

Product: **Ekaland DPTT PD**

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SDS No.: 100017-100 (Version 1.1)

Date 16.03.2015 (*Cancel and replace* : 10.01.2014)

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Identification of the product

Substance name: Ekaland DPTT PD
REACH Registration Number: 01-2119974270-39-0000
EC Nr: 213-537-2
CAS-No.: 971-15-3

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

Use of the Substance/Mixture : Curing chemical

1.3. Details of the supplier of the safety data sheet

Supplier	MLPC International 209, avenue Charles Despiau F-40370 RION-LES-LANDES Tel. + 33 (0) 5 58 57 02 00 http://www.mlpc-intl.com
E-mail address	fds@mlpc-intl.com

1.4. Emergency telephone number

+44 (0) 1235 239 670 (Carechem24 – MLPC 29003) **Europe**
001866 928 0789 (Carechem24 – MLPC 29003) **Americas**
+65 3158 1074 (Carechem24 – MLPC 29003) **Asia-pacific region** (excluding China)
+86 400 6267911 **China mainland**

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008):
Chronic aquatic toxicity, 4, H413

Classification (Directive 67/548/EEC):

R53

Additional information:

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

2.2. Label elements

Label elements (REGULATION (EC) No 1272/2008):

Hazardous components which must be listed on the label:
CAS-No. : 971-15-3

Bis(piperidinothiocarbonyl) hexasulphide

Hazard statements:

H413 : May cause long lasting harmful effects to aquatic life.

Precautionary statements:

Prevention:

P273 : Avoid release to the environment.

2.3. Other hazards : None.

Other:

Results of PBT and vPvB assessment : According to REACH regulation, annex XIII, the substance does not meet PBT and vPvB criteria.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Chemical Name ¹	EC-No.	CAS-No.	Concentration	Classification Directive 67/548/EEC	Classification REGULATION (EC) No 1272/2008
Bis(piperidinothiocarbonyl) hexasulphide	213-537-2	971-15-3	> 80 %	R53	Aquatic Chronic 4; H413

Hazardous impurities :

Chemical Name ¹	EC-No.	CAS-No.	Concentration	Classification Directive 67/548/EEC	Classification REGULATION (EC) No 1272/2008
Sulfur (N° ANNEX: 016-094-00-1)	231-722-6	7704-34-9	< 5,0 %	Xi; R38	Skin Irrit. 2; H315
Bis(piperidinothiocarbonyl) tetrasulphide	204-406-0	120-54-7	< 5,0 %	WEL substance	
Bis(piperidinothiocarbonyl) disulphide (N° ANNEX: 613-109-00-9)	202-328-1	94-37-1	< 5,0 %	Xi; R36/37/38 Xi; R36/37/38 Xi; R36/37/38 R43 R43 R43 Xi; R36/37/38 R43	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 STOT SE 3; H335

¹: See chapter 14 for Proper Shipping Name

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

4. FIRST AID MEASURES

4.1. & 4.2. Description of necessary first-aid measures & Most important symptoms/effects, acute and delayed:

General advice:

Take off immediately all contaminated clothing.

Inhalation:

Move to fresh air. Oxygen or artificial respiration if needed. Consult a physician.

Skin contact:

Wash off immediately with soap and plenty of water.

Eye contact:

Wash well-open eyes immediately, abundantly and thoroughly with water. Consult an ophthalmologist immediately.

Ingestion:

If swallowed, do not induce vomiting - seek medical advice.

Protection of first-aiders:

In case of insufficient ventilation, wear suitable respiratory equipment.

4.3. Indication of immediate medical attention and special treatment needed, if necessary : No data available.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Water, Foam, Dry powder

Unsuitable extinguishing media: All other extinguishants

5.2. Special hazards arising from the substance or mixture:

Thermal decomposition gives :, Nitrogen oxides (NOx), Sulphur oxides

5.3. Advice for firefighters:

Specific methods:

Suppress gases, fumes and/or dust with water spray jet.

Special protective actions for fire-fighters:

Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

Avoid contact with skin and eyes and inhalation of dust.

6.2. Environmental precautions:

Do not let product enter drains. Do not contaminate surface water.

6.3. Methods and materials for containment and cleaning up:

Recovery:

Shovel or sweep up. Recover the product and place in a dry labelled container.

Elimination:

Destroy the product by incineration (in accordance with local and national regulations).

6.4. Reference to other sections: None.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling:

Technical measures/Precautions:

Storage and handling precautions applicable to products: Dust forming. Provide appropriate exhaust ventilation at machinery. Provide showers, eye-baths

Safe handling advice:

In case of dust formation, wear a dust mask.

