



Blue Goop

Safety Data Sheet

In accordance with JIS Z 7253 and JIS Z 7252

Revision Date:

Date of Issue:

2021/01/26

2016/04/15

Version: 2.0

SECTION 1: CHEMICAL IDENTIFIER AND COMPANY IDENTIFICATION

Product Identifier

Product Form : Mixture
Product Name : Blue Goop

Relevant Identified Uses Of The Substance Or Mixture And Uses Advised Against

Use Of The Substance/Mixture : Valve lubricant. For professional use only.

Details Of The Supplier Of The Safety Data Sheet

Company/Manufacturer

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

www.swagelok.com

Emergency Telephone Number

Emergency Number : Infotrac: 1-800-535-5053

SECTION 2: HAZARDS IDENTIFICATION

Classification Of The Substance Or Mixture

GHS-JP Classification Not classified

Label Elements No labeling applicable

Other Hazards

Other Hazards Not Contributing To The Classification : Exposure may aggravate pre-existing eye, skin, or respiratory conditions. 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.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Distinction Of Substance Or Mixture : Mixtures

Name	Concentration	Formula	Reference Number In The Gazette List		CAS-No.
			CSCL No	ISHL No	
Formaldehyde	≤ 0.007	CH2O	(2)-482	2-(8)-379	50-00-0

SECTION 4: FIRST-AID MEASURES

Description Of First Aid Measures

First-Aid Measures General : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
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 5 minutes. Obtain medical attention if irritation develops or persists.
First-Aid Measures After Eye Contact : Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.
First-Aid Measures After Ingestion : Rinse mouth. Do NOT induce vomiting. Obtain medical attention.
Personal Protection In First Aid And Measures : Do not enter fire area without proper protective equipment, including respiratory protection.

Most Important Symptoms And Effects, Both Acute And Delayed

Symptoms/Effects : Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/Effects After Inhalation : Prolonged exposure may cause irritation. 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/Effects After Skin Contact : Prolonged exposure may cause skin irritation.

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- Symptoms/Effects After Eye Contact : May cause slight irritation to eyes.
Symptoms/Effects After Ingestion : Ingestion may cause adverse effects.
Chronic Symptoms : None expected under normal conditions of use.

Indication Of Any Immediate Medical Attention And Special Treatment Needed

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

Extinguishing Media

- Suitable Extinguishing Media : Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, or dry chemical.
Unsuitable Extinguishing Media : Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From The Substance Or Mixture

- 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.

Advice For Firefighters

- Precautionary Measures Fire : Exercise caution when fighting any chemical fire.
Firefighting Instructions : Use water spray or fog for cooling exposed containers.
Protection During Firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.
Hazardous Combustion Products : Carbon oxides (CO, CO₂). Nitrogen oxides. Formaldehyde. Acrolein. Fluorine compounds.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment And Emergency Procedures

- General Measures : Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray).
Prevention Measures For Secondary Accidents : Ventilate area. No open flames, no sparks, and no smoking. Eliminate ignition sources.

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 : 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. Ventilate area.

Environmental Precautions

Prevent Entry To Sewers And Public Waters.

Methods And Material 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.

Reference To Other Sections

See Section 8 For Exposure Controls And Personal Protection And Section 13 For Disposal Considerations.

SECTION 7: HANDLING AND STORAGE PRECAUTIONS

Precautions For Safe Handling

- Additional Hazards When Processed : Contains substances that are combustible dusts. If dried and allowed to accumulate, may form combustible dust concentrations in air that could ignite and cause an explosion. Take appropriate precautions.
Precautions For Safe Handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, spray.
Hygiene Measures : Handle in accordance with good industrial hygiene and safety procedures.

Conditions For Safe Storage, Including Any Incompatibilities

- Technical Measures : Comply with applicable regulations.

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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.

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

Material Used In Packaging/Containers : Store at room temperature

Specific End Use(S)

Valve lubricant. For professional use only.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control Parameters

Formaldehyde (50-00-0)

Japan	Japan administration level	0.1ppm
Japan	Exposure limits (JSH)	0.1ppm(0.12mg/m3) 【Ceiling】 0.2ppm(0.24mg/m3)
USA ACGIH	ACGIH TWA (ppm)	0.1 ppm
USA ACGIH	ACGIH STEL (ppm)	0.3 ppm
USA ACGIH	ACGIH chemical category	Confirmed Human Carcinogen,dermal sensitizer

Biological Limits No data available

Exposure Controls

Appropriate Engineering Controls : Suitable eye/body wash equipment should be available in the 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.



