

Product name: TEGO® Flow ATF 2

SAFETY DATA SHEET

Classified in accordance with Health Canada Hazardous Products Regulations
(SOR/2015-17)

1. Identification

Product identifier:
TEGO® Flow ATF 2

Chemical name:
Polydimethylsiloxane

Recommended use of the chemical and restrictions on use

Recommended use: Industrial use
Recommended restrictions: None known.

Manufacturer/Importer/Distributor Information

Company Name : Evonik Canada Inc.
3380 South Service Road
L7N 3J5 Burlington ON
Canada

Telephone : +1 905 336 3423
Fax : +1 905 332 5632
E-mail : product-regulatory-services@evonik.com

Emergency telephone number:

24-Hour Health : +1 800 424 9300 (CHEMTREC - US & CANADA)
Emergency : 800 681 9531 (CHEMTREC MEXICO)
+1 703 527 3887 (CHEMTREC WORLD)
+1 613 996 6666 (CANUTEC – For Transportation Emergencies Only)
+1 973 929 8060 (Product Regulatory Services)

2. Hazard identification

According to Hazardous Products Regulations

Physical Hazards

Flammable liquids Category 2

Health Hazards

Reproductive toxicity Category 2

Environmental Hazards

Acute hazards to the aquatic environment Category 2

Chronic hazards to the aquatic environment Category 3

Label Elements

Hazard Symbol:

Product name: TEGO® Flow ATF 2



Signal Word:

Danger

Hazard Statement:

Highly flammable liquid and vapor.
Toxic to aquatic life.
Harmful to aquatic life with long lasting effects.
Suspected of damaging fertility.

Precautionary Statements

Prevention:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response:

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF exposed or concerned: Get medical advice/attention. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:

Store in a well-ventilated place. Keep cool. Store locked up.

Disposal:

Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Physical Hazards Not Otherwise Classified:

Classification not possible

Health Hazards Not Otherwise Classified:

Classification not possible

3. Composition/information on ingredients

Chemical name:

Polydimethylsiloxane

Product name: TEGO® Flow ATF 2
Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)* Reference quantity: Fraction (Weight)
Hexamethyl disiloxane	No data available.	107-46-0	5 - 10%
octamethylcyclotetrasiloxane	No data available.	556-67-2	0.1 - 1%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures
Description of necessary first-aid measures

General information:	Remove soiled or soaked clothing immediately
Inhalation:	fresh air supply, consult a doctor if feeling unwell.
Skin Contact:	In case of contact with skin wash off with soap and water. In case of discomfort: Supply with medical care.
Eye contact:	In case of contact with eyes rinse thoroughly with water. In case of discomfort: Supply with medical care.
Ingestion:	Thoroughly clean the mouth with water In case of discomfort: Supply with medical care.
Personal Protection for First-aid Responders:	No data available.

Most important symptoms and effects, both acute and delayed

Symptoms:	Up to now no symptoms are known.
Hazards:	No data available.

Indication of immediate medical attention and special treatment needed

Treatment:	Treat symptomatically.
-------------------	------------------------

5. Fire-fighting measures
Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: foam, carbon dioxide, dry powder, water spray.

Unsuitable extinguishing media: High volume water jet.

Special hazards arising from the substance or mixture: In the event of fire the following can be released: - Carbon monoxide, carbon dioxide, silicon dioxide Under certain conditions of combustion traces of other toxic substances cannot be excluded

Special protective equipment and precautions for fire-fighters

Special fire-fighting procedures: Keep away from sources of ignition. Take action to prevent static discharges. Vapours may form explosive mixtures with air. Cool endangered containers by water spray

Product name: TEGO® Flow ATF 2
Special protective equipment for fire-fighters:

Do not inhale explosion and/or combustion gases. Self-contained breathing apparatus.

6. Accidental release measures
Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Keep away sources of ignition. Ensure adequate ventilation.

Accidental release measures:

No data available.

Methods and material for containment and cleaning up:

Take up with absorbent material (eg sand, kieselguhr, universal binder) Dispose of absorbed material in accordance with the regulations.

Environmental Precautions:

Do not allow to enter drains or waterways Prevent product from getting into subsoil/soil.

7. Handling and storage
Handling
Technical measures (e.g. Local and general ventilation):

No data available.

Safe handling advice:

Avoid contact with skin and eyes. Do not inhale gases/vapours/aerosols. Provide good ventilation of working area (local exhaust ventilation if necessary). Use respiratory protection during spraying.