Hygiene measures:

General industrial hygiene practice. Avoid contact with skin, eyes and clothing. Avoid breathing dust. Wash hands after handling. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities:

Store protected from moisture and heat.

Incompatible products:

Strong acids, Oxidizing agents

Packaging material:

Recommended: Paper bags

7.3. Specific end use(s): None.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters:

Exposure Limit Values (dust)

Source	Date	Value type	Value (ppm)	Value (mg/m3)	Remarks
ACGIH (US)	02 2012	TWA	–	10	Inhalable particles.
ACGIH (US)	02 2012	TWA	–	3	Respirable particles.

Exposure Limit Values

Not relevant

Derived No Effect Level (DNEL):

End Use	Inhalation	Ingestion	Skin contact
Workers	11,7 mg/m3 (LT, SE)		3,33 mg/kg (LT, SE)
Consumers	2,9 mg/m3 (LT, SE)	1,67 mg/kg (LT, SE)	1,67 mg/kg (LT, SE)

LE : Local effects, SE : Systemic effects, LT : Long term, ST : Short term

Predicted No Effect Concentration: No data available.

8.2. Exposure controls:

General protective measures: Ensure sufficient air exchange and/or exhaust in work areas

Personal protective equipment:

Respiratory protection: Effective dust mask
Hand protection: Impervious gloves
Eye/face protection: Tightly fitting safety goggles
Skin and body protection: At the workplace : Protective suit.

Environmental exposure controls: See chapter 6

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance:

Physical state (20°C): solid
Form: powder
Colour: beige
Granulometry: D50 : 0,017 mm (OECD 110)
Odour: odourless
Olfactory threshold: No data available.
pH: Not relevant
Melting point/range : 115 - 130 °C (OECD Test Guideline 102)
Boiling point/boiling range: No data available.
Flash point: Not relevant
Evaporation rate: No data available.
Flammability (solid, gas):
Flammability: Non flammable product (Standard A10)
Vapour pressure: < 0,0000001 Pa , at 20 °C (calculated)
Vapour density: No data available.
Density: approx. 1,4 g/cm³ , at 20 °C Molten form (Literature)
Bulk density: approx. 0,532 kg/m³ , at 20 °C
Water solubility: 10,48 µg/l at 20 °C (OECD Test Guideline 105)
Partition coefficient: n-octanol/water: log Kow : = 4,43, Potentially bioaccumulable. (calculated)
Auto-ignition temperature: No data available.
Decomposition temperature: No data available.
Viscosity, dynamic: Not applicable
Explosive properties:
Explosivity: Not relevant (due to the chemical structure)
Oxidizing properties: Not relevant (due to the chemical structure)

9.2. Other data:

pKA: None.
Molecular weight: 448,82 g/mol

10. STABILITY AND REACTIVITY

10.1. & 10.2. Reactivity & Chemical stability:

Product stable in the absence of moisture

10.3. Possibility of hazardous reactions: No data available.

10.4. Conditions to avoid:

Store protected from moisture and heat. Protect from light. Keep away from direct sunlight.

10.5. Incompatible materials to avoid: No data available.

10.6. Hazardous decomposition products:

Nitrogen oxides (NOx), Carbon dioxide (CO₂), Sulphur oxides

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects:

Acute toxicity:

- Inhalation:** **Slightly or not harmful by inhalation**
- In animals : No mortality/4 h/Rat: > 2,83 mg/l (Method: OECD Test Guideline 403) (Aerosol)
- Ingestion:** **Slightly or not harmful by ingestion**
- In animals : No mortality/Rat: > 2.000 mg/kg (Method: OECD Test Guideline 423)
- Dermal:** **Slightly or not harmful in contact with skin**
- In animals : No mortality/Rat: > 2.000 mg/kg (Method: OECD Test Guideline 402)

Local effects (Corrosion / Irritation / Serious eye damage):

- Skin contact:** **Non irritating to skin**
- In animals : (EPISKIN Human Skin Model Test)
- Eye contact:** **Not irritating to the eyes.**
- In animals : (OECD Test Guideline 405, Rabbit)

Respiratory or skin sensitisation:

- Inhalation:** No data available.
- Skin contact:** **Not a skin sensitizer**
- In animals : No skin allergy was observed (Method: OECD Test Guideline 429 LLNA: Local Lymph Node Assay, Mouse)

CMR effects :

Mutagenicity: **Overall not genotoxic**

In vitro

Ames test: Inactive (Method: OECD Test Guideline 471)
In vitro gene mutations test on mammalian cells: Active (Method: OECD Test Guideline 476)

In vivo

Micronucleus test in vivo rat: Inactive (Method: OECD Test Guideline 474)

Carcinogenicity: No data available.

