

Product: MIXLAND+® ZBEC 70 GA F100

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SDS No.: 100206-100 (Version 5.0)

Date 19.05.2025 (Cancel and replace : 29.01.2025)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
1.1. Product identifier

Identification of the mixture: MIXLAND+® ZBEC 70 GA F100

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 Telephone: + 33 (0) 5 58 57 02 00 E-mail address: http://www.mlpc-intl.com fds@mlpc-intl.com
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1.4. Emergency telephone number

 +1-703-741-5970 CHEMTREC international emergency phone number (ARKEMA
CCN830055)

SECTION 2: HAZARDS IDENTIFICATION
2.1. Classification of the substance or mixture
Classification (REGULATION (EC) No 1272/2008):

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

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

EC Nr : 265-158-7

Additional information: No label necessary for this product.

Special labelling:

EUH210 Safety data sheet available on request.

2.3. Other hazards : None.
Other:
Results of PBT and vPvB assessment :

Based on the available information, it is not possible to conclude on PBT and vPvB criteria according to REACH regulation, annex XIII.

Endocrine disrupting properties - Health :

Based on the available information, it is not possible to conclude on the endocrine disruptor potential.

Endocrine disrupting properties - Environment :

Based on the available information, it is not possible to conclude on the endocrine disruptor potential.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
3.2. Mixtures
Chemical nature of the mixture¹:

 Mixture based on: Polymer and
 CAS-No.: 14726-36-4
 EC Nr: 265-158-7

¹: See chapter 14 for Proper Shipping Name

²: See the text of the regulation for applicable exceptions or provisions -

SECTION 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 and effects, both acute and delayed: No data available.

4.3. Indication of any immediate medical attention and special treatment needed: No data available.

SECTION 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.

SECTION 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.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling:

Technical measures/Precautions:

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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.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters:

Exposure Limit Values Not relevant

Predicted No Effect Concentration: ZINC BIS(DIBENZYL DITHIOCARBAMATE) :

Compartment:	Value:
Sewage treatment plant	100 mg/l
Oral (Secondary Poisoning)	4,56 mg/kg food

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance:

Physical state (20°C):	solid
Form:	granules
Colour:	white, grey
Odour:	organic
Odour Threshold:	not determined
Melting point/range :	>= 180 °C Active ingredient (OECD Test Guideline 102)
Boiling temperature :	330 °C (Pressure 1.013 hPa) Pure substance (A2 Method (D. 92/69/ECC))
Flammability:	
Flammability (solid, gas):	Non flammable product (Method A10: Flammability (solids))
Upper explosion limit :	No data available.
Flash point:	Not relevant
Auto-ignition temperature:	No data available.
Decomposition temperature:	None.
pH:	Concentration 0 %, Temperature 20 °C, not determined
Viscosity, kinematic:	No data available.
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	No data available.
Vapour pressure:	negligible

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Density: 1,2 g/cm³ , at 20 °C True volume mass
Relative vapour density: No data available.
Particle characteristics:
Particle size: measured 0,7 - 0,8 cm pellets

9.2. Other information:

Bulk density: According to grade 1,22 kg/m³
Molecular weight: 610 g/mol
Explosive properties:
 Minimum ignition energy: not determined
 Explosivity: Not relevant (due to its chemical structure)
Oxidizing properties: Not relevant (due to its chemical structure)

SECTION 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:

Thermal decomposition:
None.

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

SECTION 11: TOXICOLOGICAL INFORMATION

All available and relevant 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 hazard classes as defined in Regulation (EC) No 1272/2008:

Acute toxicity:

Inhalation: **Based on the available information, it is not possible to conclude on the hazard potential of this mixture. Inhalation of vapours due to thermal decomposition: Toxic effects cannot be excluded**

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

Through analogy with a comparable product :

• In animals : No mortality/4 h/Rat: 5,53 mg/l (Method: OECD Test Guideline 403) (Aerosol)

Ingestion: **Based on the available information, it is not possible to conclude on the hazard potential of this mixture.**

ZINC BIS(DIBENZYLDITHIOCARBAMATE) :

May be considered as comparable to a similar product for which experimental results are:

ZINC BIS(DIBUTYLDITHIOCARBAMATE) :

• In animals : No mortality/Rat: 5.000 mg/kg (Method: OECD Test Guideline 401)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

Through analogy with a comparable product :

• In animals : No mortality/Rat: 5 g/kg (Method: OECD Test Guideline 401)

Dermal: **Based on the available information, it is not possible to conclude on the hazard potential of this mixture.**

ZINC BIS(DIBENZYLDITHIOCARBAMATE) :

May be considered as comparable to a similar product for which experimental results are:

