

Tribol GR 400-2 PD

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 21/01/2026 Revision date: 21/01/2026 Supersedes version of: 01/07/2025

Version: 2.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

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

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

1.2.1. Relevant identified uses

Industrial/Professional use spec For professional use only
Use of the substance/mixture Lubricant

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier	Department issuing data specification sheet
Castrol Holdings Europe B.V. d'Arcyweg 76 3198 NA Europoort Rotterdam Netherlands T +49 (0) 800 863 73 70 MSDSadvice@bp.com	Hilti AG Feldkircher Strasse 100 FL 9494 Schaan Liechtenstein T +423 234 2111 product.compliance-power.tools@hilti.com

1.4. Emergency telephone number

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

Country	Organisation/Company	Address	Emergency number	Comment
Israel	Israel Poison Information Center Rambam Health Care Campus	6 Ha'Aliya Street 31096	+972 4 854 1900	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Signal word (CLP) -
Hazard statements (CLP) H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP) P273 - Avoid release to the environment.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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EUH-statements

EUH208 - Contains 2,6-di-tert-butyl-4-nonylphenol, 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. May produce an allergic reaction.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
2,6-di-tert-butyl-4-nonylphenol (4306-88-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Reaction products of triphenyl phosphite and isodecanol (1:1) (26544-23-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Reaction product of ammonium molybdate and C12-C24-diethoxylated alkylamine	PBT: not yet assessed This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Fatty acids, C16-18 (even numbered, C18 unsaturated), 2-ethylhexyl esters, epoxidized	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component	
Reaction products of triphenyl phosphite and isodecanol (1:1) (26544-23-0)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
Reaction product of ammonium molybdate and C12-C24-diethoxylated alkylamine	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
2,6-di-tert-butyl-4-nonylphenol (4306-88-1)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
Fatty acids, C16-18 (even numbered, C18 unsaturated), 2-ethylhexyl esters, epoxidized	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

Name	Product identifier	Conc.	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Reaction products of triphenyl phosphite and isodecanol (1:1)	CAS-No.: 26544-23-0 EC-No.: 701-341-4 REACH-no: 01-2119968254-31	0.1 – 1	Skin Sens. 1, H317 STOT RE 2, H373 Aquatic Chronic 2, H411
Reaction product of ammonium molybdate and C12-C24-diethoxylated alkylamine	EC-No.: 412-780-3 REACH-no: 01-0000016000-92	0.1 – 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
2,6-di-tert-butyl-4-nonylphenol	CAS-No.: 4306-88-1 EC-No.: 224-320-7 REACH-no: 01-2120759723-46	0.1 – 1	Skin Sens. 1B, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Fatty acids, C16-18 (even numbered, C18 unsaturated), 2-ethylhexyl esters, epoxidized	EC-No.: 701-432-9 REACH-no: 01-2119977115-34	< 1	Skin Sens. 1B, H317

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

First aider: Pay attention to self-protection!

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 and effects, both 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 any immediate medical attention and special treatment needed

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam, powder.

Unsuitable extinguishing media

Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard

No fire hazard.

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Explosion hazard
Hazardous decomposition products in case of fire

No direct explosion hazard.
Carbon oxides (CO, CO₂). Metallic oxides.

5.3. Advice for firefighters

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.
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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.

6.2. Environmental precautions

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

6.3. Methods and material 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.

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	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.

7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

No additional information available

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Colour	brown.
Appearance	Pasty.
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	Not applicable
Solubility	insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	0.0087 hPa
Vapour pressure at 50°C	Not available
Density	< 1 g/cm³ (20 °C)
Relative density	Not available
Relative vapour density at 20°C	Not applicable
Particle size	Not available
Particle size distribution	Not available
Particle shape	Not available
Particle aspect ratio	Not available
Particle specific surface area	Not available
Particle dustiness	Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

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.

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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 hazard classes as defined in Regulation (EC) No 1272/2008

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

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 sensitisation	Not classified
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
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11.2. Information on other hazards

No additional information available

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)	Not classified
Hazardous to the aquatic environment, long-term (chronic)	Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

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Persistence and degradability	No additional information available.

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

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12.5. Results of PBT and vPvB assessment

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This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment 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.

European List of Waste (LoW, EC 2000/532)

12 01 12* - spent waxes and fats

HP Code

HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID /

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
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

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Air transport

Not regulated

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/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
46	4-nonylphenol, branched

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
3.2	Composition/information on ingredients	Modified	

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Indication of changes			
Section	Changed item	Change	Comments
15.1	REACH Annex XVII	Added	

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

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Abbreviations and acronyms:	
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

Full text of H- and EUH-statements:	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
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
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.
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.
EUH208	Contains 2,6-di-tert-butyl-4-nonylphenol, 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. May produce an allergic reaction.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Aquatic Chronic 3	H412	Calculation method

SDS_EU_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.