SAFETY DATA SHEET



Section 1. Identification

Product name Tribol GR 100-2 PD

468686 SDS# Code 468686-US17

Relevant identified uses of the substance or mixture and uses advised against

Product use Grease for industrial applications

For specific application advice see appropriate Technical Data Sheet or consult our

company representative.

Supplier BP Lubricants USA Inc.

1500 Valley Road Wayne, NJ 07470

Telephone: +1-888-CASTROL

EMERGENCY HEALTH

INFORMATION:

+1-800-447-8735

EMERGENCY SPILL +1-800-424-9300 (CHEMTREC USA)

INFORMATION: +1-703-527-3887 (CHEMTREC outside the US)

Section 2. Hazards identification

OSHA/HCS status This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Classification of the

substance or mixture

SKIN SENSITIZATION - Category 1

GHS label elements

Hazard pictograms



Signal word Warning

Hazard statements May cause an allergic skin reaction.

Precautionary statements

Prevention Wear protective gloves. Avoid breathing dust. Contaminated work clothing must not be

allowed out of the workplace.

Response Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of soap and

water. If skin irritation or rash occurs: Get medical attention.

Storage Not applicable.

Dispose of contents and container in accordance with all local, regional, national and **Disposal**

international regulations.

Hazards not otherwise Defatting to the skin.

Note: High Pressure Applications classified

Injections through the skin resulting from contact with the product at high pressure

constitute a major medical emergency.

See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.

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Section 3. Composition/information on ingredients

Substance/mixture

Mixture

Highly refined base oil and additives. Thickening agent.

| Ingredient name | CAS number | % |
|--|-------------|-----------|
| Distillates (petroleum), hydrotreated heavy naphthenic | 64742-52-5 | ≥25 - ≤50 |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | 64742-65-0 | ≥25 - ≤50 |
| Distillates (petroleum), hydrotreated heavy paraffinic | 64742-54-7 | ≤10 |
| Reaction product of ammonium molybdate and C12-C24-diethoxylated | Proprietary | ≤3 |
| alkylamine (1:5-1:3) | | |
| Isodecyl diphenyl phosphite | 26544-23-0 | <1 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.

Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and

remove any contact lenses. Get medical attention.

Skin contact In case of contact, immediately flush skin with plenty of water for at least 15 minutes

while removing contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Wash clothing before reuse. Clean shoes thoroughly before reuse. In the event of any complaints or symptoms, avoid further

exposure. Get medical attention.

Inhalation If inhaled, remove to fresh air. In case of inhalation of decomposition products in a fire,

symptoms may be delayed. The exposed person may need to be kept under medical

surveillance for 48 hours. Get medical attention if symptoms occur.

IngestionDo not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position

anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Get medical attention if adverse health effects

persist or are severe.

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. It may

be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash

contaminated clothing thoroughly with water before removing it, or wear gloves.

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treatment should in general be symptomatic and directed to relieving any effects.

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Note: High Pressure Applications

Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discolored and extremely painful with extensive

subcutaneous necrosis.

Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimize tissue loss and prevent or limit permanent damage. Note that high pressure may force the product

considerable distances along tissue planes.

Specific treatments No specific treatment.

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Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide

extinguisher or spray.

Unsuitable extinguishing

media

Do not use water jet.

Specific hazards arising from the chemical

No specific fire or explosion hazard.

Hazardous combustion products

Combustion products may include the following:

metal oxide/oxides

carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide)

sulfur oxides (SO, SO₂ etc.) nitrogen oxides (NO, NO2 etc.)

Special protective actions for fire-fighters

Special protective equipment for fire-fighters No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA)

and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal

Large spill

Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. If emergency personnel are unavailable, contain spilled material. Suction or scoop the spill into appropriate disposal or recycling vessels, then cover spill area with oil absorbent. Dispose of via a licensed waste disposal contractor. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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Section 7. Handling and storage

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep away from heat and direct sunlight. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Not suitable

Prolonged exposure to elevated temperature

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

vistillates (petroleum), hydrotreated heavy naphthenic

ACGIH TLV (United States).

