

SAFETY DATA SHEET

Drilube

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

1.1. Product identifier

Product name Drilube

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

Identified uses Dry lubricant spray PC24 Lubricants, greases, release products

1.3. Details of the supplier of the safety data sheet

Supplier Aztec Chemicals
Unit 16, University Way
Orion Park
Crewe
Cheshire
CW1 6NG
+ 44 (0) 1270 655500 (T)
+ 44 (0) 1270 655501 (F)
info@aztecchemicals.com

1.4. Emergency telephone number

Emergency telephone +44 (0)1270 656380 (Monday to Friday, 9am to 5pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Aerosol 1 - H222, H229

Health hazards Eye Irrit. 2 - H319 STOT SE 3 - H336

Environmental hazards Not Classified

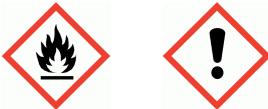
Human health Gas or vapour is harmful on prolonged exposure or in high concentrations. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

Environmental This product does not contain substances which are harmful to aquatic organisms or which may cause long term effects to the aquatic environment

Physicochemical Aerosol containers can explode when heated, due to excessive pressure build-up. The product is extremely flammable. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

2.2. Label elements

Hazard pictograms



Signal word Danger

Drilube

Hazard statements	H222 Extremely flammable aerosol. H229 Pressurised container: may burst if heated. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Precautionary statements	P102 Keep out of reach of children. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211 Do not spray on an open flame or other ignition source. P251 Do not pierce or burn, even after use. P271 Use only outdoors or in a well-ventilated area. P260 Do not breathe vapour/ spray. P262 Do not get in eyes, on skin, or on clothing. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P501 Dispose of contents/ container in accordance with local regulations.
Supplemental label information	EUH066 Repeated exposure may cause skin dryness or cracking.
Contains	ACETONE

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ACETONE	30-60%
CAS number: 67-64-1	EC number: 200-662-2
	REACH registration number: 01-2119471330-49
Classification	
Flam. Liq. 2 - H225	
Eye Irrit. 2 - H319	
STOT SE 3 - H336	
PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS	30-60%
CAS number: 68476-85-7	EC number: 270-704-2
Classification	
Flam. Gas 1 - H220	
Press. Gas (Liq.) - H280	

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XYLENE		1-5%
CAS number: 1330-20-7	EC number: 215-535-7	REACH registration number: 01-2119488216-32-XXXX
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 STOT RE 2 - H373 Asp. Tox. 1 - H304 Aquatic Chronic 3 - H412		
ETHYLBENZENE		1-5%
CAS number: 100-41-4	EC number: 202-849-4	REACH registration number: 01-2119489370-35
Classification Flam. Liq. 2 - H225 Acute Tox. 4 - H332 STOT RE 2 - H373 Asp. Tox. 1 - H304 Aquatic Chronic 3 - H412		

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Move affected person to fresh air at once.
Inhalation	If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Keep affected person warm and at rest. Get medical attention immediately.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Continue to rinse for at least 15 minutes.

4.2. Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

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Suitable extinguishing media Extinguish with foam, carbon dioxide, dry powder or water fog.

5.2. Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. The product is highly flammable. Forms explosive mixtures with air.

5.3. Advice for firefighters

Protective actions during firefighting Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours. Warn firefighters that aerosols are involved.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Provide adequate ventilation. Use suitable respiratory protection if ventilation is inadequate. Avoid inhalation of vapours.

6.2. Environmental precautions

Environmental precautions Avoid the spillage or runoff entering drains, sewers or watercourses. Contain spillage with sand, earth or other suitable non-combustible material.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Leave small quantities to evaporate, if safe to do so. Do not allow material to enter confined spaces, due to the risk of explosion. Absorb spillage with non-combustible, absorbent material.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Do not spray on a naked flame or any incandescent material. Eliminate all sources of ignition.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from heat, sparks and open flame. Store at moderate temperatures in dry, well ventilated area. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

ACETONE

Long-term exposure limit (8-hour TWA): WEL 500 ppm 1210 mg/m³

Short-term exposure limit (15-minute): WEL 1500 ppm 3620 mg/m³

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS

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Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1750 mg/m³

Short-term exposure limit (15-minute): WEL 1250 ppm 2180 mg/m³

XYLENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³

Sk

ETHYLBENZENE

Long-term exposure limit (8-hour TWA): WEL 100 ppm(Sk) 441 mg/m³(Sk)

Short-term exposure limit (15-minute): WEL 125 ppm(Sk) 552 mg/m³(Sk)

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

Ingredient comments

WEL = Workplace Exposure Limits

XYLENE (CAS: 1330-20-7)

