Vac Goop

Safety Data Sheet

This SDS is prepared in accordance with the SDS requirements of the Ministry of Employment and Labor (MOEL) of South Korea public notice No. 2016-19

Date of Issue: 2019/11/20 Version: 1.0

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

1.1. Product Identifier

Product form: Mixture

Product Name: Vac Goop

1.2. Intended Use of the Product

Recommended Uses and Restrictions: Anti-seize Thread lubricant. For professional use only.

1.3. Name, Address, and Telephone of the Responsible Party

Company

Swagelok Manufacturing Company, LLC
29495 F.A. Lennon Drive
Solon, Ohio 44139
440-519-4000
www.swagelok.com

Supplier

Distributor, add your contact information

1.4. Emergency Telephone Number

Emergency Number: Infotrac: 1-352-323-3500

SECTION 2: HAZARD IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS Classification (KR)

Health Hazards — Skin corrosion/irritation, Category 2
Serious eye damage/eye irritation, Category 2
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation

Environmental Hazards — Hazardous to the aquatic environment — Chronic Hazard, Category 4

2.2. 2.2. Label elements

Hazard Pictograms (GHS-KR) :

Signal Word (GHS-KR) : Warning

Hazard Statements (GHS-KR) :
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H413 - May cause long lasting harmful effects to aquatic life.

Precautionary Statements (GHS-KR) :
P261 - Avoid breathing vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, and eye protection.
P302+P352 - IF ON SKIN: Wash with plenty of water/….
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 - Call a POISON CENTER/doctor if you feel unwell.
P332+P313 - If on skin and if skin irritation occurs, seek medical advice and attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.2. Other Hazards

Other Hazards Which Do Not Result In Classification : Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Mixture/Substance

Distinction of Substance or Mixture : Mixture

Substance Name	CAS-No.	Formula	Concentration
Siloxanes and Silicones, methyl 3,3,3-trifluoropropyl	63148-56-1	Unspecified	80 - 90%
Polytetrafluoroethylene	9002-84-0	(C2F4)x	10 - 20%
Dimethyl silicone polymer with silica	67762-90-7	Unspecified	1 - 5%

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

First-Aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-Aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

First-Aid Measures After Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-Aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries: Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation.

Symptoms/Injuries After Inhalation: May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing. Inhalation of fumes from overheating "TEFLON" PTFE may cause polymer fume fever, a temporary flu-like illness with fever, chills and sometimes cough, of approximately 24 hours duration.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: Redness, pain, swelling, itching, burning, tearing, and blurred vision.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

Other medical advice or treatment: If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media Water spray, dry chemical, foam, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Personal Protection (Emergency Response): Insufficient ventilation: wear respiratory protection

5.2. Specific Hazards Arising From the Chemical

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Special Protective Equipment For Fire-Fighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO_2). Nitrogen oxides. Acrolein. Trifluoropropionaldehyde. Hydrogen fluoride.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Specific Fire Fighting: Do not allow run-off from fire-fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray).

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Environmental Precautions Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Prevention Measures for Secondary Accidents: Ventilate area. No open flames, no sparks, and no smoking. Eliminate ignition sources.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Technical Measures: Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

Additional Hazards When Processed: Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations. Inhalation of fumes from overheating "TEFLON" PTFE may cause polymer fume fever, a temporary flu-like illness with fever, chills and sometimes cough, of approximately 24 hours duration.

Local And General Ventilation: Ensure adequate air ventilation.

Precautions For Safe Handling: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, spray.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Incompatible Substances Or Mixtures: Refer to section 10

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Material Used In Packaging/Containers: Store at room temperature.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Exposure Limits/Biological Limits

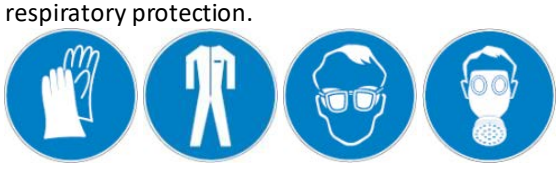
For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), China, and Korea

Exposure Limits/Biological Limits No data available

8.2. Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Hand Protection: Wear protective gloves.

