

Product: **Ekaland ETU PD**

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SDS No.: 100023-100 (Version 1.4)

Date 10.07.2012 (*Cancel and replace* : 18.01.2011)

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

1.1. Identification of the product

Substance name: Ekaland ETU PD

REACH Registration Number: The transition time according to REACH Regulation, Article 23, is still not expired.

EC Nr: 202-506-9

CAS-No.: 96-45-7

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

Use of the Substance/Mixture : Vulcanization agent

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

001866 978 0789 (Carechem24 – MLPC 29003) **Americas**
+44 (0) 1235 239 670 (Carechem24 – MLPC 29003) **Europe**
+65 3158 1074 (Carechem24 – MLPC 29003) **Asia-pacific region** (excluding China)
+86 10 5100 3039 (Carechem – MLPC 29003) **China**

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No 1272/2008):

Oral: Acute toxicity, 4, H302

Reproductive toxicity, 1B, H360

Oral: Specific target organ toxicity - repeated exposure, 1, Thyroid gland, H372

Chronic aquatic toxicity, 3, H412

Classification (Directive 67/548/EEC):

Xn; R22

Repr.Cat.2; R61

R52/53

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:

No. in ANNEXE : 613-039-00-9

ethylene thiourea; imidazolidine-2-thione; 2-imidazoline-2-thiol

Hazard pictograms:



Signal word: **Danger**

Hazard statements:

- H302 : Harmful if swallowed.
- H360 : May damage fertility or the unborn child.
- H372 : Causes damage to organs through prolonged or repeated exposure.
- H412 : Harmful to aquatic life with long lasting effects.

Precautionary statements:

Prevention:

- P201 : Obtain special instructions before use.
- P202 : Do not handle until all safety precautions have been read and understood.
- P264 : Wash hands thoroughly after handling.
- P270 : Do not eat, drink or smoke when using this product.

Response:

P301 + P312 : IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.

Disposal:

P501 : Dispose of contents/ container to an approved incineration plant.

2.3. **Other hazards** : None.

Other:

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating, toxic (PBT), nor very persistent, very bioaccumulating (vPvB).

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. **Substances**

Chemical name of the substance¹: Ekaland ETU PD

Chemical Name ¹	EC-No.	CAS-No.	Concentration	Classification Directive 67/548/EEC	Classification Regulation (EC) No 1272/2008
Imidazolidine-2-thione	202-506-9	96-45-7	> 98 %	Xn; R22 Repr.Cat.2; R61	Acute Tox. 4 (Oral); H302 Repr. 1B; H360 STOT RE H373 STOT RE 1 (Oral); H372 Aquatic Chronic 3; H412

¹: See chapter 14 for Proper Shipping Name

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 patient from contaminated area to fresh air. Consult a doctor quickly.

Skin contact:

Wash immediately, abundantly and thoroughly with water. Consult a doctor quickly.

Eye contact:

Rinse immediately with plenty of water for at least 15 minutes. Consult an ophthalmologist.

Ingestion:

Do NOT induce vomiting. In case of problems : Consult a doctor.

Protection of first-aiders:

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 spray, Foam, Dry powder

5.2. Special hazards arising from the substance or mixture:

Thermal decomposition gives : Sulphur oxides, Nitrogenous derivatives

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:

Sweep up and shovel. Recover the product and place in a dry labelled container.

Elimination:

Incinerate the residues at an approved waste disposal site only.

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 and at places where dust can be generated. Provide showers, eye-baths.

Safe handling advice:

In case of dust formation, wear a dust mask.

Hygiene measures:

Follow general hygiene guidelines. Prohibit contact with skin and eyes and inhalation of dust. Wash hands after handling. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities:

Keep in a dry place.

Incompatible products:

Strong acids, Oxidizing agents

Packaging material:

Recommended: Paper bags

7.3. **Specific end uses:** None.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. **Control parameters:**

Exposure Limit Values Not relevant

Derived No Effect Level (DNEL):

End Use	Inhalation	Ingestion	Skin contact
Workers	1,20 mg/m ³ (LT, SE)		1,7 mg/kg (LT, SE)
Consumers	0,30 mg/m ³ (LT, SE)	0,009 mg/kg (LT, SE)	0,85 mg/kg (LT, SE)

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

Predicted No Effect Concentration (PNEC):

Compartment:	Value:
Fresh water	0,0264 mg/l
Marine water	0,00264 mg/l
Water (Intermittent release)	0,264 mg/l
Effects on waste water treatment plants	10 mg/l
Soil	0,01 mg/kg dw
Marine sediment	0,00994 mg/kg dw
Fresh water sediment	0,0994 mg/kg dw
Oral (Secondary Poisoning)	0,167 mg/kg food

8.2. **Exposure controls:**

Appropriate engineering controls: Provide appropriate exhaust ventilation at machinery.

Personal protective equipment:

Respiratory protection: Dust mask recommended.
Hand protection: Gloves
Eye/face protection: Tightly fitting safety goggles
Skin and body protection: 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: white
Granulometry: D50 : 0,026 mm
D10 : 0,010 mm
D90 : 0,045 mm

Odour: characteristic

Olfactory threshold: No data available.

pH: Not applicable

Melting point/range : 199 °C (OECD Test Guideline 102)

Boiling point/boiling range: No data available.

Flash point: Not applicable

Evaporation rate: No data available.

Flammability (solid, gas):

Flammability: Non flammable product (Standard A10)
Lower flammable limit : no data available
Upper flammable limit : no data available

Vapour pressure: < 1,33 hPa , at 25 °C (OECD Test Guideline 104)

Vapour density: No data available.

