

# SAFETY DATA SHEET

## PTFE

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

#### 1.1. Product identifier

Product name PTFE

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

Identified uses Dry lubricant spray

#### 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)7831 300868

### SECTION 2: Hazards identification

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

##### Classification

Physical hazards Aerosol 1 - H222, H229  
Health hazards Skin Irrit. 2 - H315 STOT SE 3 - H336  
Environmental hazards Aquatic Chronic 2 - H411

Classification (67/548/EEC or 1999/45/EC) Xi;R38. F+;R12. N;R51/53. R67.

**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 contains substances which are very toxic or toxic to aquatic organisms and may cause long term effects to the aquatic environment (see sections 2 and 12)

**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

##### Pictogram



Signal word

Danger

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<b>Hazard statements</b>	H222 Extremely flammable aerosol. H229 Pressurised container: may burst if heated H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects.
<b>Precautionary statements</b>	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. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P102 Keep out of reach of children. P501 Dispose of contents/container in accordance with local regulations. P260 Do not breathe vapour/spray.

### 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

<b>PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS</b> <span style="float: right;"><b>30-60%</b></span>		
CAS number: 68476-85-7	EC number: 270-704-2	
<b>Classification</b> Flam. Gas 1 - H220 Press. Gas, Liquefied - H280	<b>Classification (67/548/EEC or 1999/45/EC)</b> F+;R12 Carc. Cat. 1;R45 Muta. Cat. 2;R46	
<b>HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane</b> <span style="float: right;"><b>30-60%</b></span>		
CAS number: —	EC number: 921-024-6	REACH registration number: 01-2119475514-35
<b>Classification</b> Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 Asp. Tox. 1 - H304 STOT SE 3 - H336 Aquatic Chronic 2 - H411	<b>Classification (67/548/EEC or 1999/45/EC)</b> Xn;R65. Xi;R38. F;R11. N;R51/53. R67.	
<b>PROPAN-2-OL</b> <span style="float: right;"><b>5-10%</b></span>		
CAS number: 67-63-0	EC number: 200-661-7	REACH registration number: 01-2119457558-25
<b>Classification</b> Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	<b>Classification (67/548/EEC or 1999/45/EC)</b> F;R11 Xi;R36 R67	

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<b>HEXANE-norm</b> <span style="float: right;"><b>&lt;1%</b></span>		
CAS number: 110-54-3	EC number: 203-777-6	REACH registration number: 01-2119480412-44
<b>Classification</b> Flam. Liq. 2 - H225 STOT RE 2 - H373 Skin Irrit. 2 - H315 Repr. 2 - H361f STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	<b>Classification (67/548/EEC or 1999/45/EC)</b> F;R11 Repr. Cat. 3;R62 Xn;R48/20,R65 Xi;R38 R67 N;R51/53	
<b>BUTANOL-norm</b> <span style="float: right;"><b>&lt;1%</b></span>		
CAS number: 71-36-3	EC number: 200-751-6	REACH registration number: 01-2119484630-38
<b>Classification</b> Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H335, H336	<b>Classification (67/548/EEC or 1999/45/EC)</b> R10 Xn;R22 Xi;R37/38,R41 R67	
<b>Naphtha (petroleum) hydrodesulfurized light dearomatized</b> <span style="float: right;"><b>&lt;1%</b></span>		
CAS number: 92045-53-9	EC number: 295-434-2	REACH registration number: 01-2119463325-40
<b>Classification</b> Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 Asp. Tox. 1 - H304 STOT SE 3 - H336 Aquatic Chronic 2 - H411	<b>Classification (67/548/EEC or 1999/45/EC)</b> Xn;R65. Xi;R38. F;R11. N;R51/53. R67.	

The Full Text for all R-Phrases and Hazard Statements are 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 and get medical attention.

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### 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.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Notes for the doctor**                    Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

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

### 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. Absorb spillage with non-combustible, absorbent material. Leave small quantities to evaporate, if safe to do so. Do not allow material to enter confined spaces, due to the risk of explosion.

### 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. Eliminate all sources of ignition. Do not spray on a naked flame or any incandescent material.

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

**Storage precautions**                    Extremely flammable. 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)

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**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

##### **PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS**

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1750 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 1250 ppm 2180 mg/m<sup>3</sup>

##### **HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**

Long-term exposure limit (8-hour TWA): WEL 1200 mg/m<sup>3</sup>

##### **PROPAN-2-OL**

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m<sup>3</sup>

##### **HEXANE-norm**

Long-term exposure limit (8-hour TWA): WEL 20 ppm 72 mg/m<sup>3</sup>

##### **BUTANOL-norm**

Short-term exposure limit (15-minute): WEL 50 ppm 154 mg/m<sup>3</sup>

Sk

##### **Naphtha (petroleum) hydrodesulfurized light dearomatized**

Long-term exposure limit (8-hour TWA): WEL 315 ppm 1200 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

