

Metstrip EF3461

Hot immersion paint stripper

PRODUCT DESCRIPTION

Metstrip EF3461 has been developed as a safer paint stripping alternative to Methylene Chloride. Methylene Chloride has long been recognised as an extremely effective paint stripping solvent but has the disadvantage of being assigned a Workplace Exposure Limit (WEL) 100 ppm (long term) or 300 ppm (short term). Methylene Chloride has a low boiling point 40°C; therefore it is easy to achieve these concentration levels.

Metstrip EF3461 has a much higher boiling point (206°C), so evaporation is much slower, even when used warm at 50°C.

Metstrip EF3461 is most effective at removing polyester paints from steels and Aluminium. For optimum performance it is best used warm at 50°C when it will usually remove polyester paint in less than 10 minutes (depends on coating thickness and agitation available).

It can also be used at ambient temperatures but stripping times will increase.

Metstrip EF3461 is an alkali activated solvent blend but although it contains alkali, the attack on aluminium substrate is minimal due to the water free nature of the solution.

Features and Benefits

- Liquid product for use in tank immersion process.
- Causes polyester paint to disintegrate into fine particles rather than large paint flakes.
- Low vapour pressure so less evaporation losses to atmosphere.
- Low evaporation loss so usually no need for forced extraction.
- Suitable for use on Aluminium, Steel and Zinc

PROPERTIES

Appearance	Colourless – amber
Odour	Mild solvent odour
Specific gravity	1.05
Boiling point	206°C
Solubility in water	Partially miscible

TYPICAL OPERATING PARAMETERS

Concentration	Use as supplied (100%)
Alkali accelerator concentration	1.5 to 6.0 points
Temperature	20°C to 60°C
Agitation	Stripping times are improved if the solution is constantly agitated e.g. by cycling the solution through a pump.
Rinse	After stripping, work should be rinsed in an air agitated flowing water rinse.

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TESTING AND CONTROLS

Maintain tank level by addition of fresh stripper.

To check the concentration of alkali accelerator

1. Take a 10ml of filter bath solution
2. Add 90ml of de-ionised water and mix.
3. Take 10ml of the clear top layer.
4. Add 50ml of de-ionised water.
5. Add 4 drops of Phenolphthalein indicator.
6. Titrate with 0.1N Hydrochloric Acid to a clear colourless end point.
7. Record the number of mls used as T.

T = Points

Optimum points accelerator is 1.5 to 6.0 points

If optimum fall below 1.5 the stripping times will increase – so accelerator flake should be added to a mild steel fine mesh basket immersed in the stripping solution, at a site where good solution movement is observed.

A fresh solution of **Metstrip EF3461** should have a pointage of 2.3.

An 8.3 grams/litre of accelerator flake will increase the pointage by approximately 1.0 point when it is fully dissolved.

EQUIPMENT

Tank	Mild steel with a sloping bottom.
Heating	Do not use direct heating. Heat by oil or water filled jacket. Optimum temperature is 50°C, maximum temperature 60°C.
Agitation	Solution should be circulated mechanically from one end to the other. Pump should be seal-less if possible. If not, seals should be of PTFE.
Filtration of solution	A second pump, of the diaphragm type, should pump the solution from near the bottom of the tank to a filter press. The filter press should be of mild steel construction with polypropylene filter screens. Solvent from the filter press is returned to the stripping tank.
Pipe work	Mild steel.
Extraction	Not normally required.

STORAGE AND HANDLING

Store in a cool place away from foodstuffs.

Protective clothing including rubber gloves, apron and face shield or goggles should be worn when handling the product.

OTHER INFORMATION

Metstrip EF3461 does not contain any water

Additions of water will extend stripping times and cause attack on Aluminium substrates.

It is therefore important to avoid contamination with water.

Health and safety information – See separate Material Safety Data Sheet

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