

Product: **Mixland NewGen MBT 80 G**

Page: 1 / 9

SDS No.: 100111-100 (Version 1.3)

Date 20.05.2016 (*Cancel and replace* : 29.09.2015)

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

1.1. Identification of the product

Identification of the mixture: Mixland NewGen MBT 80 G

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-DES-LANDES
FRANCE
Tel. + 33 (0) 5 58 57 02 00
<http://www.mlpc-intl.com>
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):

Skin sensitisation, 1, H317
Acute aquatic toxicity, 1, H400
Hazardous to the aquatic environment - chronic hazard, 1, H410

Additional information:

For the full text of the 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:

benzothiazole-2-thiol

Hazard pictograms:



Signal word:

Warning

Hazard statements:

H317 : May cause an allergic skin reaction.
H410 : Very toxic to aquatic life with long lasting effects.

Precautionary statements:

Prevention:

P280 : Wear eye protection/ face protection.

P273 : Avoid release to the environment.

Response:

P333 + P313 : If skin irritation or rash occurs: Get medical advice/ attention.

Disposal:

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

2.3. **Other hazards** : None.

Other:

Results of PBT and vPvB assessment : Based on the available information, it is not possible to conclude on the hazard potential of this mixture.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Chemical nature of the mixture¹:

Mixture based on: Polymer and

Hazardous components (accordance with Annex II of Regulation (EC) No 1907/2006 and its amendment(s)) :

Chemical name ¹ & REACH Registration Number ²	EC-No.	CAS-No.	Concentration	Classification REGULATION (EC) No 1272/2008
Benzothiazole-2-thiol (01-2119485805-26) (N° ANNEX: 613-108-00-3)	205-736-8	149-30-4	< 80 %	Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor Acute = 1 M-Factor Chronic = 1
Distillates (petroleum), hydrotreated light paraffinic (01-2119487077-29) (N° ANNEX: 649-468-00-3)	265-158-7	64742-55-8	12 - 14%	AH 1; H304 Nota L: DMSO <3%

¹: See chapter 14 for Proper Shipping Name

²: See the text of the regulation for applicable exceptions or provisions : The transition time according to REACH Regulation, Article 23, is still not expired.

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

4. FIRST AID MEASURES

4.1. Description of necessary first-aid measures:

General advice:

Take off immediately all contaminated clothing.

Inhalation:

Move to fresh air. Consult a physician.

Skin contact:

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Eye contact:

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

Ingestion:

Call a physician immediately. Do not induce vomiting without medical advice. Rinse mouth.

Protection of first-aiders:

If entering a saturated atmosphere, wear a self contained breathing apparatus.

4.2. **Most important symptoms/effects, acute and delayed:** No data available.

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

Unsuitable extinguishing media: All other extinguishants

5.2. Special hazards arising from the substance or mixture:

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

5.3. Advice for firefighters:

Specific methods:

Suppress gases, fumes and/or dust with water spray jet. Remove all sources of ignition.

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:

Dispose of as hazardous waste in compliance 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:

Provide appropriate exhaust ventilation at machinery. Provide showers, eye-baths. In the presence of an ignition source: Dust may form explosive mixture in air.

Safe handling advice:

In case of dust formation, wear a dust mask. Avoid static electricity build up with connection to earth.

Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with the skin and the eyes. 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. Protect from light. Keep away from direct sunlight.

Incompatible products:

Strong acids, Oxidizing agents

Packaging material:

Recommended: Cardboard lined with polyethylene liner, Paper bags lined with polyethylene

7.3. **Specific end use(s):** None.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. **Control parameters:**

Exposure Limit Values

Distillates (petroleum), hydrotreated light paraffinic

Source	Date	Value type	Value (ppm)	Value (mg/m3)	Remarks
EU SCOELS	2014	TWA	–	5	8 hours Inhalable
EU SCOELS	2014		–	–	Inhalable Listed
ACGIH (US)	02 2012		–	–	Exposure by all routes should be carefully controlled to levels as low as possible.
ACGIH (US)	02 2012		–	–	Included in the regulation but with no data values. See regulation for further details.

Distillates (petroleum), hydrotreated light paraffinic

Source	Date	Value type	Value (ppm)	Value (mg/m3)	Remarks
EU SCOELS	2014	TWA	–	5	8 hours Inhalable
EU SCOELS	2014		–	–	Inhalable Listed
ACGIH (US)	02 2012		–	–	Exposure by all routes should be carefully controlled to levels as low as possible.
ACGIH (US)	02 2012		–	–	Included in the regulation but with no data values. See regulation for further details.
ACGIH (US)	02 2012	TWA	–	5	Inhalable fraction.