- ZINC BIS(DIBUTYLDITHIOCARBAMATE) :
- In animals : No mortality/Rabbit: 2.000 mg/kg (Method: OECD Test Guideline 402)
- DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :
- Through analogy with a comparable product :
- In animals : No mortality/Rabbit: 5 g/kg (Method: OECD Test Guideline 402)

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

Skin contact: **Based on the available information, it is not possible to conclude on the hazard potential of this mixture.**

ZINC BIS(DIBENZYLDITHIOCARBAMATE) :

- In animals : No skin irritation (OECD Test Guideline 404, Rabbit)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

Through analogy with a comparable product :

- In animals : Slightly irritating to skin. (Rabbit, Exposure time: 24 h)

Eye contact: **Based on the available information, it is not possible to conclude on the hazard potential of this mixture.**

ZINC BIS(DIBENZYLDITHIOCARBAMATE) :

- In animals : No eye irritation (OECD Test Guideline 405, Rabbit)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

Through analogy with a comparable product :

- In animals : No eye irritation (OECD Test Guideline 405, Rabbit)

Respiratory or skin sensitisation:

Inhalation: No data available.

Skin contact: **Based on the available information, it is not possible to conclude on the hazard potential of this mixture.**

ZINC BIS(DIBENZYLDITHIOCARBAMATE) :

- In animals : No skin allergy was observed (Method: OECD Test Guideline 429 LLNA: Local Lymph Node Assay)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

Through analogy with a comparable product :

- In animals : Not a skin sensitizer (Method: OECD Test Guideline 406 Buehler Test, Guinea pig)

CMR effects :

Mutagenicity: **Based on the available information, it is not possible to conclude on the hazard potential of this mixture.**

In vitro

ZINC BIS(DIBENZYLDITHIOCARBAMATE) :

Ames test in vitro: Inactive (Method: OECD Test Guideline 471)
Chromosome aberration test in vitro: Inactive (Method: OECD Test Guideline 487)
In vitro mammalian cell gene mutation test: Active (Method: OECD Test Guideline 476)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

Through analogy with a comparable product :, Conflicting results have been seen in different studies.

In vivo

ZINC BIS(DIBENZYLDITHIOCARBAMATE) :

In vivo mammalian alkaline comet assay: Inactive (Method: OECD Test Guideline 489)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

Through analogy with a comparable product :
Micronucleus test in vivo mouse: Inactive (Method: OECD Test Guideline 474)

Carcinogenicity: **Based on the available information, it is not possible to conclude on the hazard potential of this mixture.**

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

Through analogy with a comparable product :

- In animals : Absence of carcinogenic effects (Mouse, Dermal)

Reproductive toxicity:

Fertility: **Based on the available information, it is not possible to conclude on the hazard potential of this mixture.**

ZINC BIS(DIBENZYLDITHIOCARBAMATE) :

- In animals : Extended One-Generation Reproductive Toxicity Study: Absence of toxic effects on fertility
No observed adverse effect level (Parental toxicity) : 1.000 mg/kg bw/day
No observed adverse effect level (Fertility) : 1.000 mg/kg bw/day
(Method: OECD Test Guideline 443, Rat, Oral)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

Through analogy with a comparable product :

- In animals : Reproductive/Developmental Effects Screening Assay: Absence of toxic effects on fertility
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, Oral)

Foetal development: **Based on the available information, it is not possible to conclude on the hazard potential of this mixture.**

ZINC BIS(DIBENZYLDITHIOCARBAMATE) :

- In animals : Exposure during pregnancy
No observed adverse effect level (Developmental Toxicity) : 904 mg/kg bw/day
No observed adverse effect level (Maternal Toxicity) : 904 mg/kg bw/day
(Method: OECD Test Guideline 414, Rabbit, Oral)
Exposure during pregnancy
No observed adverse effect level (Developmental Toxicity) : 1.000 mg/kg bw/day
No observed adverse effect level (Maternal Toxicity) : 1.000 mg/kg bw/day
(Method: OECD Test Guideline 414, Rat, Oral)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

Through analogy with a comparable product :

- In animals : Exposure during pregnancy: Absence of toxic effects for foetal development.
NOAEL (Developmental Toxicity) : 2 g/kg
NOAEL (Maternal Toxicity) : < 0,125 g/kg
(Method: OECD Test Guideline 414, Rat, dermal route)

Specific target organ toxicity :**Single exposure :**

Inhalation: **Possible irritation of respiratory system**

Repeated exposure:

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

ZINC BIS(DIBENZYLDITHIOCARBAMATE) :

- In animals : Oral: No specific toxic effects
No observed adverse effect level : 1000 mg/kg bw/day (Method: OECD Test Guideline 408, Rat, Subchronic exposure)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

Through analogy with a comparable product :

- In animals : Inhalation: No specific toxic effects, NOAEL= 220mg/m3 (3 months)
Dermal: NOAEL= 1000mg/kgbw/d (Repeated exposure)

Aspiration hazard:

Not applicable

11.2. Information on other hazards:**Endocrine disrupting properties:**

Based on the available information, it is not possible to conclude on the endocrine disruptor potential.

