



BMA Commercial & Industrial s.a.r.l.

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1- **ITEM IDENTITY :**

- NAME : ENAMOPOXY FOR CONCRETE + EPOXY HARDENER
- CODE : BMA-CEE060→199 + BMA-HPE800
- DESCRIPTION : 2 components ,solvent based , air drying , non porous , relatively high solid epoxy coating , based on a modified polyamid epoxy resin , and especially formulated for heavy duty services .

2- **ITEM USE FIELDS :**

BMA enamopoxy is an indoor and outdoor coating for well prepared and primed floor. It's especially designated to be used on any primed concrete floor ; Because of its chemical , weather and impact resistance and non-slip properties , and because it withstands the floors constant beating , prevents the surfaces stripes and leaks , maintains a strong mechanical resistance to the cured floor and gives a smooth and elegant finishing , it's formulated for industrial uses , such as factories , warehouses , showrooms ,hospitals , schools and hotels floors ,as well as for garages , hangars , aquariums , swimming pools, restaurant kitchens , boat-buildings ,...

3- **ITEM GENERAL CHARACTERISTICS :**

- Great resistance to abrasion , impact and high pressures .
- Durable elegant finish , up to 2 – 4 years minimum , according to the environment conditions (long immersion into water and salted water , very high pressure application ,...).
- Remarkable coverage and chemical resistance .
- Good waterproofing properties .
- Excellent heat , salt , acid, scratch and scuff resistance .
- Great prevention against surface strips and leaks .

- Very high non-slipping properties if it's mixed with sand or smooth gravel .
- Excellent resistance to floor constant beeting , high traffic ,.... When totally cured .
- Great heavy equipment and vehicles weight withstanding .
- Compatible with various aged coatings .
- Applicable on concrete, bitumen, ...
- Generation , during the application , of some relatively medium toxic vapors , evaporated by some solvents used during the production process .
- Heat generation during the mixture of the epoxy resin with its catalyst .
- Easy to be cleaned – up .

4- ITEM STANDARDS @ 25°C :

<i>Property</i>	<i>Standard</i>	<i>Result</i>
Specific gravity	ASTM D1475	1.40 g/cm ³
Viscosity	ASTM D562	10 Poises
Solid content	ASTM D1259	72 ± 3 % by volume
V.O.C. content	ASTM D3960	250 g/L
Catalyst %		25 %
Pot life		4 hours
Induction time		30 min.
Dry to touch		4 hours
Dry to overcoat	ASTM 1640	8 hours
Full cure		7 days
Theoretical spreading rate		10 - 14 m ² /L upon the layers thickness
Recommended wet film		70 - 100 μm/layer
Recommended dry film		50 - 72 μm/layer
Best diluent		Thinner epoxy BMA or thinner 050 BMA
Dilution %		15- 20 % by brush & roller / 2 - 5 % by airless spraying
Flash point	ASTM D93 _(PMCC)	28 °C (epoxy paint) & 25 °C (catalyst)
Miscibility with water		Not miscible
Color		White , black , grey, other colors on request
Gloss level @ 60°C	ASTM D523	70 – 95 units
Shelf life		2 years (epoxy paint) & 1 year (catalyst) in well closed containers

5- APPLICATION :

- Substrate preparation
BMA enamopoxy for concrete should be applied on a well cleaned and primed surface , which should be previously treated with a suitable alkaline detergent or degreasing solution , to remove any oil or grease spot that could interfere with proper adhesion .
- Coating preparation
 - Stir the enamopoxy for concrete and the epoxy hardener in their cans separately with a wooden stirrer or a mechanical mixer .

- In a deep can , mix the exact needed quantity of BMA-CEE... , that could be used within the pot life limit , with 25% of hardener epoxy BMA-HPE800 .
- Wait about 30 minutes for sweating time (induction) , then thin with the suitable quantity of BMA thinner epoxy or BMA thinner 050.

