Lubricant for Pneumatic Fastening Tool

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

SECTION 1: Identification

1.1. Product identifier

Product form	Mixture
Product name	Lubricant for Pneumatic Fastening Tool
Product code	BU Direct Fastening

1.2. Recommended use and restrictions on use

Recommended use	Lubricants, Greases and Release Products

1.3. Supplier

Hilti (Canada) Corp.
2360 Meadowpine Boulevard
L5N 6S2 Mississauga, Ontario - Canada
T +1905 8139200
1-800-363-4458 toll free - F +1 905 813 9009

1.4. Emergency telephone number

Emergency number	Chem-Trec Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada) Tel.: 703 527 3887 (Other countries)

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Not classified

2.2. GHS Label elements, including precautionary statements

GHS CA labelling

No labelling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS CA)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Lubricating oils (petroleum), base oils, paraffinic		(CAS-No.) 93572-43-1	97 – 100	Not classified
Dialkyl(C1-C14)dithiophosphoric acid, zinc salt		(CAS-No.) 68649-42-3	0 – 1	Skin Irrit. 2, H315 Eye Dam. 1, H318

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Phosphoric acid ester amine salt		(CAS-No.) 91745-46-9	< 0.5	Not classified
2,6-di-tert-butyl-p-cresol	1,3-di-tert-butyl-2-hydroxy-5-methylbenzene / 1,3-di-tertiary-butyl-2-hydroxy-5-methylbenzene / 2,6-bis(1,1-dimethylethyl)-4-methylphenol / 2,6-di-tert-butyl-1-hydroxy-4-methylbenzene / 2,6-di-tert-butyl-4-cresol / 2,6-di-tert-butyl-4-methylphenol / 2,6-di-tert-butyl-p-cresol / 2,6-di-tert-butyl-p-methylphenol / 2,6-di-tertiary-butyl-1-hydroxy-4-methylbenzene / 2,6-di-tertiary-butyl-4-cresol / 2,6-di-tertiary-butyl-4-methylphenol / 2,6-di-tertiary-butyl-para-cresol / 2,6-di-tertiary-butyl-para-methylphenol / 3,5-di-tert-butyl-4-hydroxytoluene / 3,5-di-tertiary-butyl-4-hydroxytoluene / 4-hydroxy-3,5-di-tert-butyltoluene / 4-hydroxy-3,5-di-tertiary-butyltoluene / 4-methyl-2,6-di-tert-butylphenol / 4-methyl-2,6-di-tertiary-butylphenol / 4-methyl-2,6-tert-butylphenol / 4-methyl-2,6-tertiary-butylphenol / advastab 401 / agidol / agidol 1 / alkofen BP / antioxidant 264 / antioxidant 29 / antioxidant 30 / antioxidant 4 / antioxidant 4K / antioxidant BHT / antioxidant DBPC / antioxidant KB / antrancine 8 / AO 29 / AO 4K / AO X4 / AO100GRA / BHT / BHT butylated hydroxytoluene / BHT, food grade / BUKS / butylated hydroxytoluene / butylhydroxytoluene / CAO 1 / CAO 3 / catalin CAO-1 DBPC / catalin CAO-3 / chemanox 11 / dalpac / DBMP / DBPC / DBPC, technical grade / deenax / dibunol / dibutylated hydroxytoluene / di-tertiary-butyl-para-cresol / ECA5703 / ECA6050 / ECA8165 / ECA8268 / EXA5453 / EXA703 / FEMA NO 2184 / formula nr 82300 / HK-1 / impruvol / ionol / ionol 1 / ionol BHT / ionol CP / ionol,antioxidant / ionole / kerabit / methyl di-tert-butylphenol / methyl di-tertiary-butylphenol / nocrac 200 / nonox TBC / NYRIM antioxidant / P 21 / parabar 441 / paranox 441 / phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- / stabilizer KB / stavox / sumilizer BHT / sustane (=2,6-di-tert-butyl-p-cresol) / sustane BHT / swanox BHT / tenamene 3 / tenox BHT / topanol / topanol BHT / topanol O / topanol OC / toxolan P / vanlube PC / vanlube PCX / vianol	(CAS-No.) 128-37-0	0 – 0.2	Acute Tox. 4 (Oral), H302

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact	Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
First-aid measures general	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

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

Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media	Foam. Dry powder. Carbon dioxide. Sand.

