
Product Characteristics

Description

MAXOPOXY ETCH 160 is a two-component epoxy primer. It provides good flexibility along with excellent abrasion and impact resistance. It contains zinc phosphate, for additional corrosion resistance.

Recommended Use

MAXOPOXY ETCH 160 is recommended primer for hot dipped galvanised steel, aluminium, mild steel as well as stainless steel surfaces in moderate to severe corrosive environments. It can be also used on surfaces where roughening is not possible.

Service Temperature

Maximum, dry exposure : 120°C

Physical Constants

Shade

Grey/Light Grey/Red Oxide

Finish

Matt/Semi-Glossy

Volume Solids (%)

60 ± 2

Theoretical Spreading Rate

12 Sq.mt/litre @ 50 microns

Flash Point

Above 24°C

Surface Dry

Approx 25-30 mins @ 30°C

Hard Dry

Approx 2-3 hours @ 30°C

VOC Content

378 g/l

Shelf Life

1 year for Base and 1 year for Hardener from the date of production when stored in an appropriate storage condition at 25 – 30°C. The drums should be seal packed in its original condition.

Application Details

Mixing Ratio

Base : Hardener/Curing Agent
(4:1 By Volume)

Recommended Thinner

Maxothin Epoxy Thinner

Application Method and Thinning

Equipment	Airless Spray	Air Spray/ Pot Gun	Brush/Roller
Suggested Thinning (%)	10	15-20	5

Pot Life

1.5 Hours @ 30°C, at higher temperature pot life reduced significantly

Nozzle Orifice

0.017” – 0.021”

Nozzle Pressure

>200 Bar or 2800 Psi

Cleaning of tools

Use of Maxoclean thinner is recommended for cleaning of tools and equipment's

Film Thickness

Below is the recommended WFT and Thinning for required DFT

DFT Required (Microns)	Recommended Thinning	Recommended WFT (Microns)
40	20%	80
50	20%	100
60	15%	115
70	10%	130
80	5%	140

Normal DFT range of this product is from 50-75 microns/ 2-3 mils. Apart from edges it is advisable to avoid excessive film thickness.

Application conditions

- Temperature of the product must be above 10°C during application
- Surface temperature must be above 5°C during application and curing
- Relative humidity should be below 85% while application

Mixing Instruction

- As it is a two-component product, it is mandatory to stir the Part A or base with the help of a high-speed mechanical stirrer till there is no settlement or pigments settled at the bottom
- Once the base portion is mixed properly then only hardener needs to be added in the recommended ratio as mentioned in the mixing ratio
- Thinning should be done as per requirement and the mixture once again should be stirred with high-speed mechanical stirrer for 2 – 3 minutes

Mixing Table

Mixing Table is for reference

Volume Required	Base/Part A	Hardener/Part B
1 Litre	800 ml	200 ml
5 Litre	4 litre	1 litre
10 Litre	8 litre	2 litre
20 Litre	16 litre	4 litre

Filtration

Before application, it is advisable to filter the mixture with a filter cloth or sieve of at least 80 to 120 microns to avoid chalking of gun. It also helps in facilitating smooth application of the product.

Surface Preparation

New Steel/GI/SS

- The product is suitable for hand/ power tool cleaned surface minimum to ST 2 (ISO 8501-1:2007)
- Abrasive Blasting to min Sa 2.5 (ISO 8501-1) / SP 10 (SSPC)
- All the dust, blast media and loose material should be removed
- The surface should be dust free in case of GI/SS substrate

Maintenance and Repair

- On spot abrasive blasting to min PSa2 (ISO 8501-2) / SP 6 (SSPC)
- Areas where blasting is not possible, to be cleaned or treated through hand or power tool to min ST 2
- Intact coating needs to be removed by water jetting to min WA 2 (ISO 8501-4)
- Acceptable flash degree of rust of maximum FR M (ISO 8501-4)
- All the dust, blast media and loose material should be removed

MAXOPOXY ETCH 160

Drying and Over Coating

Coat Requirement

Preceding Coat

None or According to Specification

Subsequent Coat

As per Maxolay's specification. Recommended series is Maxopoxy, Maxokyd, Maxothane

Drying Time

Surface Temperature	15°C	30°C	45°C
Surface Dry	60 Minutes	35 Minutes	20 Minutes
Hard Dry	5 Hours	3 Hours	2 Hours
Fully Cured	7 Days	7 Days	7 Days

Calculations shown above are mentioned considering 50-micron DFT. To achieve the desired drying time, it is important to maintain proper ventilation during the whole application process.

Over Coating

Product series	15°C		30°C		45°C	
	Min (Hours)	Max	Min (Hours)	Max	Min (Hours)	Max
Maxopoxy	5 Hours	Extended	3 Hours	Extended	2 Hours	Extended
Maxothane	5 Hours	Extended	3 Hours	Extended	2 Hours	Extended
Maxokyd	5 Hours	Extended	3 Hours	Extended	2 Hours	Extended

Overcoating time is determined considering the generic paint system. If other products are required, please consult local representative.

Over Coating Surface Preparation

- If the maximum overcoating time is exceeded, it is mandatory to roughen the surface to create proper profile for subsequent coat
- To achieve necessary adhesion the surface should be clean and dry
- All the loose dust should be removed before application

Clarification

Epoxy paint has natural tendency to chalk or fade when exposed to sunlight, moisture, or water. This does not affect the overall performance of the product. It also becomes more sensitive to mechanical damages and chemical exposure at elevated temperature.

Storage

Proper storage of the product is crucial to maintain their quality and performance over time. Below mentioned are some general guidelines for storing the material

- Store material in a controlled temperature environment, it should not be more than 30°C, or else it will affect the shelf life of the product
- Ensure good ventilation in the storage to prevent the buildup of fumes or volatile component
- It is mandatory to store material away from direct sunlight
- It is advisable to keep the material in sealed tight drums as air will enter in loose drums and will result in formation of skin or thickening of material
- Store the material away from potential ignition sources and follow proper fire safety regulations

Safety

This product is to be used for industrial use only and to be used or applied by professional applicators only

- Ensure proper ventilation in the area where you are applying the paint. This will help dissipate fumes and prevent inhalation of harmful vapours
- Wear appropriate personal protective equipment (PPE) such as gloves, safety goggles, and a respirator mask to protect your skin, eyes, and respiratory system from potential exposure to paint fumes and chemicals
- In case of accidental contact with the paint, rinse affected areas immediately with water and seek medical attention if necessary
- Do not eat, drink, or smoke while working with paint, as it can be hazardous if ingested and smoking can immediately cause hazardous fire, as it is solvent based paint
- Store paint drums out of reach of children and pets to prevent accidental exposure
- Dispose of any leftover paint or empty drums properly according to local regulations. Do not pour paint down the drain or in regular household trash.

If you have any specific questions or concerns, kindly refer to product's safety data sheet or contact the local representative for further guidance.

Note: Maxopoxy Etch 160 is for professional or industrial use only

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Disclaimer

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