Materials For Protective Clothing : Chemically resistant materials and fabrics.

Hand Protection : Wear protective gloves.

Eye and Face Protection : Chemical safety goggles.

Skin And Body Protection : Wear suitable protective clothing.

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.

Thermal Hazard Protection : No data available

Other Information : When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information On Basic Physical And Chemical Properties

Physical State	: Liquid
Appearance	: Blue paste
Odor	: Odorless
Odor Threshold	: No data available
pH	: No data available
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: No data available
Flash Point	: No data available
Auto-Ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (Solid, Gas)	: Not applicable
Vapor Pressure	: No data available
Relative Vapor Density At 20 °C	: No data available
Relative Density	: No data available

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Density	: 1.3 g/ml
Solubility	: No data available
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available
Explosion Limits	: No data available

Other Information No data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Hazardous reactions will not occur under normal conditions.

Chemical Stability

Stable under recommended handling and storage conditions (see section 7).

Possibility Of Hazardous Reactions

Hazardous polymerization will not occur.

Conditions To Avoid

Direct sunlight, extremely high or low temperatures, and incompatible materials.

Incompatible Materials

Strong acids, strong bases, strong oxidizers.

Hazardous Decomposition Products

Formaldehyde. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

SECTION 11: HAZARD INFORMATION

Information On Toxicological Effects

Acute Toxicity (Oral)	: Not classified
Acute Toxicity (Dermal)	: Not classified
Acute Toxicity (Inhalation)	: Not classified

Formaldehyde (50-00-0)	
LD50 Oral Rat	100 mg/kg
LD50 Dermal Rat	270 mg/kg
ATE JP (gases)	100 ppmV/4h

Skin Corrosion/Irritation	: Not classified
Serious Eye Damage/Irritation	: Not classified
Respiratory Or Skin Sensitization	: Not classified
Germ Cell Mutagenicity	: Not classified
Carcinogenicity	: Not classified

Formaldehyde (50-00-0)	
IARC Group	1
National Toxicology Program (NTP) Status	2

Reproductive Toxicity	: Not classified
Stot-Single Exposure	: Not classified

STOT-repeated exposure : Not classified

Aspiration hazard	: Not classified
Other Information	: Not classified

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Aquatic Acute	: Not classified
Aquatic Chronic	: Not classified

Formaldehyde (50-00-0)

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Formaldehyde (50-00-0)	
LC50 Fish 1	22.6 – 25.7 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	2 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	1510 µg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 2	11.3 – 18 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
NOEC Chronic Crustacea	1 mg/l

Persistence And Degradability

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Persistence and Degradability	Not established.

Bioaccumulative Potential

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Bioaccumulative Potential	Not established.

Formaldehyde (50-00-0)	
Partition coefficient n-octanol/water (Log Pow)	0.35 (at 25 °C)

Mobility In Soil No data available

Other Adverse Effects

Hazardous To The Ozone Layer

: Not classified

Other Information

: Avoid release to the environment.

SECTION 13: NOTES ON DISPOSAL

Waste Treatment Methods

Regional Legislation (Waste)

: Disposal must be done according to official regulations.

Waste Disposal Recommendations

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

Ecology - Waste Materials

: Avoid release to the environment.

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.

In Accordance with UNRTDG Not regulated for transport

In Accordance with IATA Not regulated for transport

In Accordance with IMDG/IMO Not regulated for transport

Transport in Bulk According to Annex II of MARPOL and The IBC Code Not applicable

Other Information

Other information : No supplementary information available.