Biological limit values	650 mmol/mol creatinine Medium : urine. Sampling time: post-shift. Parameter: methylhippuric acid.
DNEL	Consumer - Oral; Long term systemic effects: 12.5 mg/kg/day Consumer - Dermal; Long term systemic effects: 1872 mg/kg/day Consumer - Inhalation; Long term systemic effects: 65.3 mg/m ³ Consumer - Inhalation; Short term : 260 mg/m ³ Industry - Dermal; Long term systemic effects: 3182 mg/kg/day Industry - Inhalation; Long term systemic effects: 221 mg/m ³ Industry - Inhalation; Short term : 442 mg/m ³
PNEC	This product is a UVCB substance and its composition will be variable, so reported properties may vary or require a range of values to describe them. - Fresh water; 0.327 mg/l - marine water; 0.327 mg/l - Intermittent release; 0.327 mg/l - STP; 6.58 mg/l - Sediment (Freshwater); 12.46 mg/kg - Sediment (Marinewater); 12.46 mg/kg - Soil; 2.31 mg/kg

ETHYLBENZENE (CAS: 100-41-4)

DNEL	Consumer - Oral; Long term systemic effects: 1.6 mg/kg/day Consumer - Dermal; Long term systemic effects: 108 mg/kg/day Consumer - Inhalation; Long term systemic effects: 14.8 mg/m ³ Industry - Dermal; Long term systemic effects: 180 mg/kg/day Industry - Inhalation; Long term systemic effects: 77 mg/m ³ Industry - Inhalation; Short term : 289 mg/m ³
PNEC	Fresh water; 0.1 mg/l marine water; 0.1 mg/l Intermittent release; 0.1 mg/l Sediment (Freshwater); 13.7 mg/kg Sediment (Marinewater); 13.7 mg/kg Soil; 2.68 mg/kg STP; 9.6 mg/kg

8.2. Exposure controls

Drilube

Appropriate engineering controls	Provide adequate ventilation. Avoid inhalation of vapours and spray/mists. Observe any occupational exposure limits for the product or ingredients.
Personal protection	When using do not smoke.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.
Hand protection	Due to the packaging form, aerosol, risk of skin contact is small. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.
Hygiene measures	Wash hands after handling. Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Colourless to pale yellow.
Odour	Organic solvents.
Flash point	< -40°C
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.8% Upper flammable/explosive limit: 9.5%
Auto-ignition temperature	410-580°C
Comments	Information given is applicable to the major ingredient.

9.2. Other information

Other information	Not available.
Volatile organic compound	This product contains a maximum VOC content of 706 g/l.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Stable at normal ambient temperatures and when used as recommended.
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10.2. Chemical stability

Stability	Avoid the following conditions: Heat, sparks, flames.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Does not decompose when used and stored as recommended.
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition. Avoid exposing aerosol containers to high temperatures or direct sunlight.
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10.5. Incompatible materials

Materials to avoid	Keep away from oxidising materials, heat and flames.
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10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - dermal

ATE dermal (mg/kg) 34,722.22

Acute toxicity - inhalation

ATE inhalation (gases ppm) 157,828.28

ATE inhalation (vapours mg/l) 856.19

ATE inhalation (dusts/mists mg/l) 1,657.2

General information Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

Inhalation In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Unconsciousness, possibly death.

Skin contact Skin irritation should not occur when used as recommended. Repeated exposure may cause skin dryness or cracking.

Eye contact Vapour or spray in the eyes may cause irritation and smarting.

Acute and chronic health hazards Arrhythmia (deviation from normal heart beat). In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Route of exposure Inhalation

Target organs Central nervous system Respiratory system, lungs

Medical symptoms Arrhythmia (deviation from normal heart beat). Narcotic effect. Vapours may cause drowsiness and dizziness.

Toxicological information on ingredients.

ACETONE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,800.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 7,426.0

Species Guinea pig

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 76.0

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Species	Rat
ATE inhalation (dusts/mists mg/l)	76.0
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Rabbit This product may cause skin and eye irritation. 24 hours
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Repeated exposure may cause skin dryness or cracking. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.
<u>Skin sensitisation</u>	
Skin sensitisation	- Rabbit: Mild skin irritation - 24 h
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vivo	: No data available.
<u>Carcinogenicity</u>	
Carcinogenicity	There is no evidence that the product can cause cancer.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Narcotic effect. Vapours may cause drowsiness and dizziness.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	No data available.
<u>Aspiration hazard</u>	
Aspiration hazard	Data lacking.

XYLENE

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	3,523.0
Species	Rat
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	12,126.0
Species	Rabbit
ATE dermal (mg/kg)	1,100.0
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ gases ppmV)	5,000.0
Species	Rat
Acute toxicity inhalation (LC₅₀ vapours mg/l)	27.124
Species	Rat

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Acute toxicity inhalation (LC₅₀ dust/mist mg/l)	12.09
Species	Rat
ATE inhalation (gases ppm)	5,000.0
ATE inhalation (vapours mg/l)	27.124
ATE inhalation (dusts/mists mg/l)	12.09
<u>Carcinogenicity</u>	
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.