Contact avoidance measures:

No data available.

Storage
Safe storage conditions:

Keep container tightly closed in a cool, well-ventilated place.

Safe packaging materials:

No data available.

8. Exposure controls/personal protection
Control Parameters
Occupational Exposure Limits

None of the components have assigned exposure limits.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls

No data available.

Individual protection measures, such as personal protective equipment
Eye/face protection:

Safety goggles

Hand Protection:

 Material: Nitrile rubber.
 Break-through time: 480 min

Product name: TEGO® Flow ATF 2

Other:	protective clothing
Respiratory Protection:	in case of formation of vapours/aerosols: Short term: filter apparatus, combination filter A-P2
Hygiene measures:	When using do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Remove soiled or soaked clothing immediately.

9. Physical and chemical properties
Information on basic physical and chemical properties
Appearance

Physical state:	liquid
Form:	liquid
Color:	Colorless
Odor:	specific to the product
Odor Threshold:	not measured
Freezing point:	not measured
Boiling Point:	> 194 °F/> 90 °C
Flammability:	not measured

Upper/lower limit on flammability or explosive limits

Explosive limit - upper:	not measured
Explosive limit - lower:	not measured
Flash Point:	46 - 61 °F/8 - 16 °C (DIN EN ISO 2719)
Self Ignition Temperature:	not measured
Decomposition Temperature:	not measured
pH:	Not applicable

Viscosity

Dynamic viscosity:	32 - 38 mPa.s (77 °F/25 °C, DIN 53015)
Kinematic viscosity:	32 - 38 mm ² /s
Flow Time:	No data available.

Solubility(ies)

Solubility in Water:	Insoluble
Solubility (other):	not measured
Partition coefficient (n-octanol/water):	not measured
Vapor pressure:	not measured
Relative density:	not measured
Density:	0.92 - 0.94 g/cm ³ (77 °F/25 °C) (DIN 51757)
Bulk density:	No data available.
Relative vapor density:	not measured

Other information

Explosive properties:	not measured
Oxidizing properties:	not oxidizing
Minimum ignition temperature:	not measured
Metal Corrosion:	Not corrosive to metals
Evaporation Rate:	not measured

Product name: TEGO® Flow ATF 2

10. Stability and reactivity

Reactivity:	see section "Possibility of hazardous reactions".
Chemical Stability:	The product is stable under normal conditions.
Possibility of hazardous reactions:	No hazardous reactions with proper storage and handling
Conditions to avoid:	Open flames, sparks or input of much heat
Incompatible Materials:	Not known.
Hazardous Decomposition Products:	None with proper storage and handling.

11. Toxicological information

Information on toxicological effects

Information on likely routes of exposure

Inhalation:	Information on effects are given below.
Skin Contact:	Information on effects are given below.
Eye contact:	Information on effects are given below.
Ingestion:	Information on effects are given below.

Acute toxicity (list all possible routes of exposure)

Oral

Product: Not classified for acute toxicity based on available data.

Dermal

Product: LD 50 (ATEmix): 2,248 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogens present or none present in regulated quantities

Product name: TEGO® Flow ATF 2

ACGIH: US.ACGIH Threshold Limit Values:

No carcinogens present or none present in regulated quantities

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogens present or none present in regulated quantities

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended

No carcinogens present or none present in regulated quantities

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended

No carcinogens present or none present in regulated quantities

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended

No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity

No data available.

In vitro
Product: No data available.

Components:

Hexamethyl disiloxane	Ames test (OECD 471): negative Chromosomal aberration (OECD 473): negative gene mutation test (OECD 476): negative
octamethylcyclotetrasiloxane	Ames test (OECD 471): negative Chromosomal aberration (OECD 473): negative gene mutation test (OECD 476): negative

In vivo
Product: No data available.

Components:

Hexamethyl disiloxane	Chromosomal aberration (OECD 475) Intraperitoneal (Rat, Male): negative
octamethylcyclotetrasiloxane	Micronucleus test (OECD 474) Inhalation - vapor (Rat): negative Chromosomal aberration (OECD 478) Oral (Rat): negative Chromosomal aberration (OECD 475) Inhalation - vapor (Rat, Female, Male): negative

Reproductive toxicity
Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard
Product: Not classified

Information on health hazards
Other hazards
Product: No data available.

