

**SAFETY DATA SHEET**according to Regulation (EC) No. 1907/2006 its amendment  
(453/2010)**Product: PEBAX® 33 MED SERIES**

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SDS No.: 003885-001 (Version 1.4 )

Date 08.01.2015 (Cancel and replace : 14.03.2012)

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

Generic Safety Data Sheet

**1.1. Identification of the product****Identification of the mixture:** PEBAX® 33 MED SERIES**Grades :** 2533 SA01 MED, 3533 SA01 MED, 4033 SA01 MED, 4533 SA01 MED, 5533 SA01 MED, 6333 SA01 MED, 7033 SA01 MED, 7233 SA01 MED, 7433 SA 01 MED, MX 1205 SA01 MED**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the Substance/Mixture** No data available.**1.3. Details of the supplier of the safety data sheet**

Supplier	Arkema POLYAMIDES DE SPECIALITES 420 rue d'Estienne d'Orves 92705 Colombes Cedex, France Téléphone : +33 (0)1 49 00 80 80 Télécopie : +33 (0)1 49 00 83 96 <a href="http://www.arkema.com">http://www.arkema.com</a>
E-mail address	<a href="mailto:pars-drp-fds@arkema.com">pars-drp-fds@arkema.com</a>

**1.4. Emergency telephone number****+33 1 49 00 77 77**  
**European emergency phone number : 112****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.

**Classification according to EU Directives 1999/45/EC :**

This mixture is not classified as dangerous according to Directive 1999/45/EC.

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

Additional information: No label necessary for this product.

**2.3. Other hazards****Potential health effects:**

Inhalation: At high temperature, products of thermal decomposition can be irritating to respiratory system

Skin contact: Contact with the product, when handled at high temperatures, can cause serious burns. At high temperature, products of thermal decomposition can be irritating to skin

Eye contact: At high temperature, products of thermal decomposition can be irritating to eyes

**Environmental Effects:**

Not biodegradable

**Physical and chemical hazards:**

Thermal decomposition giving toxic and corrosive products.

Decomposition products: See chapter 10

**Other:**

Results of PBT and vPvB assessment : This information is not required.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2. Mixtures

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

Polyether block amides  
SA : Presence of stabilizer preventing thermo-oxidation

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

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

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### 4. FIRST AID MEASURES

#### 4.1. & 4.2. Description of necessary first-aid measures & Most important symptoms/effects, acute and delayed:

**Inhalation:**

Inhalation of vapours due to decomposition of product: Move to fresh air. Oxygen or artificial respiration if needed. In case of persistent problems : Consult a physician.

**Skin contact:**

Wash abundantly with soap and water.  
On contact with hot product : Cool skin rapidly with cold water after contact with molten material. Remove product with vegetable oil or paraffin. In case of adhesion, do not try to remove the product. Treat the affected areas as thermal burns. Consult a physician.

**Eye contact:**

Dusts : Wash well-open eyes immediately, abundantly and thoroughly with water. Remove particles remaining under the eyelids. If irritation persists, consult an ophthalmologist.  
On contact with hot product : Cool eyes rapidly with cold water after contact with molten polymer. Consult an ophthalmologist immediately.

**Ingestion:**

In case of problems : Consult a doctor.

**Protection of first-aiders:**

Dusts : In case of insufficient ventilation, wear suitable respiratory equipment.

#### 4.3. Indication of immediate medical attention and special treatment needed, if necessary : No data available.

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### 5. FIREFIGHTING MEASURES

#### 5.1. Extinguishing media

**Suitable extinguishing media:** Water spray, Foam, Carbon dioxide (CO2)

#### 5.2. Special hazards arising from the substance or mixture:

300 - 350 °C: possible formation of:  
Monomer and oligomer (white fumes)  
Temperature exceeding 350°C:  
Thermal decomposition giving toxic and corrosive products :  
Carbon monoxide, Ammonia, Amino derivatives  
Temperature exceeding 500 °C :  
Formation of toxic products through combustion:  
Carbon oxides, Hydrogen cyanide (hydrocyanic acid), (traces)

#### 5.3. Advice for firefighters:

**Specific methods:**

Ensure a system for the rapid emptying of containers. In case of fire nearby, remove the bags.

