

**Product:** MIXLAND+® HMT 80 GA F500

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SDS No.: 100061-100 (Version 7.0)

Date 26.06.2025 (Cancel and replace : 18.02.2025)

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**
**1.1. Product identifier**
**Identification of the mixture:** MIXLAND+® HMT 80 GA F500

**1.2. Relevant identified uses of the substance or mixture and uses advised against**
**Use of the Substance/Mixture :**

Adhesion promoter

**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: <a href="http://www.mlpc-intl.com">http://www.mlpc-intl.com</a> fds@mlpc-intl.com
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**1.4. Emergency telephone number**

+ 33 1 49 00 77 77  
 European emergency phone number: 112  
 +1-703-741-5970 (CHEMTREC International emergency phone number)

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

 Flammable solids, 2, H228  
 Skin sensitisation, 1, H317

**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:**

methenamine; hexamethylenetetramine

 Hazard  
 pictograms:


Signal word:

**Warning**

Hazard statements:

 H228 : Flammable solid.  
 H317 : May cause an allergic skin reaction.

## Precautionary statements:

**Prevention:**

P210 : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P240 : Ground/bond container and receiving equipment.

P261 : Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P280 : Wear protective gloves or eye protection or face protection.

P241 : Use explosion-proof ventilating equipment.

**Response:**

P370 + P378 : In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P302 + P352 : IF ON SKIN: Wash with plenty of soap and water.

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

Additional information:Rubber adhesion promoter

**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 mixture<sup>1</sup>:**

Preparation based on polymers

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

Chemical name <sup>1</sup> & REACH Registration Number <sup>2</sup>	EC-No.	CAS-No.	Concentration	Classification REGULATION (EC) No 1272/2008	specific concentration limit, M-Factors, Acute toxicity estimate
hexamethylenetetramine (01-2119474895-20) (N° ANNEX: 612-101-00-2)	202-905-8	100-97-0	70 - 90 %	Flam. Sol.2; H228 Skin Sens.1; H317	
Distillates (petroleum), hydrotreated light paraffinic (01-2119487077-29) (N° ANNEX: 649-468-00-3)	–	64742-55-8	5 - 10 %	Asp. Tox.1; H304 Nota L: DMSO <3%	

<sup>1</sup>: See chapter 14 for Proper Shipping Name

<sup>2</sup>: 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.

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## 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. In case of fire nearby, remove exposed containers. Containers/tanks should be cooled with water spray. Ensure a system for the rapid emptying of containers.

#### **Special protective actions for fire-fighters:**

Wear self-contained breathing apparatus and protective suit.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. **Personal precautions, protective equipment and emergency procedures:**

Avoid contact with skin and eyes and inhalation of dust. Prohibit all sources of sparks and ignition - Do not smoke. In the case of hazardous fumes, wear self contained breathing apparatus. Immediately evacuate personnel to safe areas. Ensure adequate ventilation.

### 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. No sparking tools should be used.

#### **Elimination:**

Dispose of as hazardous waste in compliance with local and national regulations.

### 6.4. **Reference to other sections:** None.

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## SECTION 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. Keep well away from naked flames. Prohibit all sources of sparks and ignition - Do not smoke. Use only explosion-proof equipment.

#### **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.

Provide electrical earthing of equipment and electrical equipment usable in explosive atmospheres.

#### **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**Derived No Effect Level (DNEL):** HEXAMETHYLENETETRAMINE :

End Use	Inhalation	Ingestion	Skin contact
Workers	5,6 mg/m <sup>3</sup> (LT, SE)		6,4 mg/kg (LT, SE)
Consumers	1,2 mg/m <sup>3</sup> (LT, SE)	0,8 mg/kg (LT, SE)	3,2 mg/kg (LT, SE)

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

**Predicted No Effect Concentration:** HEXAMETHYLENETETRAMINE :

Compartment:	Value:
Fresh water	3 mg/l
Marine water	0,3 mg/l
Sewage treatment plant	100 mg/l
Fresh water sediment	10,2 mg/l
Marine sediment	1,02 mg/l
Soil	0,28 mg/l

**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  
**Odour:** Amines  
**Odour Threshold:** No data available.  
**Sublimation point :** > 280 °C  
**Boiling point/boiling range:** No data available.  
**Flammability:**  
 Flammability (solid, gas): Flammable solid (Standard A10)  
**Upper explosion limit :** No data available.  
**Flash point:** 130 °C (closed cup)  
**Auto-ignition temperature:** Active ingredient 390 °C  
**Decomposition temperature:** No data available.  
**pH:** Concentration 0 %, Temperature 20 °C, not determined  
**Viscosity, kinematic:** No data available.  
**Water solubility:** insoluble  
**Solubility in other solvents:** Chloroform Active ingredient  
**Partition coefficient: n-octanol/water:** HEXAMETHYLENETETRAMINE :  
 log Kow : -2,87  
**Vapour pressure:** < 0,0035 Pa , at 30 °C Active ingredient  
**Density:** 1,24 g/cm<sup>3</sup> , at 20 °C True volume mass

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**Relative vapour density:** No data available.  
**Particle characteristics:**  
**Particle size:** measured 0,7 - 0,8 cm pellets

## 9.2. Other information:

**pKA:** 9 Pure substance  
**Molecular weight:** Active ingredient 140 g/mol  
**Explosive properties:**  
Minimum ignition energy: not determined  
**Oxidizing properties:** The substance or mixture is not classified as oxidizing.

## 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:**  
Nitrogen oxides (NOx), Carbon dioxide (CO<sub>2</sub>), 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. Product not completely tested. Take maximum precautions when handling.