TWA: 5 mg/m³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction **OSHA PEL (United States).**

TWA: 5 mg/m³ 8 hours. Issued/Revised: 6/1993

Distillates (petroleum), solvent-dewaxed heavy paraffinic

ACGIH TLV (United States).

TWA: 5 mg/m³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction OSHA PEL (United States).

TWA: 5 mg/m³ 8 hours. Issued/Revised: 6/1993

Distillates (petroleum), hydrotreated heavy paraffinic

ACGIH TLV (United States).

TWA: 5 mg/m³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction OSHA PEL (United States).

TWA: 5 mg/m³ 8 hours. Issued/Revised: 6/1993

Reaction product of ammonium molybdate and C12-C24-diethoxylated alkylamine (1:5-1:3)

None.

Isodecyl diphenyl phosphite

None.

Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

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Section 8. Exposure controls/personal protection

Hygiene measures Wash hands, forearms and face thoroughly after handling chemical products, before

eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing.

Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers

are close to the workstation location.

Eye/face protection

Skin protection Hand protection

Safety glasses with side shields.

Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/

manufacturer and with a full assessment of the working conditions.

Body protection Use of protective clothing is good industrial practice.

> Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling

this product.

Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical

suits and boots will be required.

Other skin protection Appropriate footwear and any additional skin protection measures should be selected

based on the task being performed and the risks involved and should be approved by a

specialist before handling this product.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

For protection against metal working fluids, respiratory protection that is classified as "resistant to oil" (class R) or oil proof (class P) should be selected where appropriate. Depending on the level of airborne contaminants, an air-purifying, half-mask respirator (with HEPA filter) including disposable (P- or R-series) (for oil mists less than 50mg/m3), or any powered, air-purifying respirator equipped with hood or helmet and HEPA filter

(for oil mists less than 125 mg/m3).

Where organic vapours are a potential hazard during metalworking operations, a

combination particulate and organic vapour filter may be necessary.

The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer

and with a full assessment of the working conditions.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Grease **Physical state** Color Brown. [Dark]

Odor Mild.

Odor threshold Not available. pН Not applicable. Melting point/freezing point Not available. Boiling point, initial boiling Not available. point, and boiling range

Flash point Closed cup: 170°C (338°F) [Pensky-Martens]

Evaporation rate Not available.

Flammability Not applicable. Based on - Physical state

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Section 9. Physical and chemical properties

Lower and upper explosion

limit/flammability limit

Not applicable.

Vapor pressure Not available. Not applicable. Relative vapor density

<1000 kg/m³ (<1 g/cm³) at 15°C **Density**

Solubility Partition coefficient: ninsoluble in water. Not applicable.

octanol/water

Auto-ignition temperature Not applicable. **Decomposition temperature** Not available. **Viscosity** Not available.

Particle characteristics

Median particle size Not available.

Section 10. Stability and reactivity

No specific test data available for this product. Refer to Conditions to avoid and Reactivity

Incompatible materials for additional information.

Chemical stability The product is stable.

Possibility of hazardous

reactions

Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to avoid Avoid all possible sources of ignition (spark or flame).

Incompatible materials Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition

products

Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

and

Product/ingredient Test **Species** Result **Exposure** Remarks name

Reaction product of ammonium molybdate

LD50 Dermal

Rat

>2000 mg/kg

C12-C24-diethoxylated alkylamine (1:5-1:3)

> >2000 mg/kg LD50 Oral

Conclusion/Summary

Not available.

Irritation/Corrosion

Product/ingredient Result **Exposure** Observation Conc. Remarks **Species** Score

name

Reaction product of ammonium molybdate Rabbit

Skin -Moderate irritant

C12-C24-diethoxylated alkylamine (1:5-1:3)

> Rabbit Eyes -

≥2

the

conjunctivae

Redness of

Product name Product code 468686-US17 Tribol GR 100-2 PD Page: 6/10

Section 11. Toxicological information

Sensitizer

Product/ingredient name Result Remarks Route of **Species**

exposure

Reaction product of ammonium skin Guinea pig Sensitizing

molybdate and C12-C24-diethoxylated alkylamine (1:5-1:3)

Information on the likely routes of exposure

Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Eye contact No known significant effects or critical hazards.