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

Wear self-contained breathing apparatus and protective suit.

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### 6. ACCIDENTAL RELEASE MEASURES

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

Remove all sources of ignition. Avoid contact with skin and eyes and inhalation of dust. Wear a dust mask and safety glasses/goggles if necessary. In case of insufficient ventilation, wear suitable respiratory equipment.

## 6.2. Environmental precautions:

Do not release into the environment. Do not let product enter drains.

## 6.3. Methods and materials for containment and cleaning up:

### Recovery:

Recover the product. Shovel into suitable container for disposal. Sweep up to prevent slipping hazard.

### Elimination:

Destroy the product by incineration (in accordance with local and national regulations).

## 6.4. Reference to other sections: None.

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## 7. HANDLING AND STORAGE

### 7.1. Precautions for safe handling:

#### Technical measures/Precautions:

Storage and handling precautions applicable to products: Solid (pellets).  
Ensure ventilation of work areas and extraction of dust or vapours likely to be given off during conversion operations (product handled when hot). Provide showers, eye-baths. Provide water supplies near the point of use.

#### Safe handling advice:

At all stages of the operation, do not exceed the temperature at which decomposition into toxic and corrosive products will occur. Avoid creating dust. In case of dust formation, wear a dust mask. Avoid accumulation of static charges during transfers in metallic systems. Prohibit all sources of sparks and ignition - Do not smoke. Keep well away from naked flames. In case of insufficient ventilation, wear suitable respiratory equipment.

#### Hygiene measures:

Avoid contact with the skin and the eyes. Avoid breathing dust. Product handled when hot : Avoid exposure to vapour. When using do not eat, drink or smoke.  
Wash hands after handling. Remove contaminated clothing and protective equipment before entering eating areas.

### 7.2. Conditions for safe storage, including any incompatibilities:

Store away from moisture and heat to maintain the technical properties of the product. Remove all sources of ignition. Provide earthing and safe electrical equipment.

Do not store above: 60 °C

#### Incompatible products:

None known.

#### Packaging material:

**Recommended:** Triplex bags (paper, aluminium, polyethylene), Triplex bags (polyethylene - aluminium - polyethylene)

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

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters:

**Exposure Limit Values** Not relevant

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

This information is not required.

#### Predicted No Effect Concentration:

This information is not required.

### 8.2. Exposure controls:

#### General protective measures:

Ensure ventilation of work areas and extraction of dust or vapours likely to be given off during conversion operations (product handled when hot).

#### Personal protective equipment:

Respiratory protection:	Product handled when hot : In case of insufficient ventilation, wear suitable respiratory equipment. In the case of hazardous fumes, wear self contained breathing apparatus.
Hand protection:	Gloves (product handled when hot)
Eye/face protection:	Safety glasses/goggles (product handled in molten state) - Wear face-shield and protective clothing in case of problems during processing
Skin and body protection:	Boots (product handled in molten state)

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>	granules
<b>Colour:</b>	colourless, or, natural colour
<b>Odour:</b>	none
<b>Olfactory threshold:</b>	Not relevant
<b>pH:</b>	Not applicable
<b>Melting point/range :</b>	130 - 175 °C
<b>Boiling point/boiling range :</b>	Not applicable (decomposes on heating)
<b>Flash point:</b>	Not applicable
<b>Evaporation rate:</b>	Not relevant
<b>Flammability (solid, gas):</b>	No data available.
<b>Vapour pressure:</b>	Not relevant
<b>Vapour density:</b>	Not relevant
<b>Relative density:</b>	No data available.
<b>Bulk density:</b>	550 - 650 kg/m <sup>3</sup>
<b>Water solubility:</b>	insoluble, (on the basis of its structure) at 20 °C
<b>Partition coefficient: n-octanol/water:</b>	No data available.
<b>Auto-ignition temperature:</b>	370 - 450 °C (Standard ASTM D 1929-77 (B))
<b>Decomposition temperature:</b>	300 - 350 °C
<b>Viscosity, kinematic:</b>	Not applicable
<b>Explosive properties:</b>	
Explosivity:	Not relevant (due to the chemical structure)
<b>Oxidizing properties:</b>	Not relevant (due to the chemical structure)

