SAFETY DATA SHEET



Section 1. Identification

Product name Tribol CW 851D

SDS # 469334

Code 469334-US03

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

Product use Hydraulic fluid

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 not considered hazardous by the OSHA Hazard Communication

Standard (29 CFR 1910.1200).

Classification of the

substance or mixture

Not classified.

GHS label elements

Signal word No signal word.

Hazard statements No known significant effects or critical hazards.

Precautionary statements

Prevention Not applicable.

Response Not applicable.

Storage Not applicable.

Disposal Not applicable.

Hazards not otherwise Defatting to the skin.

classified Note: High Pressure Applications

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.

Section 3. Composition/information on ingredients

Substance/mixture Mixture

Hydrocarbon solvent, Highly refined base oil and additives

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Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
vistillates, petroleum, hydrotreated middle	≥50 - ≤75	64742-46-7
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≤10	64742-65-0
Distillates (petroleum), hydrotreated heavy naphthenic	≤10	64742-52-5
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≤5	64742-65-0
Distillates (petroleum), solvent-dewaxed light paraffinic	≤3	64742-56-9
Distillates (petroleum), solvent-dewaxed light paraffinic	≤3	64742-56-9

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.

Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove Skin contact

contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly

before reuse. Get medical attention if symptoms occur.

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.

Do not induce vomiting. Aspiration hazard if swallowed. Can enter lungs and cause Ingestion

damage. Get medical attention.

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

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

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

> 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

Language ENGLISH

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 foam, dry chemical or carbon dioxide extinguisher or spray.

Unsuitable extinguishing

media

Do not use water jet.

Specific hazards arising from the chemical

In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion

products

Combustion products may include the following:

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

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. Fire-fighters' protective clothing will only provide limited protection.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-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. 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 non-emergency 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

Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Aspiration hazard if swallowed. Can enter lungs and cause damage. Use only with adequate ventilation. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Avoid prolonged or repeated contact with skin. During metal working, solid particles from workpieces or tools will contaminate the fluid and may cause abrasions of the skin. Where such abrasions result in a penetration of the skin, first aid treatment should be applied as soon as reasonably possible. The presence of certain metals in the workpiece or tool, such as chromium, cobalt and nickel, can contaminate the metalworking fluid and as a result may induce allergic skin reactions. Keep away from ignition sources such as heat/sparks/open flame. - No smoking. Concentrations of mist, fumes and vapors in enclosed spaces may result in the formation of explosive atmospheres. Excessive splashing, agitation or heating must be avoided.

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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 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.

to avoid crivilorimental contamination.

Not suitable Prolonged exposure to elevated temperature

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Distillates (petroleum), solvent-dewaxed heavy paraffinic

mineral] TWA: 5 mg/m³ 8 hours. Issued/Revised:

> 6/1993 ACGIH TLV (United States). [Mineral Oil, pure, highly and severely refined]

OSHA PEL (United States). [Oil mist,

TWA: 5 mg/m³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction

Distillates (petroleum), hydrotreated heavy naphthenic

OSHA PEL (United States). [Oil mist, mineral]

TWA: 5 mg/m³ 8 hours. Issued/Revised:

6/1993

ACGIH TLV (United States). [Mineral Oil, pure, highly and severely refined]
TWA: 5 mg/m³ 8 hours. Issued/Revised:

11/2009 Form: Inhalable fraction

Distillates (petroleum), solvent-dewaxed heavy paraffinic

OSHA PEL (United States). [Oil mist, mineral]

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

ACGIH TLV (United States). [Mineral Oil, pure, highly and severely refined]

TWA: 5 mg/m³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction

Distillates (petroleum), solvent-dewaxed light paraffinic

OSHA PEL (United States). [Oil mist, mineral]

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

ACGIH TLV (United States). [Mineral Oil, pure, highly and severely refined]

TWA: 5 mg/m³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction

Distillates (petroleum), solvent-dewaxed light paraffinic

OSHA PEL (United States). [Oil mist, mineral]

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

ACGIH TLV (United States). [Mineral Oil, pure, highly and severely refined]

TWA: 5 mg/m³ 8 hours. Issued/Revised:

Product name Tribol CW 851D Product code 469334-US03 Page: 4/10

Section 8. Exposure controls/personal protection

11/2009 Form: Inhalable fraction

Biological exposure indices

No exposure indices known.

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

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. 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.

Wear clothing and footwear that cannot be penetrated by chemicals or oil.

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

Use with adequate ventilation.

In case of insufficient ventilation, wear suitable respiratory equipment.

Recommended: half-face mask - organic vapor filter (Type A).

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.

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Section 9. Physical and chemical properties

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

Appearance

Physical state Liquid. Color Red. [Dark] Odor Not available. **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: 135°C (275°F) [Pensky-Martens]

Not available.