### 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

**Ingestion:** According to its composition, this product should not be harmful in normal conditions of use

HEXAMETHYLENETETRAMINE :  
• In animals : LD50/Rat: > 10.000 mg/kg

**Dermal:** According to its composition, this product should not be harmful in normal conditions of use

HEXAMETHYLENETETRAMINE :  
• In animals : No mortality/Rat: 2.000 mg/kg (Method: OECD Test Guideline 402), No specific toxic effects

#### 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.

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

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

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

#### Respiratory or skin sensitisation:

**Inhalation:** No data available.

**Skin contact:** According to its composition : May cause an allergic skin reaction.

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**HEXAMETHYLENETETRAMINE :**

- In man : Some cases of cutaneous sensitization reported
- In animals : Weak sensitizing effects by skin contact. (Method: OECD Test Guideline 429 LLNA: Local Lymph Node Assay, Mouse)  
Weak sensitizing effects by skin contact. (Method: OECD Test Guideline 406 Guinea pig maximization test)

**CMR effects :**

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

**In vitro**

**HEXAMETHYLENETETRAMINE :**

Ames test in vitro: Inactive (Method: OECD Test Guideline 471)  
Chromosome aberration test in vitro: Active (Method: OECD Test Guideline 473)

**In vivo**

**HEXAMETHYLENETETRAMINE :**

Chromosome aberration test in vivo: Inactive

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

**HEXAMETHYLENETETRAMINE :**

- In animals : Absence of carcinogenic effects (Method: OECD Test Guideline 453, Rat, 2 years, Drinking water)  
No Observed Adverse Effect Level (NOAEL): 1.500 mg/kg bw/day

**Reproductive toxicity:**

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

**HEXAMETHYLENETETRAMINE :**

- In animals : Three-generation study: Absence of toxic effects on fertility, Increase in stillbirths  
NOAEL ( Parental toxicity ): > 1.500 mg/kg bw/day  
NOAEL ( Fertility ): > 1.500 mg/kg bw/day  
NOAEL ( Developmental Toxicity ): < 1500 mg/kg bw/day  
(Rat, drinking water)

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

**HEXAMETHYLENETETRAMINE :**

- In animals : Exposure during pregnancy: Absence of toxic effects for foetal development.  
NOAEL ( Developmental Toxicity ): > 1.000 mg/kg bw/day  
NOAEL ( Maternal Toxicity ): > 1.000 mg/kg bw/day  
(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.**

**HEXAMETHYLENETETRAMINE :**

- In animals : Drinking water: No specific toxic effects  
NOAEL= > 1,5g/kg bw/d (Method: OECD Test Guideline 453, Rat, 2 years)  
dermal route: No specific toxic effects  
NOAEL= > 1,3 mg/kg (Rabbit, 6 Weeks)

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

HEXAMETHYLENETETRAMINE : LC50, 96 h (Pimephales promelas (fathead minnow)) : 49.800 mg/l (Method: US EPA)

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

HEXAMETHYLENETETRAMINE : EC50, 48 h (Daphnia magna (Water flea)) : 36.000 mg/l (Method: US EPA)

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

HEXAMETHYLENETETRAMINE : EC50, 336 h (Raphidocelis subcapitata) : 3.000 mg/l (Method: US EPA)

**Aquatic toxicity / Long term toxicity:****Aquatic plants:**

HEXAMETHYLENETETRAMINE : NOEC, 336 h (Raphidocelis subcapitata) : 1500 mg/l (Method: US EPA)

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

HEXAMETHYLENETETRAMINE : Not readily biodegradable.: 39 - 47 % after 28 d (Method: OECD Test Guideline 301 C)

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

HEXAMETHYLENETETRAMINE : Partition coefficient: n-octanol/water: log Kow : -2,87

**12.4. Mobility in soil - Distribution among environmental compartments:****Vapor pressure:** < 0,0035 Pa, 30 °C, Active ingredient,**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:**

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

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**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

Regulation	14.1. UN number	14.2. UN proper shipping name	14.3. Class <sup>s</sup> *	Label	14.4. PG*	14.5. Environmental hazards	14.6. Special precautions for user
<b>ADR</b>	1328	HEXAMETHYLENETETRAMINE	4.1	4.1	III	no	
<b>ADN</b>	1328	HEXAMETHYLENETETRAMINE	4.1	4.1	III	no	
<b>RID</b>	1328	HEXAMETHYLENETETRAMINE	4.1	4.1	III	no	
<b>IATA Cargo</b>	1328	Hexamethylenetetramine	4.1	4.1	III	no	
<b>IATA Passenger</b>	1328	Hexamethylenetetramine	4.1	4.1	III	no	
<b>IMDG</b>	1328	HEXAMETHYLENETETRAMINE	4.1	4.1	III	no	EmS Number: F-A, S-G

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

**14.7. Maritime transport in bulk according to IMO instruments:** Not applicable

### 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:

##### Listed in:

EU. REACH, Annex XVII, Restrictions on manufacture, placing on the market and use of certain dangerous substances, 1907/2006/EC, as amended: methenamine; hexamethylenetetramine

Additional regulations ( European Union ) :  
Regulation (EU) 2019/1148

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point

##### Listed in:

EU. REACH, Annex XVII, entry 78, Synthetic polymer microparticles (Regulation 1907/2006/EC):  
The synthetic polymer microparticles supplied is subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council

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

H228 Flammable solid.  
 H304 May be fatal if swallowed and enters airways.  
 H317 May cause an allergic skin reaction.

**Update:**

Safety datasheet sections which have been updated:		Type:
1-16	General update of Safety Data Sheet.	Revisions
15	EU. REACH, Annex XVII, entry 78, Synthetic polymer microparticles (Regulation 1907/2006/EC)	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).**

