

# SAFETY DATA SHEET

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

### 1.1. Product identifier

**Trade name**

Multi-Oil with PTFE

**Product no.**

-

**REACH registration number**

Not applicable

**Other means of identification**

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

**Relevant identified uses of the substance or mixture**

Lubricant

**Uses advised against**

-

The full text of any mentioned and identified use categories are given in section 16

### 1.3. Details of the supplier of the safety data sheet

**Company and address**

Unipak A/S  
Marktoften 3C  
8464 Galten  
Denmark

**E-mail**

sales@unipak.dk

**SDS date**

28-04-2015

**SDS Version**

1.0

### 1.4. Emergency telephone number

+45 8626 1177 (normal opening time)

These services are only available to health professionals.

The UK National Poisons Emergency number is 0870 600 6266

Use your national or local emergency number

See section 4 "First aid measures"

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Aerosol 1, // H229, H222

See full text of H/R-phrases in section 2.2.

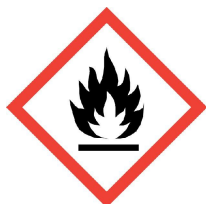
**DPD/DSD Classification**

Extremely flammable (F+).

Extremely flammable (R12).

### 2.2. Label elements

**Hazard pictogram(s)**



**Signal word**

Danger!

**Hazard statement(s)**

Extremely flammable aerosol. (H222)  
 Pressurised container: May burst if heated. (H229)

<b>Safety statement(s)</b>	General	-
	Prevention	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210) Do not spray on an open flame or other ignition source. (P211) Do not pierce or burn, even after use. (P251)
	Response	-
	Storage	Store in a well-ventilated place. (P403) Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. (P410+P412)
	Disposal	-

**Identity of the substances primarily responsible for the major health hazards**

-

**2.3. Other hazards**

**Additional labelling**

-

**Additional warnings**

-

**VOC**

-

**SECTION 3: Composition/information on ingredients**

**3.1/3.2. Substances**

NAME: isobutane  
 IDENTIFICATION NOS.: CAS-no: 75-28-5 EC-no: 200-857-2 Index-no: 601-004-00-0  
 CONTENT: 50-70%  
 DSD CLASSIFICATION: F+; R12  
 CLP CLASSIFICATION: Flam. Gas 1  
 H220

NAME: butane  
 IDENTIFICATION NOS.: CAS-no: 106-97-8 EC-no: 203-448-7 Index-no: 601-004-00-0  
 CONTENT: 50-70%  
 DSD CLASSIFICATION: F+; R12  
 CLP CLASSIFICATION: Flam. Gas 1  
 H220

NAME: propane  
 IDENTIFICATION NOS.: CAS-no: 74-98-6 EC-no: 200-827-9 Index-no: 601-003-00-5  
 CONTENT: 50-70%  
 DSD CLASSIFICATION: F+; R12  
 CLP CLASSIFICATION: Flam. Gas 1  
 H220

NAME: pentane  
 IDENTIFICATION NOS.: CAS-no: 78-78-4 EC-no: 201-142-8 Index-no: 601-006-00-1  
 CONTENT: <2%  
 DSD CLASSIFICATION: F+; R12 Xn; R65 R66 R67 N; R51-53  
 CLP CLASSIFICATION: Flam. Liq. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2  
 H225, H304, H336, H411, EUH066  
 NOTE: S

(\*) See full text of H/R-phrases in chapter 16. Occupational exposure limits are listed in section 8, if these are available.

S = Organic solvent

## Other informations

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor, if in doubt about the injured person's condition or if the symptoms continue. Never give an unconscious person water or similar.

#### Inhalation

Get the injured person into fresh air. Make sure there is always someone with the injured person. Prevent shock by keeping the injured person warm and calm. If the person stops breathing, give mouth-to-mouth resuscitation. If unconscious, roll the injured person onto side with the top leg bent at both knee and hip. Call an ambulance.

#### Skin contact

Remove contaminated clothing and shoes at once. Skin that has come in contact with the material must be washed thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

#### Eye contact

Remove contact lenses. Flush eyes immediately with plenty of water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. If irritation continues, contact a doctor.

#### Ingestion

Give the person plenty to drink and stay with the person. If the person feels unwell, contact a doctor immediately and take this safety data sheet or the label from the product with you. Do not induce vomiting unless recommended by the doctor. Hold head facing down so that no vomit runs back into the mouth and throat.

#### Burns

Rinse with water until the pain stops and continue for 30 minutes.

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

Organic solvents can reduce the skin's natural layer of fat. Repeated and long-term contact with the product can cause redness and irritation.