Evaporation rate Not available.

Flammability Not applicable. Based on - Physical state

Lower and upper explosion limit/flammability limit

Vapor pressure

Vapor Pressure at 20°C Vapor pressure at 50°C kPa **Ingredient name** mm Hg **kPa** Method mm Method Hg

ASTM D 5191 Distillates (petroleum), <0.08 < 0.011 solvent-dewaxed heavy paraffinic <0.08 **ASTM D 5191** Distillates (petroleum), <0.011 hydrotreated heavy naphthenic Distillates (petroleum), <0.08 <0.011 **ASTM D 5191** solvent-dewaxed heavy Distillates (petroleum), <0.08 <0.011 ASTM D 5191 solvent-dewaxed light paraffinic

ASTM D 5191

Not available. Relative vapor density

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

Solubility(ies)

Media	Result
water	Not soluble

<0.08

<0.011

Partition coefficient: noctanol/water

Not applicable.

Distillates (petroleum),

solvent-dewaxed light

paraffinic

Auto-ignition temperature

Ingredient name	°C	°F	Method
stillates, petroleum, hydrotreated middle	225	437	

Decomposition temperature

Not available.

Viscosity Kinematic: 32.4 mm²/s (32.4 cSt) at 40°C

Kinematic: 9 to 11 mm²/s (9 to 11 cSt) at 100°C

VOC 238 g/l

Particle characteristics

Median particle size Not applicable.

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Section 10. Stability and reactivity

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

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

Aspiration hazard

Name	Result
Distillates, petroleum, hydrotreated middle Distillates (petroleum), solvent-dewaxed heavy paraffinic	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1
Distillates (petroleum), solvent-dewaxed light paraffinic	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Routes of entry anticipated: Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact No known significant effects or critical hazards.

Skin contact No known significant effects or critical hazards.

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

be delayed following exposure.

Ingestion Aspiration hazard if swallowed -- harmful or fatal if liquid is aspirated into lungs.

Ingestion of large quantities may cause nausea and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact No specific data.

Skin contact Adverse symptoms may include the following:

irritation dryness cracking

Inhalation Exposure to high concentrations can cause dizziness, lightheadedness, headache,

nausea and blurred vision. Higher levels may cause unconsciousness.

May be harmful by inhalation if exposure to vapor, mists or fumes resulting from thermal

decomposition products occurs.

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.

Product name Tribol CW 851D Product code 469334-US03 Page: 7/10

Section 11. Toxicological information

Potential chronic health effects

GeneralNo known significant effects or critical hazards.CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.TeratogenicityNo known significant effects or critical hazards.Developmental effectsNo known significant effects or critical hazards.Fertility effectsNo known significant effects or critical hazards.

Numerical measures of toxicity Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

No testing has been performed by the manufacturer.

Persistence and degradability

Expected to be biodegradable.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (Koc)

Not available.

Mobility Liquid. insoluble in water.

Other adverse effects No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

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. 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

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-

Product name Tribol CW 851D Product code 469334-US03 Page: 8/10

Section 14. Transport information					
Transport hazard class(es)	-	-	-	-	
Packing group	-	-	-	-	
Environmental hazards	No.	No.	No.	No.	
Additional information	-	-	-	-	

Special precautions for user

Not available.

Transport in bulk according

Not available.

to IMO instruments

Section 15. Regulatory information

U.S. Federal regulations

United States inventory (TSCA 8b)

All components are active or exempted.

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 311/312

Classification Not applicable.

SARA 313

Form R - Reporting This product does not contain any hazardous ingredients at or above regulated

requirements thresholds.

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

thresholds.

State regulations

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

MIST, MINERAL; OIL MIST, MINERAL; MINERAL OIL, PETROLEUM DISTILLATES,

SOLVENT-DEWAXED LIGHT PARAFFINIC; MINERAL OIL, PETROLEUM

DISTILLATES, SOLVENT-DEWAXED LIGHT PARAFFINIC

New Jersey The following components are listed: MINERAL OIL (UNTREATED and MILDLY

TREATED)

Pennsylvania None of the components are listed.

California Prop. 65

MARNING: This product can expose you to chemicals including 2-ethylhexyl acrylate and Ethyl acrylate, which are known to the State of California to cause cancer, and Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Other regulations

Australia inventory (AIIC)

Canada inventory

China inventory (IECSC)

Japan inventory (CSCL)

Korea inventory (KECI)

Philippines inventory

All components are listed or exempted.

(PICCS)

Taiwan Chemical Not determined.

Substances Inventory (TCSI)

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Section 15. Regulatory information

REACH Status

For the REACH status of this product please consult your company contact, as identified in Section 1.

Section 16. Other information

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



History

Date of issue/Date of

revision

Date of previous issue

Prepared by

Key to abbreviations

11/11/2022.

08/15/2022.

Product Stewardship

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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