

# Tribol GR 400-2 PD

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

Issue date: 21/01/2026

Revision date: 21/01/2026

Supersedes: 01/07/2025

Version: 3.0

### SECTION 1: Identification

#### 1.1. GHS Product identifier

|              |                    |
|--------------|--------------------|
| Product form | Mixture            |
| Trade name   | Tribol GR 400-2 PD |
| Product code | BU ET&A            |

#### 1.2. Other means of identification

No additional information available

#### 1.3. Recommended use of the chemical and restrictions on use

|                              |                           |
|------------------------------|---------------------------|
| Use of the substance/mixture | Lubricant                 |
| Restrictions on use          | For professional use only |

#### 1.4. Supplier's details

##### Supplier

Castrol Holdings Europe B.V.  
d'Arcyweg 76  
3198 NA Europoort Rotterdam  
Netherlands  
T +49 (0) 800 863 73 70  
[MSDSadvice@bp.com](mailto:MSDSadvice@bp.com)

##### Department issuing data specification sheet

Hilti AG  
Feldkircher Strasse 100  
FL 9494 Schaan  
Liechtenstein  
T +423 234 2111  
[product.compliance-power.tools@hilti.com](mailto:product.compliance-power.tools@hilti.com)

#### 1.5. Emergency phone number

|                  |                                                                                                   |
|------------------|---------------------------------------------------------------------------------------------------|
| Emergency number | Emergency CONTACT (24-Hour-Number):<br>GBK GmbH Global Regulatory Compliance<br>+49 (0)6132-84463 |
|------------------|---------------------------------------------------------------------------------------------------|

### SECTION 2: Hazard identification

#### 2.1. Classification of the substance or mixture

##### Classification according to the United Nations GHS

|                                                                   |      |                    |
|-------------------------------------------------------------------|------|--------------------|
| Skin sensitisation, Category 1                                    | H317 | Calculation method |
| Hazardous to the aquatic environment – Acute Hazard, Category 3   | H402 | Calculation method |
| Hazardous to the aquatic environment – Chronic Hazard, Category 3 | H412 | Calculation method |
| Full text of H-statements: see section 16                         |      |                    |

#### 2.2. GHS Label elements, including precautionary statements

##### Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)



Signal word (GHS UN)

Hazardous ingredients

Hazard statements (GHS UN)

Precautionary statements (GHS UN)

Warning

Reaction products of triphenyl phosphite and isodecanol (1:1); Reaction product of ammonium molybdate and C12-C24-diethoxylated alkylamine ; Fatty acids, C16-18 (even numbered, C18 unsaturated), 2-ethylhexyl esters, epoxidized

H317 - May cause an allergic skin reaction

H412 - Harmful to aquatic life with long lasting effects

P261 - Avoid breathing dust.

P273 - Avoid release to the environment.

P280 - Wear protective gloves.

# Tribol GR 400-2 PD

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P333+P317 - If skin irritation or rash occurs: Get medical help.

P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards which do not result in classification

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name                                                                                  | Product identifier  | %       | Classification according to the United Nations GHS                                                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------|---------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reaction products of triphenyl phosphite and isodecanol (1:1)                         | CAS-No.: 26544-23-0 | 0.1 – 1 | Flammable liquids Not classified<br>Acute toxicity (dermal) Not classified<br>Skin sensitisation, Category 1, H317<br>Specific target organ toxicity – Repeated exposure, Category 2, H373<br>Hazardous to the aquatic environment – Chronic Hazard, Category 2, H411 |
| Reaction product of ammonium molybdate and C12-C24-diethoxylated alkylamine           | -                   | 0.1 – 1 | Skin corrosion/irritation, Category 2, H315<br>Serious eye damage/eye irritation, Category 2, H319<br>Skin sensitisation, Category 1, H317<br>Hazardous to the aquatic environment – Chronic Hazard, Category 2, H411                                                 |
| 2,6-di-tert-butyl-4-nonylphenol                                                       | CAS-No.: 4306-88-1  | 0.1 – 1 | Skin sensitisation, category 1B, H317<br>Hazardous to the aquatic environment – Acute Hazard, Category 1, H400<br>Hazardous to the aquatic environment – Chronic Hazard, Category 1, H410                                                                             |
| Fatty acids, C16-18 (even numbered, C18 unsaturated), 2-ethylhexyl esters, epoxidized | -                   | < 1     | Skin sensitisation, category 1B, H317                                                                                                                                                                                                                                 |