Derived No Effect Level (DNEL): BENZOTHAZOLE-2-THIOL :

End Use	Inhalation	Ingestion	Skin contact
Workers	70,4 mg/m3 (ST, SE) 8,8 mg/m3 (LT, SE)		40 mg/kg (ST, SE) 5 mg/kg (LT, SE)
Consumers	17,6 mg/m3 (ST, SE) 2,2 mg/m3 (LT, SE)	10 mg/kg (ST, SE) 1,25 mg/kg (LT, SE)	20 mg/kg (ST, SE) 2,5 mg/kg (LT, SE)

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

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: 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: roll, or, pellets
Colour: pigmented, light brown
Odour: characteristic
Olfactory threshold: No data available.
pH: Not applicable
Melting point/range : 170 - 180 °C
Boiling point/boiling range : Not applicable

Flash point:	200 °C (closed cup)
Evaporation rate:	No data available.
Flammability (solid, gas):	
Flammability:	Non flammable product (Standard A10) not auto-flammable (Relative self-ignition temperature for solids)
Lower flammable limit :	No data available
Upper flammable limit :	No data available
Vapour pressure:	< 0,0000025 hPa , at 25 °C Active ingredient
Vapour density:	No data available.
Density:	Active ingredient 1,42 g/cm3 approx. 1,3 g/cm3 packed, depending on grade.
Relative density (Water=1):	1,51
Bulk density:	1.270 kg/m3 , at 20 °C powder
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	BENZOTHIAZOLE-2-THIOL : log Kow : 2,42 (measured)
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

9.2. Other data:

Solubility in other solvents:	Alcohols , Acetone , Chloroform Active ingredient
pKA:	None.
Molecular weight:	Active ingredient 167 g/mol Active ingredient

10. STABILITY AND REACTIVITY

10.1. **Reactivity:** No data available.

10.2. **Chemical stability:**
The product is stable under normal handling and storage conditions.

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:**
Strong acids and strong bases

10.6. **Hazardous decomposition products:**
Nitrogen oxides (NOx), Carbon dioxide (CO2), Sulphur oxides

11. TOXICOLOGICAL INFORMATION

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.

11.1. Information on toxicological effects:

Acute toxicity:

Inhalation:	According to its composition, can be considered as : Slightly harmful by inhalation
BENZOTHIAZOLE-2-THIOL :	
• In animals :	No mortality/4 h/Rat: > 1,27 mg/l (Dusts)
Ingestion:	According to its composition, can be considered as : Slightly harmful by ingestion

BENZOTHAZOLE-2-THIOL :

• In animals : LD50/Rat: 3.800 mg/kg

Dermal: According to its composition, can be considered as : Slightly harmful in contact with skin

BENZOTHAZOLE-2-THIOL :

• In animals : No mortality/24 h/Rabbit: > 7.940 mg/kg

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

Skin contact: According to its composition, can be considered as : Non irritating to skin

BENZOTHAZOLE-2-THIOL :

• In animals : No skin irritation (Draize Test, Rabbit)

Eye contact: According to its composition, can be considered as : Not irritating to the eyes.

BENZOTHAZOLE-2-THIOL :

• In animals : Mild eye irritation (Draize Test, Rabbit)

Respiratory or skin sensitisation:

Inhalation: No data available.

Skin contact: From its composition, it must be considered as: Skin sensitizer

BENZOTHAZOLE-2-THIOL :

• In man : Some cases of cutaneous sensitization reported
• In animals : Weak sensitizing effects by skin contact. (Method : OECD Test Guideline 406 Guinea pig maximization test)

CMR effects :

Mutagenicity: Results from in vitro and in vivo tests do not lead to considering the product as genotoxic

In vitro

BENZOTHAZOLE-2-THIOL :

Ames test in vitro: negative
Tests for chromosome aberrations in vitro on mammalian cells: Inconclusive results
In vitro gene mutations test on mammalian cells: negative (Method: OECD Test Guideline 476)

In vivo

BENZOTHAZOLE-2-THIOL :

Micronucleus test in vivo mouse: negative

Carcinogenicity: Available experimental data indicates no particular problems for man. (in the usual conditions of use)

BENZOTHAZOLE-2-THIOL :

• In animals : (Method: OECD Test Guideline 451, 2 years, By oral route)
Neoplastic lesion, At high dose ;, Target organs: Pituitary gland, Kidney (Rat)
Absence of carcinogenic effects (Mouse)

Reproductive toxicity:

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

BENZOTHAZOLE-2-THIOL :

• In animals : Two generations study.: No toxic effects for reproduction
NOAEL (Parental toxicity): 130 mg/kg bw/day
(Method: OECD Test Guideline 416, Rat, By diet)

Foetal development: Based on the available data, the substance is not suspected of having developmental toxicity potential.