**Ingredient comments** WEL = Workplace Exposure Limits

#### PROPAN-2-OL (CAS: 67-63-0)

<b>DNEL</b>	Industry - Dermal; Long term systemic effects: 888 mg/kg/day Industry - Inhalation; Long term systemic effects: 500 mg/m <sup>3</sup> Consumer - Dermal; Long term systemic effects: 319 mg/kg/day Consumer - Dermal; Long term systemic effects: 26 mg/kg/day Consumer - Inhalation; Long term systemic effects: 89 mg/m <sup>3</sup>
<b>PNEC</b>	- Fresh water; 140.9 mg/l - Marine water; 140.9 mg/l - Intermittent release; 140.9 mg/l - Sediment (Freshwater); 552 mg/kg - Sediment (Marinewater); 552 mg/kg - STP; 2251 mg/l - Soil; 28 mg/kg

#### 8.2. Exposure controls

**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.

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<b>Hand protection</b>	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. It is recommended that gloves are made of the following material: Nitrile rubber. Polyvinyl alcohol (PVA). Viton rubber (fluoro rubber). 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.
<b>Hygiene measures</b>	Wash hands after handling. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Use appropriate hand lotion to prevent defatting and cracking of skin.
<b>Respiratory protection</b>	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

<b>Appearance</b>	Aerosol.
<b>Colour</b>	Colourless to pale yellow.
<b>Odour</b>	Organic solvents.
<b>Initial boiling point and range</b>	-40 to -2°C @ 1013 hPa
<b>Flash point</b>	<-40°C
<b>Upper/lower flammability or explosive limits</b>	Lower : 1.8% - Upper 9.5%
<b>Vapour pressure</b>	ca. 590 to 1760 kPa @ 45°C
<b>Vapour density</b>	ca. 1.5 at 15°C
<b>Partition coefficient</b>	log Pow: ca. 2.3 to 2.8
<b>Auto-ignition temperature</b>	410-580°C
<b>Comments</b>	Information given is applicable to the major ingredient.

#### 9.2. Other information

<b>Other information</b>	Not available.
<b>Volatile organic compound</b>	This product contains a maximum VOC content of 618 g/l.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

<b>Reactivity</b>	Stable at normal ambient temperatures and when used as recommended.
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#### 10.2. Chemical stability

<b>Stability</b>	Avoid the following conditions: Heat, sparks, flames.
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#### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	Does not decompose when used and stored as recommended.
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#### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	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

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**Materials to avoid** Keep away from oxidising materials, heat and flames.

### 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

<b>General information</b>	Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.
<b>Inhalation</b>	In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Unconsciousness, possibly death.
<b>Skin contact</b>	Irritating to skin.
<b>Eye contact</b>	Vapour or spray in the eyes may cause irritation and smarting.
<b>Acute and chronic health hazards</b>	Arrhythmia (deviation from normal heart beat). Irritating to skin. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
<b>Route of entry</b>	Inhalation
<b>Target organs</b>	Central nervous system Respiratory system, lungs
<b>Medical symptoms</b>	Skin irritation. Arrhythmia (deviation from normal heart beat). Narcotic effect. Vapours may cause drowsiness and dizziness.

## SECTION 12: Ecological Information

**Ecotoxicity** This product has not been tested but contains ingredients which are toxic or very toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment. During normal use the volatility of the components and the packaging form, pressurised container, make entry into the aquatic environment unlikely, however, do not empty or discharge into drains or watercourses. Ensure container is empty before disposal to prevent contents entering watercourses.

### 12.1. Toxicity

**Toxicity** Not available.

### 12.2. Persistence and degradability

**Persistence and degradability** Not available.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** Not available.

**Partition coefficient** log Pow: ca. 2.3 to 2.8

### 12.4. Mobility in soil

**Mobility** Not known.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** Not available.

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### 12.6. Other adverse effects

**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

#### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** AEROSOLS (HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane)

**Proper shipping name (IMDG)** AEROSOLS (HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane)

**Proper shipping name (ICAO)** AEROSOLS (HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane)

**Proper shipping name (ADN)** AEROSOLS (HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane)

#### 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



**PTFE****Environmentally hazardous substance/marine pollutant****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 MARPOL73/78 and the IBC Code**

**Transport in bulk according to** Not applicable.

**Annex II of MARPOL 73/78  
and the IBC Code**

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**National regulations** The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

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

**Guidance** Workplace Exposure Limits EH40.  
CHIP for everyone HSG228.  
Safety Data Sheets for Substances and Preparations.  
Approved Classification and Labelling Guide (Sixth edition) L131.  
British Aerosol Manufacturers Code of Practice 7th. Edition 1999

**15.2. Chemical safety assessment**

No chemical safety assessment has been carried out.

**SECTION 16: Other information**

**Revision comments** Supplemental information added.

**Revision date** 20/11/2015

**Revision** 2

**SDS number** 10067

**SDS status** Approved.

## PTFE

### Risk phrases in full

R10 Flammable.  
R11 Highly flammable.  
R12 Extremely flammable.  
R22 Harmful if swallowed.  
R36 Irritating to eyes.  
R37/38 Irritating to respiratory system and skin.  
R38 Irritating to skin.  
R41 Risk of serious damage to eyes.  
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R62 Possible risk of impaired fertility.  
R65 Harmful: may cause lung damage if swallowed.  
R67 Vapours may cause drowsiness and dizziness.

### Hazard statements in full

H222 Extremely flammable aerosol.  
H225 Highly flammable liquid and vapour.  
H229 Pressurised container: may burst if heated  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H361f Suspected of damaging fertility.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H411 Toxic 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.