Full text of H-statements: see section 16

## SECTION 4: First-aid measures

### 4.1. Description of necessary first-aid measures

First-aid measures general

First aider: Pay attention to self-protection!.

# Tribol GR 400-2 PD

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

|                                       |                                                                                                                                                                                                                                          |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| First-aid measures after inhalation   | Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.                                                                                                   |
| First-aid measures after skin contact | Wash with soap and water. Remove all contaminated clothing and footwear. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.                                                               |
| First-aid measures after eye contact  | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.                                                                           |
| First-aid measures after ingestion    | Do 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 and seek medical advice. If you feel unwell, seek medical advice. |

### 4.2. Most important symptoms/effects, acute and delayed

|                                     |                                                                          |
|-------------------------------------|--------------------------------------------------------------------------|
| Symptoms/effects after inhalation   | May cause respiratory irritation.                                        |
| Symptoms/effects after skin contact | Repeated dermal contact with material can lead to defatting of the skin. |
| Symptoms/effects after eye contact  | Direct contact with the eyes is likely to be irritating.                 |
| Symptoms/effects after ingestion    | Nausea. Diarrhea.                                                        |
| Chronic symptoms                    | Symptoms may be delayed.                                                 |

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

High pressure injection of product under the skin can have very serious consequences even without apparent symptoms or injuries.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

|                                |                                  |
|--------------------------------|----------------------------------|
| Suitable extinguishing media   | Foam, powder.                    |
| Unsuitable extinguishing media | Do not use a heavy water stream. |

### 5.2. Specific hazards arising from the chemical

|                                                  |                                                        |
|--------------------------------------------------|--------------------------------------------------------|
| Fire hazard                                      | No fire hazard.                                        |
| Explosion hazard                                 | No direct explosion hazard.                            |
| Hazardous decomposition products in case of fire | Carbon oxides (CO, CO <sub>2</sub> ). Metallic oxides. |

### 5.3. Special protective actions for fire-fighters

|                                |                                                                                                                                                     |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautionary measures fire    | No action shall be taken without appropriate training or involving any personal risk. Evacuate area.                                                |
| Firefighting instructions      | Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. |
| Protection during firefighting | Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.              |
| Other information              | 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 | Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage. |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### 6.1.1. For non-emergency personnel

|                      |                                                                                                          |
|----------------------|----------------------------------------------------------------------------------------------------------|
| Protective equipment | Wear recommended personal protective equipment.                                                          |
| Emergency procedures | Evacuate unnecessary personnel. If spilled, may cause the floor to be slippery. Ventilate spillage area. |

#### 6.1.2. For emergency responders

|                      |                                                                                                                                                           |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protective equipment | Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | Evacuate unnecessary personnel. Ventilate area.                                                                                                           |

# Tribol GR 400-2 PD

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

### 6.2. Environmental precautions

Avoid release to the environment. Prevent liquid from entering sewers, watercourses, underground or low areas.

