

DUOTEMPI PMY 45

Version 1.3

Revision Date 09.02.2016

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1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : DUOTEMPI PMY 45

Article-No. : 005066

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

Use of the Substance/Mixture : Lubricant

Recommended restrictions on use : Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

KLÜBER LUBRICATION MÜNCHEN
Geisenhausenerstrasse 7
D-81379 München
Deutschland
Phone: +49 (0) 897876-0
Fax: +49 (0) 897876-333

E-mail address : mcm@klueber.com
Responsible/issuing person : Material Compliance Management

National contact : Klüber Lubrication Great Britain Limited
Unit 10 Pennine Business Park
Longbow Close
Huddersfield
West Yorkshire HD2 1GQ
Great Britain
Tel: +44-1422-205115
Fax: +44-1422-206073
sales@uk.klueber.com

1.4 Emergency telephone number

+49 89 7876 700 (24 hrs)

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Serious eye damage, Category 1 H318: Causes serious eye damage.

Classification (67/548/EEC, 1999/45/EC)

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Irritant

R41: Risk of serious damage to eyes.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



Signal word : Danger

Hazard statements : H318 Causes serious eye damage.

Precautionary statements : **Prevention:**
P280 Wear eye protection/ face protection.
Response:
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

Hazardous components which must be listed on the label:
1305-62-0 calcium dihydroxide

2.3 Other hazards

3. Composition/information on ingredients

3.2 Mixtures

Chemical nature : Synthetic hydrocarbon oil
Mineral oil.
solid lubricant
special lithium soap

Hazardous components

Chemical Name	CAS-No. EC-No. Index-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
calcium dihydroxide	1305-62-0 215-137-3	Xi; R37/38 Xi; R41	Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335	>= 30 - < 50
Lithium special soap	1282612-35-4 / 01- 0000017926- 59-0001 / / /	R52/53	Aquatic Chronic 3; H412	>= 2.5 - < 10

For the full text of the R-phrases mentioned in this Section, see Section 16.

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For the full text of the H-Statements mentioned in this Section, see Section 16.

4. First aid measures

4.1 Description of first aid measures

- If inhaled : Call a physician or poison control centre immediately.
Remove person to fresh air. If signs/symptoms continue, get medical attention.
Keep patient warm and at rest.
If unconscious place in recovery position and seek medical advice.
Keep respiratory tract clear.
If breathing is irregular or stopped, administer artificial respiration.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.
In case of contact, immediately flush skin with plenty of water.
Get medical attention if irritation develops and persists.
Wash clothing before reuse.
Thoroughly clean shoes before reuse.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.
Get medical attention immediately.
- If swallowed : Move the victim to fresh air.
If unconscious place in recovery position and seek medical advice.
Keep respiratory tract clear.
Do not induce vomiting without medical advice.
Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : Pain
- Risks : Causes serious eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : No information available.

5. Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : High volume water jet

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: High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Fire may cause evolution of:
Carbon oxides
Metal oxides
Nitrogen oxides (NOx)

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. Exposure to decomposition products may be a hazard to health.

: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. In the case of respirable dust and/or fumes, use self-contained breathing apparatus. Exposure to decomposition products may be a hazard to health.

Further information : Standard procedure for chemical fires.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas. Use personal protective equipment. Ensure adequate ventilation. Do not breathe vapours or spray mist. Refer to protective measures listed in sections 7 and 8.

: Evacuate personnel to safe areas. Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust). Avoid breathing dust. Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Try to prevent the material from entering drains or water courses. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal.

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6.4 Reference to other sections

For personal protection see section 8.

7. Handling and storage

7.1 Precautions for safe handling

- Advice on safe handling :
- Do not breathe vapours or spray mist.
 - In case of insufficient ventilation, wear suitable respiratory equipment.
 - For personal protection see section 8.
 - Smoking, eating and drinking should be prohibited in the application area.
 - Wash hands and face before breaks and immediately after handling the product.
 - Do not get in eyes or mouth or on skin.
 - Do not get on skin or clothing.
 - Do not ingest.
 - Do not repack.
 - Do not re-use empty containers.
 - These safety instructions also apply to empty packaging which may still contain product residues.
 - Keep container closed when not in use.
 - Avoid inhalation of vapour or mist.
 - Avoid contact with skin and eyes.
- : Avoid contact with skin and eyes.
- For personal protection see section 8.
 - Smoking, eating and drinking should be prohibited in the application area.
 - Wash hands and face before breaks and immediately after handling the product.
 - Do not get in eyes or mouth or on skin.
 - Do not get on skin or clothing.
 - Do not ingest.
 - Do not repack.
 - These safety instructions also apply to empty packaging which may still contain product residues.
 - Keep container closed when not in use.