ETHYLBENZENE

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	3,523.0
Species	Rat
ATE oral (mg/kg)	3,523.0
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	12,126.0
Species	Rabbit
ATE dermal (mg/kg)	12,126.0
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ vapours mg/l)	17.8
Species	Rat
Acute toxicity inhalation (LC₅₀ dust/mist mg/l)	17.5
Species	Rat
ATE inhalation (vapours mg/l)	17.8
ATE inhalation (dusts/mists mg/l)	17.5

SECTION 12: Ecological information

Ecotoxicity No negative effects on the aquatic environment are known. The product is not expected to be toxic to aquatic organisms.

Ecological information on ingredients.**XYLENE**

Drilube

Ecotoxicity The product is not expected to be hazardous to the environment.

ETHYLBENZENE

Ecotoxicity Not regarded as dangerous for the environment.

12.1. Toxicity

Toxicity Not available.

Ecological information on ingredients.

ACETONE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 5540 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 13500 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: >100 mg/l, Algae

XYLENE

Toxicity Not available.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 2.6 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates IC₅₀, 24 hours: 1 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 73 hours: 2.2 mg/l, Pseudokirchneriella subcapitata
NOEC, 73 hours: 0.44 mg/l, Pseudokirchneriella subcapitata

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates NOEC, 96 hours: 3.3 mg/l, Daphnia magna

ETHYLBENZENE

Toxicity Not available.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 4.2 mg/l, Fish
LC₅₀, 96 hours: 5.1 mg/l, Menidia menidia (Atlantic silverside)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: >2.93 mg/l, Daphnia magna

Acute toxicity - aquatic plants IC₅₀, 72 hours: 2.2 mg/l, Algae

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 6.8 mg/l, Daphnia magna

12.2. Persistence and degradability

Drilube

Persistence and degradability Not available.

Ecological information on ingredients.

ACETONE

Persistence and degradability No data available.

XYLENE

Persistence and degradability Not available.

Biodegradation - Degradation > 60%: 28 days

ETHYLBENZENE

Persistence and degradability Not available.

12.3. Bioaccumulative potential

Bioaccumulative potential Not available.

Ecological information on ingredients.

ACETONE

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient log Pow: -0.24

XYLENE

Bioaccumulative potential Not available.

Partition coefficient log Kow: < 3.2

ETHYLBENZENE

Bioaccumulative potential Not available.

Partition coefficient Pow: 3.6

12.4. Mobility in soil

Mobility Not known.

Ecological information on ingredients.

ACETONE

Mobility No data available.

XYLENE

Mobility Not known.

ETHYLBENZENE

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Mobility Not known.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment Not available.

Ecological information on ingredients.

XYLENE

Results of PBT and vPvB assessment Not available.

ETHYLBENZENE

Results of PBT and vPvB assessment Not available.

12.6. Other adverse effects

Other adverse effects Not available.

Ecological information on ingredients.

ACETONE

Other adverse effects Not available.

XYLENE

Other adverse effects Not available.

ETHYLBENZENE

Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Containers should be thoroughly emptied before disposal because of the risk of an explosion. Empty containers must not be punctured or incinerated because of the risk of an explosion.

SECTION 14: Transport information

General This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, ADR and IMDG. These provisions allow transport of aerosols of less than 1 litre packed in cartons of less than 30kg gross weight to be exempt from control providing that they are labelled in accordance with the requirements of these regulations to show that they are being transported as Limited Quantities. Aerosols not so packed and labelled must show the following.

14.1. UN number

UN No. (ADR/RID) 1950

UN No. (IMDG) 1950

UN No. (ICAO) 1950

Drilube

14.2. UN proper shipping name

Proper shipping name (ADR/RID) AEROSOLS

Proper shipping name (IMDG) AEROSOLS

Proper shipping name (ICAO) AEROSOLS

Proper shipping name (ADN) AEROSOLS

14.3. Transport hazard class(es)

ADR/RID class 2.1

ADR/RID label 2.1

IMDG class 2.1

ICAO class/division 2.1

Transport labels



14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS F-D, S-U

Tunnel restriction code (D)

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).
EH40/2005 Workplace exposure limits.
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].

EU legislation Commission Regulation (EU) No 453/2010 of 20 May 2010.

Guidance Approved Classification and Labelling Guide (Sixth edition) L131.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Drilube

Revision comments	Supplemental information added.
Revision date	02/07/2019
Revision	3
SDS number	10070
SDS status	Approved.
Hazard statements in full	H220 Extremely flammable gas. H222 Extremely flammable aerosol. H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H229 Pressurised container: may burst if heated. H280 Contains gas under pressure; may explode if heated. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H373 May cause damage to organs through prolonged or repeated exposure. H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.