### 6.3. Methods and materials for containment and cleaning up

|                         |                                                                                                                       |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------|
| For containment         | Using a clean shovel, put the material in a dry container and cover without compressing it.                           |
| Methods for cleaning up | Mechanically recover the product. Clean up any spills as soon as possible, using an absorbent material to collect it. |
| Other information       | Dispose of materials or solid residues at an authorized site.                                                         |

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

|                               |                                                                                                                              |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling | Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. |
| Hygiene measures              | Do not eat, drink or smoke when using this product. Always wash hands after handling the product.                            |

### 7.2. Conditions for safe storage, including any incompatibilities

|                     |                                                                               |
|---------------------|-------------------------------------------------------------------------------|
| Technical measures  | Keep in a cool, well-ventilated place away from heat.                         |
| Storage conditions  | Opened containers must be carefully closed and kept upright to avoid leakage. |
| Packaging materials | Always store product in container of same material as original container.     |

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Appropriate engineering controls

|                                  |                                              |
|----------------------------------|----------------------------------------------|
| Appropriate engineering controls | Ensure good ventilation of the work station. |
| Environmental exposure controls  | Avoid release to the environment.            |

### 8.3. Individual protection measures, such as personal protective equipment (PPE)

#### Personal protective equipment:

Wear recommended personal protective equipment.

|                          |                                                                          |
|--------------------------|--------------------------------------------------------------------------|
| Hand protection          | Protective gloves                                                        |
| Eye protection           | Safety glasses                                                           |
| Skin and body protection | Wear suitable protective clothing                                        |
| Respiratory protection   | In case of insufficient ventilation, wear suitable respiratory equipment |

#### Personal protective equipment symbol(s)



### 8.4. Exposure limit values for the other components

No additional information available

## SECTION 9: Physical and chemical properties

### 9.1. Basic physical and chemical properties

|                |       |
|----------------|-------|
| Physical state | Solid |
|----------------|-------|

# Tribol GR 400-2 PD

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

|                                                 |                               |
|-------------------------------------------------|-------------------------------|
| Appearance                                      | Pasty                         |
| Colour                                          | brown.                        |
| Odour                                           | No data available.            |
| Odour threshold                                 | Not available                 |
| Melting point                                   | Not available                 |
| Freezing point                                  | Not available                 |
| Boiling point                                   | Not available                 |
| Flammability                                    | Not available                 |
| Lower explosion limit                           | Not applicable                |
| Upper explosion limit                           | Not applicable                |
| Flash point                                     | 268 °C estimated              |
| Auto-ignition temperature                       | Not applicable                |
| Decomposition temperature                       | Not available                 |
| pH                                              | Not available                 |
| pH solution                                     | Not available                 |
| Viscosity, kinematic (calculated value) (40 °C) | Not applicable                |
| Partition coefficient n-octanol/water (Log Kow) | Not available                 |
| Vapour pressure                                 | 0.0087 hPa                    |
| Vapour pressure at 50°C                         | Not available                 |
| Density                                         | < 1 g/cm <sup>3</sup> (20 °C) |
| Relative density                                | Not available                 |
| Relative vapour density at 20°C                 | Not applicable                |
| Solubility                                      | insoluble in water.           |
| Particle size                                   | Not available                 |

### 9.2. Data relevant with regard to physical hazard classes (supplemental)

|                  |                |
|------------------|----------------|
| Explosive limits | Not applicable |
|------------------|----------------|

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

Oxidizing materials.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

|                             |                |
|-----------------------------|----------------|
| Acute toxicity (oral)       | Not classified |
| Acute toxicity (dermal)     | Not classified |
| Acute toxicity (inhalation) | Not classified |

# Tribol GR 400-2 PD

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

| Reaction products of triphenyl phosphite and isodecanol (1:1) (26544-23-0) |                                                                                               |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| LD50 dermal rabbit                                                         | > 5000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) |
| LC50 Inhalation - Rat                                                      | > 8.4 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)         |

|                                   |                                      |
|-----------------------------------|--------------------------------------|
| Skin corrosion/irritation         | Not classified                       |
| Serious eye damage/irritation     | Not classified                       |
| Respiratory or skin sensitization | May cause an allergic skin reaction. |
| Germ cell mutagenicity            | Not classified                       |
| Carcinogenicity                   | Not classified                       |
| Reproductive toxicity             | Not classified                       |
| STOT-single exposure              | Not classified                       |
| STOT-repeated exposure            | Not classified                       |

| Reaction products of triphenyl phosphite and isodecanol (1:1) (26544-23-0) |                                                                                                                                                                      |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LOAEL (oral, rat, 90 days)                                                 | 40 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test) |
| NOAEL (oral, rat, 90 days)                                                 | 15 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test) |
| STOT-repeated exposure                                                     | May cause damage to organs through prolonged or repeated exposure.                                                                                                   |

|                   |                |
|-------------------|----------------|
| Aspiration hazard | Not classified |
|-------------------|----------------|