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media	Do not use extinguishing media containing water. Do not use a heavy water stream.

5.3. Specific hazards arising from the hazardous product

5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up	Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
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

Storage conditions	Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Heat sources. Keep container closed when not in use.
Incompatible products	Strong bases. Strong acids.
Incompatible materials	Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves.

Eye protection:

Chemical goggles or safety glasses

Respiratory protection:

Wear appropriate mask

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	No data available
Colour	Yellow
Odour	characteristic
Odour threshold	No data available
pH	No data available
Relative evaporation rate (butylacetate=1)	No data available
Relative evaporation rate (ether=1)	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	> 300 °C
Flash point	> 190 °C
Auto-ignition temperature	No data available
Decomposition temperature	> 250 °C
Flammability (solid, gas)	Non flammable.
Vapour pressure	< 1 hPa
Vapour pressure at 50 °C	No data available

Relative density	No data available
Density	0.873 g/cm³
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Viscosity, kinematic	22 mm²/s (40 °C)
Explosive limits	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

Reactivity	No additional information available
Chemical stability	Not established.
Possibility of hazardous reactions	Not established.
Conditions to avoid	Direct sunlight. Extremely high or low temperatures.
Incompatible materials	Strong acids. Strong bases.
Hazardous decomposition products	fume. Carbon monoxide. Carbon dioxide.
Hardening time:	No additional information available

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

2,6-di-tert-butyl-p-cresol (128-37-0)	
LD50 oral rat	> 6000 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
ATE CA (oral)	890 mg/kg bodyweight

Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified

Lubricant for Pneumatic Fastening Tool	
Viscosity, kinematic	22 mm²/s (40 °C)

Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute)	Not classified
Hazardous to the aquatic environment, long–term (chronic)	Not classified

2,6-di-tert-butyl-p-cresol (128-37-0)	
LC50 - Fish [1]	0.199 mg/l (ECOSAR v1.00, 96 h, Pisces, QSAR, Lethal)
EC50 - Crustacea [1]	0.48 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
EC50 72h - Algae [1]	> 0.24 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)
BCF - Fish [1]	230 – 2500 (56 days; Cyprinus carpio)
Partition coefficient n-octanol/water (Log Pow)	4.17 (Experimental value, 37 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.362 (log Koc, SRC PCKOCWIN v1.66, Calculated value)
Threshold limit - Algae [1]	> 0.4 mg/l (72 h; Scenedesmus subspicatus; GLP)
Threshold limit - Algae [2]	0.363 mg/l (Algae; Chronic)

12.2. Persistence and degradability

Lubricant for Pneumatic Fastening Tool	
Persistence and degradability	Not established.

2,6-di-tert-butyl-p-cresol (128-37-0)	
Persistence and degradability	Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.51 g O□/g substance
Chemical oxygen demand (COD)	2.27 g O□/g substance
ThOD	2.977 g O□/g substance
BOD (% of ThOD)	0.17 % ThOD

12.3. Bioaccumulative potential

Lubricant for Pneumatic Fastening Tool	
Bioaccumulative potential	Not established.

2,6-di-tert-butyl-p-cresol (128-37-0)	
Bioaccumulative potential	Potential for bioaccumulation (4 ≤ Log Kow ≤ 5).
BCF - Fish [1]	230 – 2500 (56 days; Cyprinus carpio)
Partition coefficient n-octanol/water (Log Pow)	4.17 (Experimental value, 37 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.362 (log Koc, SRC PCKOCWIN v1.66, Calculated value)

12.4. Mobility in soil

2,6-di-tert-butyl-p-cresol (128-37-0)	
Surface tension	Not applicable (water solubility < 1 mg/l)
Ecology - soil	Low potential for mobility in soil. May be harmful to plant growth, blooming and fruit formation.
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.362 (log Koc, SRC PCKOCWIN v1.66, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	4.17 (Experimental value, 37 °C)

12.5. Other adverse effects

Ozone	Not classified
Other information	Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations	Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID /

ADR	IMDG	IATA	RID
14.1. UN number			
Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available			

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

Rail transport
Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

2,6-di-tert-butyl-p-cresol (128-37-0)
Listed on the Canadian DSL (Domestic Substances List)

Dialkyl(C1-C14)dithiophosphoric acid, zinc salt (68649-42-3)
Listed on the Canadian DSL (Domestic Substances List)

SECTION 16: Other information

Other information None.

Full text of H-statements:

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.

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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.