Eye And Face Protection: Chemical goggles or safety glasses.

Skin And Body Protection: Wear suitable protective clothing.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Use good housekeeping practices during storage, transfer and handling.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Appearance	:	Opaque-white paste
Physical State	:	Liquid
Molecular Mass	:	Neutral
Odour	:	Odorless
Odor Threshold	:	No data available
pH	:	No data available
Melting Point	:	No data available
Boiling Point	:	No data available
Flash Point	:	> 250 °F (121.11 °C)
Autoignition Temperature	:	No data available
Flammability (Solid, Gas)	:	Non flammable.
Vapour Pressure	:	No data available
Relative Vapour Density At 20 °C	:	No data available
Solubility	:	No data available
N-Octanol/Water Distribution Coefficient	:	No data available
Decomposition Temperature	:	No data available
Viscosity	:	No data available
Explosive Limits (g/m³)	:	No data available
Explosive Limits (vol %)	:	No data available
Density	:	1.45 g/ml

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: Hazardous reactions will not occur under normal conditions.

10.2 Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

10.3 Possibility Of Hazardous Reactions: Hazardous polymerization will not occur.

10.4 Conditions To Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5 Incompatible Materials: Strong acids, strong bases, strong oxidizers.

10.6 Hazardous Decomposition Products: Thermal decomposition generates: Carbon and nitrogen oxides. Acrolein. Trifluoropropionaldehyde. Hydrogen fluoride.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity	Not classified.
Eye Damage/Irritation	Causes serious eye irritation.
Skin Corrosion/Irritation	Causes skin irritation.
Respiratory Sensitizer	Not classified.
Skin Sensitization	Not classified.
Germ Cell Mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive Toxicity	Not classified.
Specific Target Organ Toxicity (Single Exposure)	May cause respiratory irritation.
Specific Target Organ Toxicity (Repeated Exposure)	Not classified.

Aspiration Hazard Not classified.

11.2 Information on Toxicological Effects - Ingredient(s)

Polytetrafluoroethylene (9002-84-0)	
IARC Group	3

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity : May cause long lasting harmful effects to aquatic life.

Fish Toxicity / Other Toxicity : No data available

Other Information : Avoid release to the environment.

12.2. Persistence and Degradability

Vac Goop	
Persistence And Degradability	Not established.

12.3. Bioaccumulative Potential

Vac Goop	
Bioaccumulative Potential	Not established.

12.4. Mobility in Soil

Vac Goop	
Ecology - Soil	Not established.

12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Description of Waste Materials: Do not empty into drains; dispose of this material and its container in a safe way.

Waste Treatment Methods: Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1 In Accordance with UNRTDG Not regulated for transport

14.2 In Accordance with IATA Not regulated for transport

14.3 In Accordance with IMDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

Asia/Pacific Regulations

Polytetrafluoroethylene (9002-84-0)
Regulatory Reference
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Canadian DSL (Domestic Substances List)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Dimethyl Silicone Polymer With Silica (67762-90-7)
Regulatory Reference
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Canadian DSL (Domestic Substances List)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
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Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Siloxanes And Silicones, Methyl 3,3,3-Trifluoropropyl (63148-56-1)

Regulatory Reference

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Canadian DSL (Domestic Substances List)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
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Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on the TCSI (Taiwan Chemical Substance Inventory)

SECTION 16: OTHER INFORMATION

Revision Date	:	Not applicable
Revision Number	:	1.0
Date of Issue	:	2019/11/20
Data sources	:	Information and data obtained and used in the authoring of this safety data sheet could come from database subscriptions, official government regulatory body websites, product/ingredient manufacturer or supplier specific information, and/or resources that include substance specific data and classifications according to GHS or their subsequent adoption of GHS.
Other Information	:	This SDS is prepared in accordance with the SDS requirements of the Ministry of Employment and Labor (MOEL) of South Korea public notice No. 2016-19

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Korea GHS SDS