Skin contact May cause an allergic skin reaction.

Inhalation Exposure to decomposition products may cause a health hazard. Serious effects may

be delayed following exposure.

Ingestion No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact No specific data.

Skin contact Adverse symptoms may include the following:

> irritation redness dryness cracking

Inhalation No specific data. Ingestion No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate Not available.

effects

Potential delayed effects Not available.

Long term exposure

Potential immediate Not available.

effects

Potential delayed effects Not available.

Potential chronic health effects

General No known significant effects or critical hazards. Carcinogenicity No known significant effects or critical hazards. Mutagenicity No known significant effects or critical hazards. **Teratogenicity** No known significant effects or critical hazards. **Developmental effects** No known significant effects or critical hazards. **Fertility effects** No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

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Section 12. Ecological information

Toxicity

No testing has been performed by the manufacturer.

Product/ingredient Species Test/Result Exposure Effects Remarks

name

Reaction product of Daphnia Chronic EC50 6.8 48 hours - - ammonium molybdate mg/l

ammoniur

C12-C24-diethoxylated alkylamine (1:5-1:3)

Conclusion/Summary Not available.

Persistence and degradability

Not expected to be rapidly degradable.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (Koc)

Not available.

Mobility **©**rease. insoluble in water.

Other adverse effects No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

Version 2

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

Date of issue 12/08/2021.

| | DOT Classification | TDG Classification | IMDG | IATA |
|-------------------------------|--------------------|--------------------|----------------|----------------|
| UN number | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name | - | - | - | - |
| Transport hazard class(es) | - | - | - | - |
| Packing group | - | - | - | - |
| Environmental hazards | No. | No. | No. | No. |
| Additional information | - | - | - | - |

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Format US

Language ENGLISH

Section 14. Transport information

Special precautions for user Not available.

Transport in bulk according

to IMO instruments

Not available.

Section 15. Regulatory information

U.S. Federal regulations

United States inventory

All components are active or exempted.

(TSCA 8b)

TSCA 5(a)2 proposed significant new use rules: 4-nonylphenol, branched

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 311/312

Classification SKIN SENSITIZATION - Category 1

SARA 313

Form R - Reporting

This product does not contain any hazardous ingredients at or above regulated

thresholds.

Supplier notification

This product does not contain any hazardous ingredients at or above regulated

thresholds.

State regulations

requirements

Massachusetts The following components are listed: OIL MIST, MINERAL; OIL MIST, MINERAL; OIL

MIST, MINERAL; Rape oil, sulfurized; Fatty acids, vegetable-oil, Me esters, sulfurized

New Jersey The following components are listed: Rape oil, sulfurized; Fatty acids, vegetable-oil, Me

esters, sulfurized

Pennsylvania The following components are listed: Rape oil, sulfurized; Fatty acids, vegetable-oil, Me

esters, sulfurized

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

Other regulations

Australia inventory (AIIC) At least one component is not listed.

Canada inventory At least one component is not listed in DSL but all such components are listed in NDSL.

China inventory (IECSC)

Japan inventory (CSCL)

Korea inventory (KECI)

At least one component is not listed.

(PICCS)

Taiwan Chemical

Substances Inventory

(TCSI)

REACH Status For the REACH status of this product please consult your company contact, as

All components are listed or exempted.

identified in Section 1.

Section 16. Other information

National Fire Protection Association (U.S.A.)



History

12/08/2021.

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Section 16. Other information

Date of issue/Date of

revision

Date of previous issue 12/01/2021.

Prepared by Product Stewardship

Key to abbreviations ACGIH = American Conference of Industrial Hygienists

ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

CAS Number = Chemical Abstracts Service Registry Number

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978. ("Marpol" = marine pollution)

OEL = Occupational Exposure Limit

SDS = Safety Data Sheet STEL = Short term exposure limit TWA = Time weighted average

UN = United Nations

UN Number = United Nations Number, a four digit number assigned by the United

Nations Committee of Experts on the Transport of Dangerous Goods.

Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0,

64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

Indicates information that has changed from previously issued version.

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

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