



Rotary Valve Grease

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

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SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Rotary Grease Valve
Product code : D9-60-003A

1.2. Recommended use and restrictions on use

Tissue-Tek VIP®

1.3. Supplier

Sakura Finetek USA Inc.

1750 West 214th St.

Torrance, CA 90501

T 1-310-972-7800

1.4. Emergency telephone number

CHEMTREC 1-800-424-9300

Email: SDSsupport@sakuraus.com

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labeling - The mixture does not meet the criteria for classification.

Prevention - Observe good industrial hygiene practices.

Response - Wash hands after handling.

Storage - Store away from incompatible materials.

Disposal - Dispose of waste and residues in accordance with local authority requirements.

2.3. Other hazards which do not result in classification

The mixture does not meet the criteria for classification.

2.4. Unknown acute toxicity (GHS US)

2% of the mixture consists of component(s) of unknown acute toxicity.

71% of the mixture consists of component(s) of unknown hazards to the aquatic environment

SECTION 3: Composition/Information on ingredients

3.1. Substances

Mixture

Rotary Valve Grease

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

3.2. Mixtures

| Name | CAS Number | % |
|---------------------------|-------------|-------------|
| Fluorinated polyether oil | Proprietary | Proprietary |
| PTFE | Proprietary | Proprietary |

The specific chemical component identities and/or the exact component percentages of this material may be withheld as trade secrets.

This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1). Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/ inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Move to fresh air. Call a physician if symptoms develop or persist.
First-aid measures after skin contact : Wash off with soap and water. Get medical attention if irritation develops and persists.
First-aid measures after eye contact : Rinse with water. Get medical attention if irritation develops and persists.
First-aid measures after ingestion : Rinse mouth. Get medical attention if symptoms occur.

4.2. Most important symptoms and effects (acute and delayed)

Direct contact with eyes may cause temporary irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry chemicals. Carbon dioxide (CO₂)
Unsuitable extinguishing media : Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : During fire, gases hazardous to health may be formed.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Use standard firefighting procedures and consider the hazards of other involved materials.
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Move containers from fire area if you can do so without risk.
No unusual fire or explosion hazards noted.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Keep unnecessary personnel away

6.1.2. For emergency responders

Protective equipment : . For personal protection, see section 8 of the SDS.

6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

Rotary Valve Grease

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : **Large Spills:** Stop the flow of material, if this is without risk. Shovel up and place in a container for salvage or disposal. Following product recovery, flush area with water.

Small Spills: Scoop up released material. Clean surface thoroughly to remove residual contamination.

Other information : Never return spills to original containers for re-use.
For waste disposal, see section 13 of the SDS.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin, eyes and clothing. Avoid breathing mist.
Hygiene measures : Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original tightly closed container. Store in a cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) | | | |
|--|------|---------------------|-------|
| Components | Type | Value | Form |
| Mineral oil, vegetable oil, and/or synthetic oil (CAS Proprietary) | PEL | 5 mg/m ³ | Mist. |

| US. ACGIH Threshold Limit Values | | | |
|--|------|---------------------|--------------------|
| Components | Type | Value | Form |
| Mineral oil, vegetable oil, and/or synthetic oil (CAS Proprietary) | TWA | 5 mg/m ³ | Inhalable fraction |

| US. NIOSH: Pocket Guide to Chemical Hazards | | | |
|--|------|----------------------|-------|
| Components | Type | Value | Form |
| Mineral oil, vegetable oil, and/or synthetic oil (CAS Proprietary) | STEL | 10 mg/m ³ | Mist. |

| US. NIOSH: Pocket Guide to Chemical Hazards | | | |
|--|------|---------------------|-------|
| Components | Type | Value | Form |
| Mineral oil, vegetable oil, and/or synthetic oil (CAS Proprietary) | TWA | 5 mg/m ³ | Mist. |

8.2. Appropriate engineering controls

Appropriate engineering controls : General ventilation normally adequate.
Environmental exposure controls : No biological exposure limits noted for the ingredient(s).