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

No special

#### Information to medics

Bring this safety data sheet.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Water jets should not be used, since they can spread the fire.

### 5.2. Special hazards arising from the substance or mixture

If the product is exposed to high temperatures, as in the case of fire, dangerous catabolic substances are produced. These are: Carbon oxides. Fire will result in thick black smoke. Exposure to catabolic products can damage your health. Fire fighters should use proper protection gear. Closed containers, which are exposed to fire, should be cooled with water. Do not let fire-extinguishing water run into sewers and other water courses.

### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapours from waste material. Stores that have not ignited must be cooled by water mist. Where possible, remove flammable materials. Make sure there is sufficient ventilation.

### 6.2. Environmental precautions

No specific requirements.

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

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. Cleaning should be done as far as possible using normal cleaning agents. Solvents should be avoided.

### 6.4. Reference to other sections

See section on "Disposal considerations" with regard to the handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Smoking, consumption of food or liquid, and storage of tobacco, food or liquids are not allowed in the workrooms. See section on 'Exposure controls/personal protection' for information on personal protection.

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

Always store in containers of the same material as the original. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Must be stored in a cool and ventilated area, away from possible sources of combustion.

#### Storage temperature

10 – 45°C

### 7.3. Specific end use(s)

This product should only be used for applications described in Section 1.2

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### OEL

pentane (EH40, 2005)

Long-term exposure limit (8-hour TWA reference period): 600 ppm | 1800 mg/m<sup>3</sup>

Short-term exposure limit (15-minute reference period): - ppm | - mg/m<sup>3</sup>

butane (EH40, 2005)

Long-term exposure limit (8-hour TWA reference period): 600 ppm | 1450 mg/m<sup>3</sup>

Short-term exposure limit (15-minute reference period): 750 ppm | 1810 mg/m<sup>3</sup>

#### DNEL / PNEC

DNEL (pentane): 3000 mg/m<sup>3</sup> - Exposure: Inhalation - Duration: Long term – Systemic effects - Workers - Remarks: Supplier

DNEL (pentane): 432 mg/kg/day - Exposure: Dermal - Duration: Long term – Systemic effects - Workers - Remarks: Supplier

### 8.2. Exposure controls

Compliance with the stated exposure limits values should be checked on a regular basis.

#### General recommendations

▼ Observe general occupational hygiene.

#### Exposure scenarios

If there is an appendix to this safety data sheet, the indicated exposure scenarios must be complied.

#### Exposure limits

Trade users are covered by the rules of the working environment legislation on maximum concentrations for exposure. See work hygiene threshold values below.

#### Appropriate technical measures

Airborne gas and dust concentrations must be kept as low as possible and below the current threshold values (see below). Use for example an exhaust system if the normal air flow in the work room is not sufficient. Make sure that eyewash and emergency showers are clearly marked.

#### Hygiene measures

Whenever you take a break in using this product and when you have finished using it, all exposed areas of the body must be washed. Always wash hands, forearms and face.

#### Measures to avoid environmental exposure

No specific requirements.

### Individual protection measures, such as personal protective equipment

According to EC-Regulation 1907/2006 (REACH)



#### Generally

Only CE-marked personal protection equipment should be used. Use only CE marked protective equipment.

#### Respiratory Equipment

Recommended: A.

#### Skin protection

No specific requirements.

#### Hand protection

Recommended: Nitrile rubber.

#### Eye protection

Use face shield. Use safety glasses with a side shield as an alternative.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Form	Colour	Odour	pH	Viscosity	Density (g/cm <sup>3</sup> )
Aerosol	-	None	-	-	-

#### Phase changes

Melting point (°C)	Boiling point (°C)	Vapour pressure (mm Hg)
-	-	-

#### Data on fire and explosion hazards

Flashpoint (°C)	Ignition (°C)	Self ignition (°C)
-	-	-
Explosion limits (Vol %)	Oxidizing properties	
-	-	

#### Solubility

Solubility in water	n-octanol/water coefficient
Insoluble	-

### 9.2. Other information

Solubility in fat	Additional information
-	N/A

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available

### 10.2. Chemical stability

The product is stable under the conditions, noted in the section on "Handling and storage".

### 10.3. Possibility of hazardous reactions

No special

### 10.4. Conditions to avoid

Avoid static electricity.