Reproductive toxicity:

Fertility: **Based on the available data, the substance is not suspected of having reprotoxic potential.**

- In animals : No toxic effects for reproduction
NOAEL (Parental toxicity): 1.000 mg/kg bw/day
NOAEL (Fertility): 1.000 mg/kg bw/day
NOAEL (Developmental Toxicity): 1000 mg/kg bw/day
(Method: OECD Test Guideline 421, Rat, By oral route)

Specific target organ toxicity :

- Single exposure :** No data available.
- Repeated exposure:** **The substance or mixture is not classified as specific target organ toxicant, repeated exposure.**
- In animals : By oral route: No specific toxic effects
NOAEL= 1.000 mg/kg (Method: OECD Test Guideline 407, Rat, 4 Weeks)

Aspiration hazard: Not applicable

12. ECOLOGICAL INFORMATION

Ecotoxicology Assessment: All available data on this product and/or the components quoted in section 3 and/or the analogue substances/metabolites have been taken into account for the hazard assessment.

12.1. Toxicity :

Aquatic plants: **Slightly harmful to algae**
EC50, 72 h (Pseudokirchneriella subcapitata) : > 0,079 mg/l (Method: OECD Test Guideline 201, growth rate)
No effect up to the limit of solubility

Microorganisms:
NOEC, 28 d : = 100 mg/l
No effect up to the limit of solubility

12.2. Persistence and degradability :

Biodegradation (In water): **Not readily biodegradable.**
0 % after 28 d (Method: OECD Test Guideline 301 C)

12.3. Bioaccumulative potential :

Bioaccumulation: **Not bioaccumulable**
Partition coefficient: n-octanol/water: log Kow : = 4,43, Potentially bioaccumulable. (Method: calculated)

12.4. Mobility in soil - Distribution among environmental compartments:

Absorption / desorption:
log Koc: = 4,56 (Method: calculated)

12.5. Results of PBT and vPvB assessment :

According to REACH regulation, annex XIII, the substance does not meet PBT and vPvB criteria.

12.6. Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment:

- Disposal of product:** Destroy the product by incineration (in accordance with local and national regulations).
- Disposal of packaging:** Destroy packaging by incineration at an approved waste disposal site (in accordance with local and national regulations).

14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

Safety data sheets: according to Regulation (EC) No. 1907/2006

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

15.2. Chemical Safety Assessment:

A Chemical Safety Assessment has been carried out for this substance.

INVENTORIES:

EINECS: Conforms to
TSCA: Conforms to
AICS: Conforms to
DSL: All components of this product are on the Canadian DSL.
ENCS (JP): Conforms to
KECI (KR): Conforms to
PICCS (PH): Conforms to
IECSC (CN): Conforms to
NZIOC: Conforms to

16. OTHER INFORMATION

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

R36/37/38 Irritating to eyes, respiratory system and skin.
R38 Irritating to skin.
R43 May cause sensitisation by skin contact.
R53 May cause long-term adverse effects in the aquatic environment.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H413 May cause long lasting harmful effects to aquatic life.

Update:

Safety datasheet sections which have been updated:	Type:
9. PHYSICAL AND CHEMICAL PROPERTIES	Revisions

Thesaurus:

NOAEL : No Observed Adverse Effect Level (NOAEL)
LOAEL : Lowest Observed Adverse Effect Level (LOAEL)
bw : Body weight
food : oral feed
dw : Dry weight
vPvB : very Persistent and very Bioaccumulative
PBT : Persistent, Bioaccumulative and Toxic

This information applies to the PRODUCT AS SUCH and conforming to specifications of ARKEMA. In case of formulations or mixtures, it is necessary to ascertain that a new danger will not appear. The information contained is based on our knowledge of the product, at the date of publishing and it is given quite sincerely. Users are advised of possible additional hazards when the product is used in applications for which it was not intended. This sheet shall only be used and reproduced for prevention and security purposes. The references to legislative, regulatory and codes of practice documents cannot be considered as exhaustive. It is the responsibility of the person receiving the product to refer to the totality of the official documents concerning the use, the possession and the handling of the product. It is also the responsibility of the handlers of the product to pass on to any subsequent persons who will come into contact with the product (usage, storage, cleaning of containers, other processes) the totality of the information contained within this safety data sheet and necessary for safety at work, the protection of health and the protection of environment.

NB: In this document the numerical separator of the thousands is the "." (point), the decimal separator is "," (comma).