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers :
- Store in original container.
 - Keep container closed when not in use.
 - Keep in a dry, cool and well-ventilated place.
 - Containers which are opened must be carefully resealed and kept upright to prevent leakage.
 - Store in accordance with the particular national regulations.
 - Keep in properly labelled containers.

7.3 Specific end use(s)

- : Consult the technical guidelines for the use of this

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substance/mixture.

8. Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value type	Control parameters	Update	Basis
calcium dihydroxide	1305-62-0	TWA	5 mg/m ³	1991-07-05	91/322/EEC
Further information:	6: Existing scientific data on health effects appear to be particularly limited Indicative				
calcium dihydroxide	1305-62-0	TWA	5 mg/m ³	2005-04-06	GB EH40
Further information:	2: Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used				

DNEL

calcium dihydroxide

: End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term local effects
Value: 1 mg/m³

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Acute local effects
Value: 4 mg/m³

PNEC

calcium dihydroxide

: Fresh water
Value: 0.49 mg/l

Marine water
Value: 0.32 mg/l

Intermittent use/release
Value: 0.49 mg/l

Microbiological Activity in Sewage Treatment Systems
Value: 3 mg/l

Soil
Value: 1080 mg/kg

8.2 Exposure controls

Engineering measures

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Effective exhaust ventilation system

Personal protective equipment

- Respiratory protection : Not required; except in case of aerosol formation.
Filter type P
- Hand protection : For prolonged or repeated contact use protective gloves.
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.
In case of contact through splashing:

: Nitrile rubber
Protective index Class 1
- Eye protection : Tightly fitting safety goggles
- Hygiene measures : Wash face, hands and any exposed skin thoroughly after handling.
- Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Environmental exposure controls

- General advice : Try to prevent the material from entering drains or water courses.
Local authorities should be advised if significant spillages cannot be contained.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Form : paste
- Colour : beige
- Odour : oily
- Odour Threshold : No data available
- pH : No data available
- Melting point/range : No data available
- Boiling point/boiling range : No data available

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Flash point	: Not applicable
Evaporation rate	: No data available
Flammability (solid, gas)	: Combustible Solids
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Vapour pressure	: < 0.001 hPa, 20 °C
Relative vapour density	: No data available
Density	: 1.20 g/cm ³ , 20 °C
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Ignition temperature	: No data available
Viscosity, dynamic	: Not applicable
Viscosity, kinematic	: Not applicable
Oxidizing properties	: No data available

9.2 Other information

Sublimation point	: No data available
Bulk density	: No data available

10. Stability and reactivity

10.1 Reactivity

None reasonably foreseeable.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No conditions to be specially mentioned.

10.5 Incompatible materials

Materials to avoid : No materials to be especially mentioned.

10.6 Hazardous decomposition products

Hazardous decomposition products : No decomposition if stored and applied as directed.

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11. Toxicological information

11.1 Information on toxicological effects

Product

- Acute inhalation toxicity : The substance or mixture has no acute inhalation toxicity
- Skin corrosion/irritation : Result: No skin irritation, Classification: No skin irritation, Information given is based on tests on the mixture itself., According to the classification criteria of the European Union, the product is not considered as being a skin irritant.
- Serious eye damage/eye irritation : Risk of serious damage to eyes.
- Respiratory or skin sensitisation : This information is not available.
- Germ cell mutagenicity
- Genotoxicity in vitro : No data available
- Genotoxicity in vivo : No data available
- Carcinogenicity : No data available
- Reproductive toxicity : No data available
- Teratogenicity : No data available
- STOT - single exposure : Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
- Repeated dose toxicity : This information is not available.
- STOT - repeated exposure : Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
- Aspiration toxicity : This information is not available.
- Acute effects (Assessment) : No skin irritation, Not a respiratory irritant
- Further information : Ingestion causes irritation of upper respiratory system and gastrointestinal disturbance.