Density:	1,36 g/cm ³ , at 20 °C
Bulk density:	452 kg/m ³ , at 20 °C
Water solubility:	27,4 g/l at 20 °C (OECD Test Guideline 105)
Partition coefficient: n-octanol/water:	log Kow : -0,67 , at 20 °C, Not bioaccumulable
Autoignition temperature:	not applicable
Decomposition temperature:	240 °C
Viscosity:	No data available.
Explosive properties:	
Explosivity:	Not explosive, Not relevant (due to the chemical structure)
Oxidizing properties:	No data available.

9.2. Other data:

Solubility in other solvents:	Alcohols , Acetone , Chloroform Soluble in:
Surface tension:	65,7 mN/m at 23 °C
pKA:	None.
Molecular Weight:	102 g/mol

10. STABILITY AND REACTIVITY

10.1. & 10.2. **Reactivity & Chemical stability:** No data available.

10.3. **Possibility of hazardous reactions:** No data available.

10.4. **Conditions to avoid:**
Store protected from moisture.

10.5. **Incompatible materials to avoid:**
Oxidizing agents, Strong acids

10.6. Hazardous decomposition products:

Thermal decomposition:
Decomposition temperature: 240 °C
Thermal decomposition gives : sulfur oxides, nitrogen oxides (NO_x)

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects:

Acute toxicity:

Ingestion: • In animals :	Harmful by ingestion. LD50/rat: 940 mg/kg
Dermal: • In animals :	Slightly harmful in contact with skin LD50/rat: > 2.000 mg/kg (Method: OECD Test Guideline 402)

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

Skin contact: • In animals :	Non irritating to skin No skin irritation (OECD Test Guideline 404, rabbit)
Eye contact: • In animals :	Slightly irritating to eyes Mild eye irritation (OECD Test Guideline 405, rabbit)

Respiratory or skin sensitization:

Inhalation:	No data available.
Skin contact: • In man : • In animals :	Not a skin sensitizer Some cases of cutaneous sensitization reported Not a skin sensitizer (mouse)

CMR effects :

Mutagenicity: **According to available experimental data: Overall not genotoxic**

In vitro

Ames test in vitro: Overall not genotoxic (Method: OECD Test Guideline 471)
Chromosome aberration test in vitro: Inactive (Method: OECD Test Guideline 473)
In vitro gene mutations test on mammalian cells: Active (Method: OECD Test Guideline 476)
DNA repair test on rats hepatocytes: Inactive

In vivo

Micronucleus test in vivo mouse: Inactive
DNA repair test on rats hepatocytes: Inactive

Carcinogenicity: No data available.

Reproductive toxicity:

Foetal development: **According to available experimental data: Toxic effects for foetal development**
Teratogen.

• In animals : Exposure during pregnancy (By oral route)

NOAEL: 5 mg/kg Maternal concentration without effect: 40 mg/kg (rat)
NOAEL: 100 mg/kg Maternal concentration without effect: < 100 mg/kg (mouse)

Specific target organ toxicity :

Single exposure : **The substance or mixture is not classified as specific target organ toxicant, single exposure.**

Inhalation:

At high concentrations , Dust inhalation:, Possible irritation of respiratory system

Repeated exposure: **According to available experimental data:**
Target organs: Thyroid gland
By diet: NOAEL= 1.7 mg/kg/d (Method: OECD Test Guideline 408, rat, 3 months)
Inhalation: NOAEL= 10 mg/m3 (Method: OECD Test Guideline 412, rat, 1 Months)

Repeated exposure: Exposure routes : Ingestion
Target Organs : Thyroid gland

Aspiration hazard: Not relevant

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Fish: **Slightly harmful to fish**
LC50, 96 h (Poecilia reticulata) : 7.500 mg/l

Aquatic invertebrates: **Harmful to daphnia.**
EC50, 48 h (Daphnia magna (Water flea)) : 26,4 mg/l

Aquatic plants: **Slightly harmful to algae**
EC50, 72 h (Algae) : > 100 mg/l (Method: OECD Test Guideline 201)

Microorganisms:
EC50, 3 h (Activated sludge) : > 100 mg/l (Method: OECD Test Guideline 209, Respiration inhibition of activated sludge)

Aquatic toxicity / Long term toxicity:

Aquatic invertebrates: LC50, 21 d (Daphnia magna (Water flea)) : 18 mg/l

12.2. Persistence and degradability :

Biodegradation (In water): 0 % after 28 d (Method: OECD Test Guideline 301 E)

12.3. Bioaccumulative potential :

Partition coefficient: n-octanol/water: log Kow : -0,67 , at 20 °C, Not bioaccumulable

12.4. Mobility in soil - Distribution among environmental compartments:

Surface tension: 65,7 mN/m 23 °C

Absorption / desorption:

In aqueous environment, Non volatile , log Koc: 0,8 (Method: calculated)

12.5. Results of PBT and vPvB assessment :

This substance is not considered to be persistent, bioaccumulating, toxic (PBT), nor very persistent, very bioaccumulating (vPvB).

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: None.

INVENTORIES:

EINECS:	Conforms to
AICS:	Conforms to
DSL:	This product contains one or several components that are not on the Canadian DSL nor NDSL lists.
ENCS (JP):	Conforms to
KECI (KR):	Conforms to
PICCS (PH):	Conforms to
IECSC (CN):	Conforms to
NZIOC:	Does not conform

16. OTHER INFORMATION

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

R22	Harmful if swallowed.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R61	May cause harm to the unborn child.
H302	Harmful if swallowed.
H360	May damage fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled.
H412	Harmful to aquatic life with long lasting effects.

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).