BENZOTHAZOLE-2-THIOL :

• In animals : Absence of toxic effects for foetal development.
(Method: OECD Test Guideline 414, By oral route)
NOAEL (Developmental Toxicity): >= 300 mg/kg bw/day
(Rabbit)
NOEL (Maternal Toxicity): = 150 mg/kg bw/day

NOAEL (Developmental Toxicity): ≥ 1.800 mg/kg bw/day
(Rat)
NOAEL (Maternal Toxicity): = 300 mg/kg bw/day

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.**

BENZOTHIAZOLE-2-THIOL :

- In animals :
 - By oral route: changes in body weight, NOAEL= < 187 mg/kg (Rat, 3 months)
 - changes in organ weights, Target organs: Liver
 - By diet: changes in organ structure or function, Target organs: Kidney, NOAEL= = 14,6 mg/kg (Mouse, Chronic)

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 :

Fish: **According to its composition, can be considered as : , Very toxic to fish.**

BENZOTHIAZOLE-2-THIOL : LC50, 96 h (Oncorhynchus mykiss) : = 0,73 mg/l (Method: OECD Test Guideline 203)

Aquatic invertebrates: **According to its composition, can be considered as : , Very toxic to daphnia.**

BENZOTHIAZOLE-2-THIOL : EC50, 48 h (Daphnia magna (Water flea)) : = 0,71 mg/l (Method: OECD Test Guideline 202)

Aquatic plants: **According to its composition, can be considered as : , Very toxic to algae.**

BENZOTHIAZOLE-2-THIOL : EC50, 72 h (Pseudokirchneriella subcapitata (green algae)) : = 0,5 mg/l (Method: OECD Test Guideline 201, growth rate)

Microorganisms:

BENZOTHIAZOLE-2-THIOL : EC50, 24 h (Tetrahymena pyriformis) : = 10 mg/l
EC50, 3 h : = 3.301 mg/l (Method: OECD Test Guideline 209, Respiration inhibition of activated sludge)

Aquatic toxicity / Long term toxicity:

Fish:

BENZOTHIAZOLE-2-THIOL : NOEC, 89 d (Oncorhynchus mykiss (rainbow trout)) : = 0,041 mg/l

Aquatic invertebrates:

BENZOTHIAZOLE-2-THIOL : NOEC, 21 d (Daphnia magna (Water flea)) : = 0,08 mg/l (Method: OECD Test Guideline 211, Reproduction inhibition)

Aquatic plants:

BENZOTHIAZOLE-2-THIOL : NOEC, 72 d (Pseudokirchneriella subcapitata (green algae)) : = 0,066 mg/l (Method: OECD Test Guideline 201, growth rate)

12.2. Persistence and degradability :

Stability in water:

BENZOTHIAZOLE-2-THIOL : Not hydrolysable
Hydrolysis time: 7 d degree of hydrolysis: 15 % (pH 7)
Method: OECD Test Guideline 111

Photodegradation (In water):

BENZOTHIAZOLE-2-THIOL : Direct photolysis (Half-life) : 31,1 min

12.3. Bioaccumulative potential :

Bioaccumulation: Based on the available information, it is not possible to conclude on the hasard potential of this mixture.

BENZOTHIAZOLE-2-THIOL : Partition coefficient: n-octanol/water: log Kow : 2,42 (Method: measured)

BENZOTHIAZOLE-2-THIOL : Bioconcentration factor (BCF): < 8 (42 d, 25 °C, Method: OECD Test Guideline 305 C, Cyprinus carpio (Carp))

12.4. Mobility in soil - Distribution among environmental compartments:

Absorption / desorption:
BENZOTHIAZOLE-2-THIOL : In soils and sediments: log Koc: 2,51 - 3,55Koc: 326 - 3560 (Method: measured)

12.5. Results of PBT and vPvB assessment :

Based on the available information, it is not possible to conclude on the hasard potential of this mixture.

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

Regulation	14.1. UN number	14.2. UN proper shipping name	14.3. Class*	Label	14.4. PG*	14.5. Environmental hazards	14.6. Special precautions for user
ADR	3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(BENZOTHIAZOLE-2-THIOL)	9	9	III	yes	
ADN	3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BENZOTHIAZOLE-2-THIOL)	9	9	III	yes	
RID	3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BENZOTHIAZOLE-2-THIOL)	9	9	III	yes	
IATA Cargo	3077	Environmentally hazardous substance, solid, n.o.s. (Benzothiazole-2-thiol)	9	9MI	III	yes	
IATA Passenger	3077	Environmentally hazardous substance, solid, n.o.s. (Benzothiazole-2-thiol)	9	9MI	III	yes	
IMDG	3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BENZOTHIAZOLE-2-THIOL)	9	9	III	Marine pollutant	EmS Number: F-A, S-F Mark: MP

*Description: 14.3. Transport hazard class(es)
14.4. Packing group

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

15. REGULATORY INFORMATION

Safety data sheets: accordance with Annex II of Regulation (EC) No 1907/2006 and its amendment(s)

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

15.2. Chemical safety assessment: None.

INVENTORIES:

EINECS:	Conforms to
TSCA:	Conforms to
AICS:	Conforms to
KECI (KR):	Conforms to
PICCS (PH):	Conforms to
IECSC (CN):	Conforms to
NZIOC:	Conforms to

16. OTHER INFORMATION**Full text of H, EUH-phrases referred to under sections 2 and 3**

H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Update:

Safety datasheet sections which have been updated:		Type:
3	REACH Registration Number	Additions

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).