Other information:

Not relevant

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicology Assessment: All available and relevant 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: **From its composition, it must be considered as: Slightly harmful to fish**

ZINC BIS(DIBENZYLDITHIOCARBAMATE) :

LC50, 96 h (Poecilia reticulata (guppy)) (Method: OECD Test Guideline 203) No effect up to the limit of solubility

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

LL50, 96 h (Pimephales promelas (fathead minnow)) : > 100 mg/l (Method: OECD Test Guideline 203)

Aquatic invertebrates: **Based on the available information, it is not possible to conclude on the hazard potential of this product.**

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :
May be considered as comparable to a similar product for which experimental results are:
LL50, 48 h (Daphnia magna (Water flea)) : > 10.000 mg/l (Method: OECD Test Guideline 202)

Aquatic plants: **From its composition, it must be considered as: Slightly harmful to algae**

ZINC BIS(DIBENZYLDITHIOCARBAMATE) :
EC50, 72 h (Raphidocelis subcapitata (freshwater green alga)) (Method: OECD Test Guideline 201)
No effect up to the limit of solubility

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :
May be considered as comparable to a similar product for which experimental results are:
ErL50, 72 h (Pseudokirchneriella subcapitata (green algae)) : > 100 mg/l (Method: OECD Test Guideline 201)

Microorganisms:

ZINC BIS(DIBENZYLDITHIOCARBAMATE) :
EC10, 3 h (Activated sludge) : > 1.000 mg/l (Method: OECD Test Guideline 209, Respiration inhibition)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :
May be considered as comparable to a similar product for which experimental results are:
NOEC, 4 d (Photobacterium phosphoreum) : > 1,93 mg/l (Method: DIN 38412)

Aquatic toxicity / Long term toxicity:

Fish:

ZINC BIS(DIBENZYLDITHIOCARBAMATE) :
NOEC, 32 d (Pimephales promelas (fathead minnow)) (Method: OECD Test Guideline 210) No effect up to the limit of solubility

Aquatic invertebrates:

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :
May be considered as comparable to a similar product for which experimental results are:
NOEC, 21 d (Daphnia magna (Water flea)) : 10 mg/l (Method: OECD Test Guideline 211, Growth inhibition/Reproduction inhibition)

Aquatic plants:

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :
NOEC r, 72 h (Pseudokirchneriella subcapitata (green algae)) : 100 mg/l (Method: OECD Test Guideline 201)

12.2. Persistence and degradability :

Biodegradation (In water): **Based on the available information, it is not possible to conclude on biodegradability of this mixture.**

ZINC BIS(DIBENZYLDITHIOCARBAMATE) :
Not readily biodegradable.: 8 % after 28 d (Method: OECD Test Guideline 301F)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :
Not readily biodegradable.: 2 - 31 % after 28 d (Method: OECD Test Guideline 301 B)

12.3. Bioaccumulative potential :

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

12.4. Mobility in soil - Distribution among environmental compartments:

Vapor pressure: negligible,

Absorption / desorption:

ZINC BIS(DIBENZYLDITHIOCARBAMATE) :
log Koc: 9,4 (Method: calculated)

12.5. Results of PBT and vPvB assessment :

Based on the available information, it is not possible to conclude on PBT and vPvB criteria according to REACH regulation, annex XIII.

12.6. Endocrine disrupting properties:

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Based on the available information, it is not possible to conclude on the endocrine disruptor potential.

12.7. Other adverse effects: None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods:

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).

SECTION 14: TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 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:

European union/EEA : In the event of purchase from an Arkema legal entity based in the European Economic Area (EEA), it is established that this product complies with the registration provisions of REACH Regulation (EC) No. 1907/2006, given that all of its components are excluded, exempted and / or registered. If purchasing from a legal entity established outside the EEA, please contact your local representative for more information.

TSCA (USA) : The components of this product are all on the TSCA Inventory
DSL/NDSL (CA) : All components of this product are on the Canadian DSL
IECSC (CN) : All components of this product are listed or exempted
ENCS (JP) : All components of this product are listed or exempted
ISHL (JP) : All components of this product are listed or exempted
KECI (KR) : All components of this product are listed or exempted
PICCS (PH) : All components of this product are listed or exempted
NZIOC (NZ) : All components of this product are listed or exempted
AIIC (AU) : All components of this product are listed or exempted
TCSI (TW) : All components of this product are listed or exempted

SECTION 16: OTHER INFORMATION

Update:

Safety datasheet sections which have been updated:		Type:
1-16	General update of Safety Data Sheet.	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.

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