12. Ecological information
Ecotoxicity:
Acute hazards to the aquatic environment:

Product name: TEGO® Flow ATF 2

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Components:

Hexamethyl disiloxane	EC 50 (Algae (<i>Pseudokirchneriella subcapitata</i>), 95 h): > 0.55 mg/l (OECD 201)
octamethylcyclotetrasiloxane	EC 50 (Algae (<i>Pseudokirchneriella subcapitata</i>), 96 h): > 22 µg/l (US-EPA-method)
	EC 50 (Algae (<i>Pseudokirchneriella subcapitata</i>), 96 h): > 22 µg/l (US-EPA-method)

Toxicity to microorganisms

Product: No data available.

Chronic hazards to the aquatic environment:
Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Components:

Hexamethyl disiloxane	NOEC (Algae (<i>Pseudokirchneriella subcapitata</i>), 96 h): 1 mg/l (OECD 201)
octamethylcyclotetrasiloxane	NOEC (Algae (<i>Pseudokirchneriella subcapitata</i>), 96 h): < 22 µg/l (US-EPA-method)

Toxicity to microorganisms

Product: No data available.

Persistence and Degradability
Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential
Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: not measured

Mobility in soil:

Product No data available.

Results of PBT and vPvB assessment:

Product No data available.

Product name: TEGO® Flow ATF 2

Other adverse effects:**Other hazards****Product:**

Do not allow to enter soil, waterways or waste water canal. Based on expert judgement and on experimental data within an analogue approach, the maximum estimated aqueous concentration of typical impurities of siloxane polymers, migrating into water is below their established no-effect threshold value for aquatic organisms.

13. Disposal considerations**Disposal methods:**

In accordance with local authority regulations, take to special waste incineration plant

Contaminated Packaging:

If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards.

14. Transport information**Domestic regulation****TDG**

UN number or ID number : UN 1993
Proper shipping name : FLAMMABLE LIQUID, N.O.S.
(hexamethyldisiloxane)
Class : 3
Packing group : II
Labels : 3
Marine pollutant : no

International Regulations**IATA-DGR**

UN/ID No. : UN 1993
Proper shipping name : Flammable liquid, n.o.s.
(hexamethyldisiloxane)
Class : 3
Packing group : II
Labels : 3
Packing instruction (cargo aircraft) : 364
Packing instruction (passenger aircraft) : 353

IMDG-Code

UN number or ID number : UN 1993
Proper shipping name : FLAMMABLE LIQUID, N.O.S.
(hexamethyldisiloxane)
Class : 3
Packing group : II
Labels : 3
EmS Code : F-E, S-E
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Product name: TEGO® Flow ATF 2

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. Regulatory information

Canada Federal Regulations

List of Toxic Substances (CEPA, Schedule 1)

Chemical Identity

octamethylcyclotetrasiloxane

Chemical Identity

octamethylcyclotetrasiloxane

Export Control List (CEPA 1999, Schedule 3)

Not Regulated

National Pollutant Release Inventory (NPRI)

Canada. National Pollutant Release Inventory (NPRI) Substances, Part 5, VOCs with Additional Reporting Requirements

NPRI PT5 Not Regulated

Canada. National Pollutant Release Inventory (NPRI) (Schedule 1, Parts 1-4)

NPRI Not Regulated

Greenhouse Gases

Not Regulated

Canada. Substances Subject to Significant New Activity (SNAc) Reporting Requirements

Not Regulated

Controlled Drugs and Substances Act

CA CDSI Not Regulated

CA CDSII Not Regulated

CA CDSIII Not Regulated

CA CDSIV Not Regulated

CA CDSV Not Regulated

CA CDSVII Not Regulated

CA CDSVIII Not Regulated

Precursor Control Regulations

Not Regulated

Inventory Status:

US TSCA Inventory:	Included on Inventory.	
Canada DSL Inventory List:	Included on Inventory.	

Product name: TEGO® Flow ATF 2

16. Other information, including date of preparation or last revision**Issue Date:** 03/13/2019**Version #:** 2.0**Further Information:** No data available.**Revision Information:** Changes since the last version are highlighted in the margin. This version replaces all previous versions.**Disclaimer:** This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes. In no event shall Evonik assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. EVONIK EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION AND RECOMMENDATIONS PROVIDED. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used. Evonik reserves the right to make any changes to the information and/or recommendations at any time, without prior or subsequent notice.