PRODUCT INFORMATION		WASTE WATER CHEMICAL IL SHIM FINE CHEMICAL

Remaval of Heavy Metals

YMC - 700

¦APPLICATION

YMC-700 is a reagent used for the precipitation of heavy metal ions during the treatment of effluents.

It is even effective with solutions containing the metal ions in the form of complexes (such as NTA, EDTA).

The precipitation can take place at a range of pH values, from mild acidic to strongly alkaline.

In order to obtain optimum precipitation results, the pH value should, however, ve adjusted for the metal that is to be pricipitated.

Generally speaking, higher pH values are preferable, since a decomposition of YMC-700 is then made impossible.

¦CHARACTERISTICS

1. **YMC-700 has a superior heavy metals-removing performance and is insoluble in waste water and hence very useful as an agent for removing heavy metal.**
2. **Solution type - Easy handling.**
3. **Wide pH range (4 - 13)**

¦HOW TO USE

Dosing depends upon the concentration of the metal in the effluents and it is effected following the "neutralization" stage.

1. **Dose YMC-700 in to the coagulant tank in waste water treatment plant.**
2. **Feed YMC-700 in and undiluted solution by using metric pump at the suitable point in the system.**
3. **Keep pH 4-12.**
4. **Dosage is normally 100 - 1,000 ppm in the waste water.**

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¦PROPERTIES

1. **Appearance : deep yellow liquid**
2. **pH : 11.5 ± 1.5**
3. **Specific gravity(25℃) : 1.18 ± 0.03**
4. **Flash point : above 100℃**

¦HANDLING AND STORING

1. **Protect the face and hands with a mask and rubber gloves to avoid the direct contact with YMC-700**
2. **In the case of the direct contact, the affected area should be immediately washed with running water throughly**
3. **Store YMC-700 in a cool and dark place**

¦PACKING STYLE

200Kgs PE Drum

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APPLICATION OF YMC - 700

EXAMPLE 1 PLATING MANUFACTURE (1)

1) Chemicals : YMC - 700 1.2ml / waste water 1L
2) Analysis : Atomic Absorption Spectrometer
3) Result

ITEM	BEFORE	AFTER
pH	**3.1**	**7.01**
Cu	**177**	**0.05**
Zn	**40**	**0.05**
Ni	**115**	**0.05**

EXAMPLE 2 PLATING MANUFACTURE (2)

1) Chemicals : YMC - 700 1.2ml / waste water 1L
2) Analysis : Atomic Absorption Spectrometer
3) Result

ITEM	BEFORE	AFTER
pH	**1.49**	**6.99**
Cd	**0.4**	**0.01**
Cu	**41**	**0.03**
Fe	**51**	**0.01**
Ni	**76**	**0.1**
Pb	**0.8**	**0.01**
Zn	**152**	**0.3**

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EXAMPLE 3 DYE MANUFACTURE

1) Chemicals : YMC - 700 0.45ml / waste water 1L
2) Analysis : Atomic Absorption Spectrometer
3) Result

ITEM	BEFORE	AFTER
pH	**7.9**	**7.5**
Cu	**92**	**0.2**

EXAMPLE 4 CERAMIC INDUSTRY

1) Chemicals : YMC - 700 0.3ml / waste water 1L
2) Analysis : Atomic Absorption Spectrometer
3) Result

ITEM	BEFORE	AFTER
pH	**3.2**	**7.3**
Cu	**7**	**0.003**
Ni	**51**	**0.1**
Zn	**15.6**	**0.07**
Cd	**6.4**	**0.01**
Pb	**0.7**	**0.01**

EXAMPLE 5 PCB MANUFACTURE

1) Chemicals : YMC - 700 0.4ml / waste water 1L
2) Analysis : Atomic Absorption Spectrometer
3) Result

ITEM	BEFORE	AFTER
pH	**2.8**	**7.5**
Cu	**87**	**0.08**

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Remaval of Heavy Metals

METAL ION STOICHIOMETRIC EQUIVALENTS

The concentration of YMC-700 equivalent to 1ppm off various metal ions.

METAL ION	YMC - 700 Equicalent Concentration mg/L
Hg^{+2}	3.6
Cd^{+2}	6.4
Pb^{+2}	3.5
Cu^{+2}	11.3
Zn^{+2}	11.0
Ag^{+1}	3.3
Mo^{+6}	22.5
W^{+6}	11.7
Fe^{+2}	12.8
Ni^{+2}	12.2
Co^{+2}	12.1
Sb^{+3}	8.9
Bi^{+3}	5.3
As^{+3}	8.6
Cr^{+2}	20.7
Sn^{+4}	12.1
Sr^{+2}	8.2
V^{+3}	21.2