➤ Application on concrete surfaces

- Etch the concrete with Muriatic (hydrochloric) acid then rinse it immediately with plenty of water; the surface must seem as a 150–180 grit sandpaper, and it must directly absorb few drops of water , otherwise the etching procedure should be repeated.
- When the surface is dry , rub your finger against it and wait for a white film of dust or powder , if it appears rinse again .
- After full dryness , the epoxy could be applied :
 - begin with one or two cross coats (if the surface needs) of insulopoxy BMA-INS000 mixed with 25% of hardener epoxy BMA-HPE800.
 - allow to dry for at least 6 – 8 hours .
 - follow – up by one cross – coat of primopoxy for concrete BMA-CPE...mixed with 25% of hardener epoxy BMA-HPE800 .
 - allow to dry for 6 – 8 hours .
 - finish with one or two cross coats of enamopoxy for concret BMA-CEE... mixed with 25% of hardener epoxy BMA-HPE800 for an elegant finish .
 - let dry for 2 days for light foot traffic , 5 days for heavy foot traffic and ten days for vehicle traffic .
- to apply any BMA paint epoxy on a previously coated floor , clean it well , remove any peeling paint or stain , and if it's sealed , grind it to remove the sealer , then scuff it well before the application to ensure proper adhesion .

➤ Application tips

- BMA epoxy solvent based could be applied by a brush , a roller or an airless spraying gun (which is not very recommended for safety issues) ; although while spraying epoxy , it's recommended to apply the first coat by a brush , this fills the grain better , because epoxy doesn't usually wet out well which could lead , during a non appropriate application to holes and fish eyes into the cured surface .
- It's recommended to mix just the needed quantity of BMA enamopoxy for concrete with 25 % of its hardener just before the application and to close hermetically the cans of the remaining 2 components to avoid their solidification .

➤ Cleaning

Clean hands and tools directly with BMA thinner epoxy or 050 ; any residue left in the spraying gun could irreversibly block its nozzle .

6- SUMMARY:

<i>Mineral Substrate : Concrete (variant 1)</i>		
1 st layer	Insulator epoxy INS000+HPE800	25µm
2 nd layer	Paint epoxy PEP...+HPE800	75µm
3 rd layer	Paint epoxy PEP...+HPE800	75µm

<i>Mineral Substrate : Concrete (variant 2)</i>		
1 st layer	Insulator epoxy INS000+HPE800	25µm
2 nd layer	Primer epoxy PRE...+HPE800	50µm
3 rd layer	Paint epoxy PEP...+HPE800	35µm
4 th layer	Paint epoxy PEP...+HPE800	35µm

7- LIMITATIONS :

It's not recommended to use this product in the following cases :

- When the application area is closed and not well ventilated .
- When one of the 2 components is expired .
- When the temperature is below 5°C or above 40°C .
- When the substrate temperature is not at least 3°C above the dew point .
- When the humidity overstep 85 % .
- When rain is forecasted within 72 hours after application on an outdoor substrate .
- When the mixture of the 2 components oversteps the pot life limit .
- When the coating will be applied over a wet floor .

8- AVAILABLE PACKAGES :

- US gal and 5 US gal for the epoxy coating .
- 1L can and 5L gal for the catalyst .

9- STORAGE :

Store this product in well closed containers , kept in a ventilated area , away from direct sunlight , heat sources , flames , freezing conditions , in a moderate temperature between 5 to 35 °C .

10- HEALTH AND SAFETY :

- Keep out of the reach of children .
- Apply in a well ventilated area away from children , pregnant women and persons with respiratory problems .
- Don't hang the product container while storing .
- Do never touch any paint with bare hands .

- It's recommended to wear face mask and hand gloves while applying , especially in case of repetitive exposures .
- In case of eye contact flush with large amounts of water without rubbing eyes , if the malaise persists , directly contact a physician .
- In case of skin contact , wash the defected area with warm soapy water ; if any allergic reaction appears consult a physician .
- Get rid of the unused remaining quantities and the empty cans according to your country regulations .