SECTION 15: REGULATORY INFORMATION

Regulatory Information

Formaldehyde (50-00-0)	
Chemical Substances Control Law	Type II Monitoring Chemical Substance (Article 2, Paragraph (5) of the Act) Priority Assessment Chemical Substances (Law Article 2, Para.5)
Industrial Safety and Health Law	Group 2 Specified Chemical Substance, Specified Group 2 Substance (Ordinance on Prevention of Hazards Due to Specified Chemical Substances Art.2 Para.1, Item 2,3) Working Environment Evaluation Standards, Administrative Control Levels (Law Art.65-2, Para.1) Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57, Para.1, Enforcement Order Art.18 Item 1, Item 2, Attached Table No.9) Dangerous Substances - Flammable Substance (Enforcement Order Attached Table 1 Item 4) Notifiable Substances (Law Art.57-2, Enforcement Order Art.18-2 Item 1,

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	Item 2, Attached Table No.9) Formaldehyde (Ordinance number : 548) () Specified Chemical Substances, Special Control Substances (Ordinance on Prevention of Hazards Due to Specified Chemical Substances Art.38-3)
Japanese Poisonous and Deleterious Substances Control Law	Deleterious Substances (Law Art.2, Attached Table 2) Formaldehyde () Deleterious Substances (Designated Order Art.2) Preparations containing formaldehyde. (except for preparations which contain 1% or less of formaldehyde.) ()
Water Pollution Prevention Law	Designated Chemical Substances (Law Article 2, Paragraph 4, Enforcement Order Article 3-3)
Fire Service Law	Designation of Materials Requiring Notification (Law Art.9-3, Cabinet Order on Hazardous Materials Art.1-10 Para 6, Attached Table No.2 Designation of Materials Requiring Notification (Law Art.9-3, Cabinet Order on Hazardous Materials Art.1-10 Para 6, Attached Table No.2-18, Ordinance No. 2 of 1988, Art.2)
Air Pollution Control Law	Specified Substances (Law Art.17 Para.1, Enforcement Order Art. 10) Hazardous Air Pollutants, Priority Substances (Central Environment Council Report No. 9) Substances with Self-Imposed Control (Notification of Environment Agency) Volatile Organic Compounds (Law Art.2 Para.4) (MOE Official Notice to Prefectures)
Foreign Exchange and Foreign Trade Control Act	Export Trade Control Order, Attached Table 1 Para.16 (1)
Road Act	Restriction for Vehicle Traffic (Enforcement Order Art.19-13, Publication of Japan Highway Public Corp.)
Waterworks Law	Hazardous Substances (Act Article 4 paragraph 2), Standard for Water Quality (Ministry Order No.101of 2003,)
Japanese Pollutant Release and Transfer Register Law (PRTR Law)	Class 1 Designated Chemical Substances, Specified Class 1 Designated Chemical Substances (Act Art.2 para. 2, Enforcement Order Art.1 Appended Table No.1, Enforcement Order Art.4) Formaldehyde (Ordinance number : 411) (100%)
Labor Standards Act	Chemical Substances Causing Occupational Illnesses (Act Art.75, Para.2, Ordinance Attached Table 1-2, Item 4-1, MHLW Notification No.36 of 1978)
Building Standards Act	Restriction of Using Chemical Substances for Construction Materials (Act Art.28-2-3, Cabinet Order for Enforcement Art.20-5)
Regulatory Reference	Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the Canadian DSL (Domestic Substances List) Listed on IARC (International Agency for Research on Cancer) Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) Listed on the Canadian IDL (Ingredient Disclosure List) Listed as carcinogen on NTP (National Toxicology Program) Listed on the United States SARA Section 302 Subject to reporting requirements of United States SARA Section 313 Listed on EPA Hazardous Air Pollutant (HAPS) Listed on the AICS (Australian Inventory of Chemical Substances) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on KECL/KECI (Korean Existing Chemicals Inventory) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Japanese Poisonous and Deleterious Substances Control Law Japanese Pollutant Release and Transfer Register Law (PRTR Law) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on the Japanese ISHL (Industrial Safety and Health Law) Listed on INSQ (Mexican National Inventory of Chemical Substances) Listed on the TCSI (Taiwan Chemical Substance Inventory)

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SECTION 16: OTHER INFORMATION

Date of Preparation or Latest Revision : 2021/01/26

Data Sources : This document has been prepared in accordance with the SDS requirements of the Japanese Hazard Communication Standard(s); JIS Z 7253 and JIS Z 7252.

Japan GHS SDS

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.