dangerous Goods Regulations
 49 CFR Title 49 of US Code of Federal Regulations
 ICAO International Civil Aviation Organization
 IATA International Air Transport Association
 IMDG International Maritime Dangerous Goods Code

NATIONAL FIRE PROTECTION ASSOCIATION: NFPA