

**Product: MIXLAND+® HMT 80 GA**

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SDS No.: 100061-100 (Version 3.0)

Date 28.08.2019 (Cancel and replace : 20.02.2018)

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**
**1.1. Identification of the product**

Identification of the mixture: MIXLAND+® HMT 80 GA

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

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Additional information: Rubber adhesion promoter

**2.3. Other hazards :** None.

**Other:**

Results of PBT and vPvB assessment : According to REACH regulation, annex XIII, this mixture contains no substance meeting PBT and vPvB criteria.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2. Mixtures

**Chemical nature of the mixture<sup>1</sup>:**

Preparation based on polymers and

**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
hexamethylenetetramine (01-2119474895-20) (N° ANNEX: 612-101-00-2)	202-905-8	100-97-0	Approximately 80 %	Flam. Sol. 2; H228 Skin Sens. 1; H317
Distillates (petroleum), hydrotreated light paraffinic (01-2119487077-29) (N° ANNEX: 649-468-00-3)	265-158-7	64742-55-8	<= 8,5 %	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 -

### 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** 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

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Soil	0,28 mg/l
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## 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:

<b>Physical state (20°C):</b>	solid
<b>Form:</b>	roll, or, pellets
<b>Colour:</b>	According to grade
<b>Odour:</b>	Amines
<b>Olfactory threshold:</b>	No data available.
<b>pH:</b>	Concentration 800 g/l, pH 8 - 9
<b>Melting point/range:</b>	No data available.
<b>Boiling point/boiling range:</b>	No data available.
<b>Flash point:</b>	250 °C (closed cup)
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	
Flammability:	Flammable solid (Standard A10)
Lower flammable limit :	20 g/m3
<b>Vapour pressure:</b>	< 0,0035 Pa , at 30 °C Active ingredient
<b>Vapour density:</b>	No data available.
<b>Density:</b>	1,120 g/cm3 packed
<b>Water solubility:</b>	insoluble
<b>Partition coefficient: n-octanol/water:</b>	HEXAMETHYLENETETRAMINE : log Kow : -2,87
<b>Auto-ignition temperature:</b>	Active ingredient 410 °C (Reported data)
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.
<b>Explosive properties:</b>	No data available.
<b>Oxidizing properties:</b>	No data available.

### 9.2. Other data:

<b>Solubility in other solvents:</b>	Chloroform Active ingredient
<b>pKA:</b>	9 Pure substance
<b>Molecular weight:</b>	Active ingredient 140 g/mol

## 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**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 toxicological effects:****Acute toxicity:**

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

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

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

**Ingestion:** According to its composition, can be considered as Slightly harmful by ingestion

HEXAMETHYLENETETRAMINE :

- In animals : LD50/Rat: > 10.000 mg/kg

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

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

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

HEXAMETHYLENETETRAMINE :

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

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

- In animals : No mortality/Rabbit: 5 g/kg (Method: OECD Test Guideline 402)

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

**Skin contact:** According to its composition : Non irritating to skin

HEXAMETHYLENETETRAMINE :

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

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

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

**Eye contact:** According to its composition : Not irritating to the eyes.

HEXAMETHYLENETETRAMINE :

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

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

- 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.

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)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

- In animals : Not a skin sensitizer (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. Contains no ingredient listed as a mutagen

**In vitro**

## HEXAMETHYLENETETRAMINE :

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

## DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

Ames test in vitro: Inactive (Method: OECD Test Guideline 471)  
In vitro test for chromosomal abnormalities on CHO cells: Inactive (Method: OECD Test Guideline 473)  
In vitro gene mutations test on mammalian cells: Inactive (Method: OECD Test Guideline 476)

**In vivo**

## HEXAMETHYLENETETRAMINE :

Chromosome aberration test in vivo: Inactive

## DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

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.**

## 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

## DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

- In animals : Absence of carcinogenic effects (Method: OECD Test Guideline 451, mice, Chronic, dermal route)

**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)

## DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

- In animals : Reproductive/Developmental Effects Screening Assay: No toxicity to reproduction  
NOAEL ( Parental toxicity ): 1 g/kg  
NOAEL ( Fertility ): 1 g/kg  
(Method: OECD Test Guideline 421, Rat, By oral route)

**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)

## DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

- In animals : 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 :**

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)

## DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :

- In animals : By inhalation: No effect is reported.  
NOAEL= > 1 mg/l (Rat, 4 Weeks) (Aerosol)  
dermal route: No effect is reported.  
NOAEL= > 2g/kg bw/d (Method: OECD Test Guideline 411, Rat, 3 months)  
By oral route: (Results obtained on a similar product).  
Target organs: Reproductive organs, Stomach, Liver, Thymus, NOAEL= < 125 mg/kg (Method: OECD Test Guideline 408, Rat, 3 months)

**Aspiration hazard:**

Not applicable

**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. Acute 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)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :  
LL50, 96 h (Pimephales promelas (fathead minnow)) : > 100 mg/l (Method: OECD Test Guideline 203)  
No effect up to the limit of solubility

**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, Immobilization)

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, Immobilization) No effect up to the limit of solubility

**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, growth rate inhibition)

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:**

HEXAMETHYLENETETRAMINE : EC0, 16 h (Pseudomonas fluorescens) : >= 5.000 mg/l

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:****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:**

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

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.**

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

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC :  
Not readily biodegradable.: 4 % after 28 d (Method: OECD Test Guideline 301 B)

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### 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 :

According to REACH regulation, annex XIII, this mixture contains no substance meeting 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

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

Listed in:

EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC): methenamine; hexamethylenetetramine: Distillates (petroleum), hydrotreated light paraffinic; Baseoil -- unspecified  
EU. REACH, Annex XVII, Appendix 2, Entry 28 - Carcinogens: Category 1B (Table 3). (Regulation 1907/2006/EC): Distillates (petroleum), hydrotreated light paraffinic; Baseoil -- unspecified

**15.2. Chemical safety assessment:** None.



**INVENTORIES:**

EINECS:	Conforms to
TSCA:	Conforms to
DSL:	All components of this product are on the Canadian DSL
IECSC (CN):	Conforms to
ENCS (JP):	Conforms to
ISHL (JP):	Conforms to
KECI (KR):	Conforms to
PICCS (PH):	The mixture contains a polymer. All the monomers for this polymer & other substances are listed on the inventory, Consult Arkema.
AICS:	Conforms to
NZIOC:	Conforms to
TSCA 12B:	

**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	1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING, Emergency telephone number	Revisions
3	3. COMPOSITION/INFORMATION ON INGREDIENTS	Revisions
8	8. EXPOSURE CONTROLS/PERSONAL PROTECTION	Revisions
12	12. ECOLOGICAL INFORMATION	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).**