## SECTION 12: Ecological information

### 12.1. Toxicity

|                                                                                      |                                                    |
|--------------------------------------------------------------------------------------|----------------------------------------------------|
| Ecology - general                                                                    | Harmful to aquatic life with long lasting effects. |
| Hazardous to the aquatic environment, short-term (acute)                             | Harmful to aquatic life.                           |
| Classification procedure (Hazardous to the aquatic environment, short-term (acute))  | Calculation method                                 |
| Hazardous to the aquatic environment, long-term (chronic)                            | Harmful to aquatic life with long lasting effects. |
| Classification procedure (Hazardous to the aquatic environment, long-term (chronic)) | Calculation method                                 |

### 12.2. Persistence and degradability

| Tribol GR 400-2 PD                                                                    |                                      |
|---------------------------------------------------------------------------------------|--------------------------------------|
| Persistence and degradability                                                         | No additional information available. |
| 2,6-di-tert-butyl-4-nonylphenol (4306-88-1)                                           |                                      |
| Persistence and degradability                                                         | Not rapidly degradable               |
| Reaction products of triphenyl phosphite and isodecanol (1:1) (26544-23-0)            |                                      |
| Persistence and degradability                                                         | Rapidly degradable                   |
| Reaction product of ammonium molybdate and C12-C24-diethoxylated alkylamine           |                                      |
| Persistence and degradability                                                         | Rapidly degradable                   |
| Fatty acids, C16-18 (even numbered, C18 unsaturated), 2-ethylhexyl esters, epoxidized |                                      |
| Persistence and degradability                                                         | Rapidly degradable                   |

# Tribol GR 400-2 PD

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

### 12.3. Bioaccumulative potential

| Tribol GR 400-2 PD        |                                     |
|---------------------------|-------------------------------------|
| Bioaccumulative potential | No additional information available |

### 12.4. Mobility in soil

| Tribol GR 400-2 PD |                                     |
|--------------------|-------------------------------------|
| Mobility in soil   | No additional information available |

### 12.5. Other adverse effects

|                       |                                     |
|-----------------------|-------------------------------------|
| Ozone                 | Not classified                      |
| Other adverse effects | No additional information available |

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

|                                            |                                                                                                                       |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Regional waste regulation                  | Disposal must be done according to official regulations.                                                              |
| Waste treatment methods                    | Dispose of contents/container in accordance with licensed collector's sorting instructions.                           |
| Sewage disposal recommendations            | Disposal must be done according to official regulations.                                                              |
| Product/Packaging disposal recommendations | Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations. |
| Additional information                     | Do not re-use empty containers.                                                                                       |

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID /

| ADR                                     | IMDG          | IATA          | RID           |
|-----------------------------------------|---------------|---------------|---------------|
| <b>14.1. UN number or ID number</b>     |               |               |               |
| Not regulated                           | Not regulated | Not regulated | Not regulated |
| <b>14.2. UN proper shipping name</b>    |               |               |               |
| Not regulated                           | Not regulated | Not regulated | Not regulated |
| <b>14.3. Transport hazard class(es)</b> |               |               |               |
| Not regulated                           | Not regulated | Not regulated | Not regulated |
| <b>14.4. Packing group</b>              |               |               |               |
| Not regulated                           | Not regulated | Not regulated | Not regulated |
| <b>14.5. Environmental hazards</b>      |               |               |               |
| Not regulated                           | Not regulated | Not regulated | Not regulated |
| No supplementary information available  |               |               |               |