### 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reductants agents.

### 10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

Substance	Species	Test	Route of exposure	Result
pentane	Rat	LD50	Oral	> 5000mg/kg
pentane	Rat	LC50	Inhalation	> 25,3 mg/L 4h

According to EC-Regulation 1907/2006 (REACH)

butane	Rat	LC50	Inhalation	1237 mg/L 2h
<b>Skin corrosion/irritation</b>				
No data available.				
<b>Serious eye damage/irritation</b>				
No data available.				
<b>Respiratory or skin sensitisation</b>				
No data available.				
<b>Germ cell mutagenicity</b>				
No data available.				
<b>Carcinogenicity</b>				
No data available.				
<b>Reproductive toxicity</b>				
No data available.				
<b>STOT-single exposure</b>				
No data available.				
<b>STOT-repeated exposure</b>				
No data available.				
<b>Aspiration hazard</b>				
No data available.				
<b>Long term effects</b>				

Neurotoxic effect: This product contains organic solvents, which can have an effect on the nervous system. Symptoms of neurotoxicity can be: loss of appetite, headache, dizziness, whistling in the ears, tingling sensations in the skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer. The skin will then be more prone to absorb dangerous substances, e.g. allergens.

## SECTION 12: Ecological information

### 12.1. Toxicity

Substance	Species	Test	Test duration	Result
pentane	Daphnia	EC50	48h	2,3 mg/L
pentane	Fish	LC50	96h	12,8 mg/L
pentane	Algae	EC50	96h	5,2 mg/L
butane	Daphnia	LC50	48h	14,22 mg/L
butane	Fish	LC50	96h	27,98 mg/L
butane	Algae	EC50	96h	7,71 mg/L

### 12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
pentane	No data available.		

### 12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BFC
pentane	No	2,72	No data available

### 12.4. Mobility in soil

pentane : Log Koc= 2,232368, Calculated from LogPow (Moderate mobility potential. ). and isobutane : Log Koc= 0,941571, Calculated from LogPow (High mobility potential. ).

### 12.5. Results of PBT and vPvB assessment

No data available

### 12.6. Other adverse effects

No data available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

The product is covered by the regulations on dangerous waste.

#### Waste

EWC code  
16 05 04

#### Specific labelling

-

According to EC-Regulation 1907/2006 (REACH)

### Contaminated packing

Packaging which contains leftovers from the product must be disposed of in the same way as the product.

## SECTION 14: Transport information

This product is covered by the conventions on dangerous goods.

### 14.1 – 14.4

#### ADR/RID

14.1. UN number	1950
14.2. UN proper shipping name	AEROSOLS, FLAMMABLE
14.3. Transport hazard class(es)	2.1
14.4. Packing group	-
Notes	-
Tunnel restriction code	-

#### IMDG

UN-no.	1950
Proper Shipping Name	AEROSOLS, FLAMMABLE
Class	2.1
PG*	-
EmS	F-D, S-U
MP**	-
Hazardous constituent	-

#### IATA/ICAO

UN-no.	
Proper Shipping Name	
Class	
PG*	

### 14.5. Environmental hazards

-

### 14.6. Special precautions for user

-

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No data available

(\*) Packing group

(\*\*) Marine pollutant

## SECTION 15: Regulatory information

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

#### Restrictions for application

People under the age of 18 must not be exposed to this product cf. Council Directive 94/33/EC.

#### Demands for specific education

-

#### Additional information

-

#### Sources

EC regulation 1907/2006 (REACH)

Directive 2000/532/EC

EC Regulation 1272/2008 (CLP)

### 15.2. Chemical safety assessment

No

## SECTION 16: Other information

Full text of H/R-phrases as mentioned in section 3

According to EC-Regulation 1907/2006 (REACH)

R12 - Extremely flammable.  
R51 - Toxic to aquatic organisms.  
R53 - May cause long-term adverse effects in the aquatic environment.  
R65 - Harmful: may cause lung damage if swallowed.  
R66 - Repeated exposure may cause skin dryness or cracking.  
R67 - Vapours may cause drowsiness and dizziness.  
H220 - Extremely flammable gas.  
H225 - Highly flammable liquid and vapour.  
H304 - May be fatal if swallowed and enters airways.  
H336 - May cause drowsiness or dizziness.  
H411 - Toxic to aquatic life with long lasting effects.  
EUH066 - Repeated exposure may cause skin dryness or cracking.

**The full text of identified uses as mentioned in section 1**

-

**Other symbols mentioned in section 2**



**Other**

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.  
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.  
A change (in proportion to the last essential change (first cipher in SDS version)) is marked with a blue triangle.

**The safety data sheet is validated by**

**Date of last essential change  
(First cipher in SDS version)**

-

**Date of last minor change  
(Last cipher in SDS version)**

-