Components:

calcium dihydroxide :

- Acute oral toxicity : LD50: > 2,000 mg/kg, Rat(female), OECD Test Guideline 425
- Acute dermal toxicity : LD50: > 2,500 mg/kg, Rabbit, OECD Test Guideline 402
- Skin corrosion/irritation : Rabbit, Result: Irritating to skin., Classification: Irritating to skin., OECD Test Guideline 404
- Serious eye damage/eye : Rabbit, Result: Risk of serious damage to eyes.,

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irritation : Classification: Risk of serious damage to eyes., OECD Test Guideline 405

Respiratory or skin sensitisation : Result: Does not cause skin sensitisation., Classification: Does not cause skin sensitisation.

Germ cell mutagenicity

Genotoxicity in vitro : Ames test, Result: negative, OECD Test Guideline 471
: Chromosome aberration test in vitro, Result: negative, OECD Test Guideline 473

STOT - single exposure : Assessment: May cause respiratory irritation.

Lithium special soap :

Acute oral toxicity : LD50: > 2,000 mg/kg, Rat, OECD Test Guideline 401

Acute dermal toxicity : LD50: > 2,000 mg/kg, Rat, OECD Test Guideline 402

Skin corrosion/irritation : Rabbit, Result: No skin irritation, Classification: No skin irritation, OECD Test Guideline 404

Serious eye damage/eye irritation : Rabbit, Result: No eye irritation, Classification: No eye irritation, OECD Test Guideline 405

Respiratory or skin sensitisation : Guinea pig, Result: Did not cause sensitisation on laboratory animals., Classification: Did not cause sensitisation on laboratory animals., OECD Test Guideline 406

Germ cell mutagenicity

Genotoxicity in vitro : Result: negative, OECD Test Guideline 471

12. Ecological information

12.1 Toxicity

Product:

Toxicity to fish : No data available

Toxicity to daphnia and other aquatic invertebrates : No data available

Toxicity to algae : No data available

Toxicity to bacteria : No data available

Components:

calcium dihydroxide :

Toxicity to fish : LC50: 160 mg/l, 96 h, Gambusia affinis (Mosquito fish)

Toxicity to daphnia and other aquatic invertebrates : EC50: 49.1 mg/l, 48 h, Daphnia magna (Water flea), static test, OECD Test Guideline 202, GLP: yes

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Toxicity to algae : EC50: 184.57 mg/l, 72 h, Pseudokirchneriella subcapitata (green algae), static test, OECD Test Guideline 201, GLP: yes

Lithium special soap :

Toxicity to fish : LC50: > 100 mg/l, 96 h, Danio rerio (zebra fish), static test, OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50: > 100 mg/l, 48 h, Daphnia magna (Water flea), OECD Test Guideline 202

Toxicity to algae : EC50: 78.2 mg/l, 72 h, Desmodesmus subspicatus (green algae), Growth inhibition

Toxicity to bacteria : EC50: > 1,000 mg/l, 3 h, activated sludge, Respiration inhibition, OECD Test Guideline 209

12.2 Persistence and degradability

Product:

Biodegradability : No data available

Physico-chemical removability : No data available

Components:

calcium dihydroxide :

Biodegradability : The methods for determining the biological degradability are not applicable to inorganic substances.

Lithium special soap :

Biodegradability : 27.5 %, Result: Not rapidly biodegradable, Exposure time: 28 d

12.3 Bioaccumulative potential

Product:

Bioaccumulation : This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT)., This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

12.4 Mobility in soil

Product:

Mobility : No data available
Distribution among environmental compartments : No data available

12.5 Results of PBT and vPvB assessment

Product:

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Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Components:

calcium dihydroxide :

Assessment : Not applicable

12.6 Other adverse effects

Product:

Additional ecological information : No information on ecology is available.

13. Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
: Waste codes should be assigned by the user based on the application for which the product was used.

Contaminated packaging : Empty containers can be landfilled, when in accordance with the local regulations.

14. Transport information

14.1 UN number

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.2 Proper shipping name

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.3 Transport hazard class

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

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Not dangerous goods

14.4 Packing group

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.5 Environmental hazards

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.6 Special precautions for user

No data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available

15. Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

Major Accident Hazard Legislation : 96/82/EC Update: Not applicable

15.2 Chemical Safety Assessment

This information is not available.

16. Other information

Full text of R-phrases referred to under sections 2 and 3

R37/38	Irritating to respiratory system and skin.
R41	Risk of serious damage to eyes.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of H-Statements referred to under sections 2 and 3.

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according to Regulation (EC) No. 1907/2006 - GB



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H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Further information

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