### 14.6. Special precautions for user

#### Overland transport

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated



# Tribol GR 400-2 PD

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

### Rail transport

Not regulated

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

## SECTION 16: Other information

Issue date 1/21/2026  
Revision date 1/21/2026  
Supersedes 7/1/2025

| Section | Changed item                           | Comments |
|---------|----------------------------------------|----------|
| 3       | Composition/information on ingredients | Modified |

### Abbreviations and acronyms

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road  
ATE - Acute Toxicity Estimate  
BCF - Bioconcentration factor  
BLV - Biological limit value  
BOD - Biochemical oxygen demand (BOD)  
COD - Chemical oxygen demand (COD)  
DMEL - Derived Minimal Effect level  
DNEL - Derived-No Effect Level  
EC-No. - European Community number  
EC50 - Median effective concentration  
EN - European Standard  
IARC - International Agency for Research on Cancer  
IATA - International Air Transport Association  
IMDG - International Maritime Dangerous Goods  
LC50 - Median lethal concentration  
LD50 - Median lethal dose  
LOAEL - Lowest Observed Adverse Effect Level  
NOAEC - No-Observed Adverse Effect Concentration  
NOAEL - No-Observed Adverse Effect Level  
NOEC - No-Observed Effect Concentration  
OECD - Organisation for Economic Co-operation and Development  
OEL - Occupational Exposure Limit  
PBT - Persistent Bioaccumulative Toxic  
PNEC - Predicted No-Effect Concentration  
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail  
SDS - Safety Data Sheet  
STP - Sewage treatment plant  
ThOD - Theoretical oxygen demand (ThOD)  
TLM - Median Tolerance Limit  
VOC - Volatile Organic Compounds  
CAS-No. - Chemical Abstracts Service number





# Tribol GR 400-2 PD

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

N.O.S. - Not Otherwise Specified  
vPvB - Very Persistent and Very Bioaccumulative  
ED - Endocrine disruptor

| Full text of H-statements:         |                                                                   |
|------------------------------------|-------------------------------------------------------------------|
| Acute Tox. Not classified (Dermal) | Acute toxicity (dermal) Not classified                            |
| Aquatic Acute 1                    | Hazardous to the aquatic environment – Acute Hazard, Category 1   |
| Aquatic Acute 3                    | Hazardous to the aquatic environment – Acute Hazard, Category 3   |
| Aquatic Chronic 1                  | Hazardous to the aquatic environment – Chronic Hazard, Category 1 |
| Aquatic Chronic 2                  | Hazardous to the aquatic environment – Chronic Hazard, Category 2 |
| Aquatic Chronic 3                  | Hazardous to the aquatic environment – Chronic Hazard, Category 3 |
| Eye Irrit. 2                       | Serious eye damage/eye irritation, Category 2                     |
| Flam. Liq. Not classified          | Flammable liquids Not classified                                  |
| Skin Irrit. 2                      | Skin corrosion/irritation, Category 2                             |
| Skin Sens. 1                       | Skin sensitisation, Category 1                                    |
| Skin Sens. 1B                      | Skin sensitisation, category 1B                                   |
| STOT RE 2                          | Specific target organ toxicity – Repeated exposure, Category 2    |
| H315                               | Causes skin irritation                                            |
| H317                               | May cause an allergic skin reaction                               |
| H319                               | Causes serious eye irritation                                     |
| H373                               | May cause damage to organs through prolonged or repeated exposure |
| H400                               | Very toxic to aquatic life                                        |
| H402                               | Harmful to aquatic life                                           |
| H410                               | Very toxic to aquatic life with long lasting effects              |
| H411                               | Toxic to aquatic life with long lasting effects                   |
| H412                               | Harmful to aquatic life with long lasting effects                 |

SDS\_UN\_Hilti

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.