Rotary Valve Grease

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

8.3. Individual protection measures/Personal protective equipment

| |
|---|
| Hand protection: |
| Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. |
| Eye protection: |
| Not normally needed. Risk of contact: Wear safety glasses with side shields (or goggles). |
| Skin and body protection: |
| Wear suitable protective clothing. Wear appropriate thermal protective clothing, when necessary. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |
| Respiratory protection: |
| Not normally needed. Wear a NIOSH-approved (or equivalent) respirator as needed. |

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|----------------------|
| Physical state | : Solid, Paste. |
| Color | : White |
| Odor | : None. |
| Odor threshold | : Not available. |
| pH | : Not available. |
| Melting point | : Not available. |
| Freezing point | : Not available. |
| Boiling point | : Not available. |
| Flash point | : Not available. |
| Relative evaporation rate (butyl acetate=1) | : Not available. |
| Flammability | : Combustible solid. |
| Vapor pressure | : Not available. |
| Relative vapor density at 20°C | : Not available. |
| Relative density | : Not available. |
| Solubility | : Insoluble |
| Partition coefficient n-octanol/water (Log Pow) | : Not available. |
| Auto-ignition temperature | : Not available. |
| Decomposition temperature | : Not available. |
| Viscosity, kinematic | : Not available. |
| Viscosity, dynamic | : Not available. |
| Explosion limits | : Not available. |
| Explosive properties | : Not available. |
| Oxidizing properties | : Not available. |

9.2. Other information

Density - 1.96 g/cm³ (approximate) 60°F (20°C)
Drop point - DIN ISO 2176: Not melting

Rotary Valve Grease

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport

10.2. Chemical stability

Material is stable under normal conditions

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Contact with incompatible materials.

10.5. Incompatible materials

Strong oxidizing agents. Strong bases. Alkali metals. Alkaline earth metals. Lewis acids.

10.6. Hazardous decomposition products

Thermal decomposition above 500°F (260°C) can produce traces of fluorinated products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Swallowing may cause gastrointestinal irritation.
Rotary Valve Grease (CAS Mixture)

| Product | Species | Test Results |
|------------------------------|---------|--|
| Acute <i>Oral</i> LD50 | Rat | > 2000 mg/kg, (literature data taken from products of similar composition) |

Acute toxicity (dermal) : Prolonged or repeated skin contact may cause irritation.

Acute toxicity (inhalation) : Prolonged inhalation may be harmful.

Skin corrosion/irritation : Prolonged skin contact may cause temporary irritation.

Serious eye damage/irritation : Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization : Not a respiratory sensitizer. This product is not expected to cause skin sensitization.

Germ cell mutagenicity : No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic

Carcinogenicity : This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. This product contains component(s) classified by IARC as Group 3 (unclassifiable as to carcinogenicity in humans).

Reproductive toxicity : This product is not expected to cause reproductive or developmental effects.

STOT-single exposure : Not classified.

STOT-repeated exposure : Not classified.

Aspiration hazard : Not an aspiration hazard.

Other information : 2% of the mixture consists of component(s) of unknown acute toxicity.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Rotary Valve Grease

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

12.2. Persistence and degradability

No data is available on the degradability of this product.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

The product is insoluble in water.

12.5. Other adverse effects

71% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Dispose of in accordance with local regulations.
Empty containers or liners may retain some product residues.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number

Not regulated as dangerous goods.

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not regulated as dangerous goods.
Proper Shipping Name (IMDG) : Not regulated as dangerous goods.
Proper Shipping Name (IATA) : Not regulated as dangerous goods.

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not regulated as dangerous goods.

IMDG

Transport hazard class(es) (IMDG) : Not regulated as dangerous goods.

IATA

Transport hazard class(es) (IATA) : Not regulated as dangerous goods.

14.4. Packing group

Packing group (DOT) : Not regulated as dangerous goods.
Packing group (IMDG) : Not regulated as dangerous goods.
Packing group (IATA) : Not regulated as dangerous goods.

14.5. Environmental hazards

Other information : Not regulated as dangerous goods.

14.6. Special precautions for user

DOT

Not regulated as dangerous goods.

Rotary Valve Grease

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

IMDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

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

Not established.

SECTION 15: Regulatory information

15.1. US Federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

| Superfund Amendments and Reauthorization Act of 1986 (SARA) | |
|---|--|
| Hazard categories | Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No |

15.2. International regulations

| Country(s) or Region | Inventory Name | On Inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
* A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

15.3. US State regulations

US. Massachusetts RTK - Substance List

Mineral oil, vegetable oil, and/or synthetic oil (CAS Proprietary)

US. New Jersey Worker and Community Right-to-Know Act

Mineral oil, vegetable oil, and/or synthetic oil (CAS Proprietary)

US. Pennsylvania Worker and Community Right-to-Know Law

Mineral oil, vegetable oil, and/or synthetic oil (CAS Proprietary)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Rotary Valve Grease

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

SECTION 16: Other information

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Sakura Finetek USA, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.