### 9.2. Other data:

<b>Solubility in other solvents:</b>	Soluble in: PHENOL, METACRESOL, BENZYL ALCOHOL(when hot) , Formic acid (concentrate), Sulphuric acid (concentrate) METHYLENE CHLORIDE , partly soluble
<b>Net calorific value :</b>	34.000 - 37.000 kJ/kg (Standard : NF M 03 0005)

## 10. STABILITY AND REACTIVITY

### 10.1. & 10.2. Reactivity & Chemical stability:

The product is stable under normal handling and storage conditions.

### 10.3. Possibility of hazardous reactions:

None under normal conditions of use.

### 10.4. Conditions to avoid:

Temperatures above 60 °C  
(to maintain the technical properties of the product).  
Remove all sources of ignition. Avoid storing in moist and warm conditions.

### 10.5. Incompatible materials to avoid:

Strong acids and oxidizing agents

### 10.6. Hazardous decomposition products:

**Thermal decomposition:**

Decomposition temperature: 300 - 350 °C  
300 - 350 °C: possible formation of:  
Monomer and oligomer (white fumes)  
Temperature exceeding 350°C:  
Thermal decomposition giving toxic and corrosive products :  
Carbon monoxide, Ammonia, Amino derivatives  
Temperature exceeding 500 °C :

Formation of toxic products through combustion:  
Carbon oxides, Hydrogen cyanide (hydrocyanic acid), (traces)

## 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:

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

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

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

**Skin contact:** According to its composition, can be considered as : Slightly or not irritating to skin  
• In man : Contact with the product, when handled at high temperatures, can cause serious burns.  
At high temperature, products of thermal decomposition can be irritating to skin

**Eye contact:** According to its composition, can be considered as : Slightly or not irritating to eyes  
• In man : Contact with the product, when handled at high temperatures, can cause serious burns.  
At high temperature, products of thermal decomposition can be irritating to eyes

#### Respiratory or skin sensitisation:

**Inhalation:** No data available.

**Skin contact:**  
• In man : No reported cases of cutaneous sensitization in man

**CMR effects :** Polymer: No particular problems for man

#### Specific target organ toxicity :

##### Single exposure :

**Inhalation:**  
• In man : At high temperature, products of thermal decomposition can be irritating to respiratory system

**Repeated exposure:** According to its composition : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

**Aspiration hazard:** Not relevant

## 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:** No data available.

**Aquatic invertebrates:** No data available.

**Aquatic plants:** No data available.

**Microorganisms:** No data available.

### 12.2. Persistence and degradability :

**Biodegradation (In water):** Inert polymer, Not biodegradable on the basis of its structure

**12.3. Bioaccumulative potential :** No data available.

12.4. **Mobility in soil - Distribution among environmental compartments:** No data available.

12.5. **Results of PBT and vPvB assessment :**

This information is not required.

12.6. **Other adverse effects:** None known.

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13. **DISPOSAL CONSIDERATIONS**

13.1. **Waste treatment:**

- Disposal of product:** Recycle if possible. Destroy the product by incineration (in accordance with local and national regulations).
- Disposal of packaging:** Recycle if possible. Destroy packaging by incineration at an approved waste disposal site (in accordance with local and national regulations).

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14. **TRANSPORT INFORMATION**

Not classified as dangerous in the meaning of transport regulations.

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15. **REGULATORY INFORMATION**

Safety data sheets: according to Regulation (EC) No. 1907/2006 its amendment (453/2010)

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

15.2. **Chemical Safety Assessment:**

This information is not required.

**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): Conforms to  
AICS: Conforms to  
NZIOC: Conforms to

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16. **OTHER INFORMATION**

**Update:**

Safety datasheet sections which have been updated:		Type:
1	Grades	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

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**Product:**

SDS No.: 003885-001 (Version 1.4)

+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

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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).**

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