

Water Technologies & Solutions fact sheet

MetClear* MR2445

heavy metal precipitant

- Directly precipitates soluble heavy metals to help meet customer permit limits
- Effective for various metals including, cadmium, cobalt, copper, lead, mercury and nickel.
- Improves potential for wastewater recycling for plant processes
- Can be applied during normal treatment process or as a polishing agent for wastewater treatment
- Excellent aquatic toxicity profile versus dithiocarbamate based products

description and use

MetClear MR2445 is a polymeric, liquid precipitating agent for heavy metals. It is a highly effective alternative to conventional techniques for precipitation of higher levels of heavy metal ions. It is commonly used in conjunction with, or as a polishing step after, conventional hydroxide precipitation and may also be used without hydroxide precipitation, but higher dosages may be needed.

Treated water mercury concentrations of parts per trillion are possible without filtration, which is of special importance due to potential increased mercury discharge regulations. Supplemental use of a coagulant may not be required, but confirmation testing is recommended. Flocculants are commonly used unless direct media filtration with MetClear pre-treatment is performed.

typical applications

MetClear MR2445 is very effective in precipitating soluble metals. Such heavy metals can be found in various industrial wastewaters, such as automotive manufacturing and assembly operations, steel

manufacturing processes, plating operations, metal finishing, coal fired power plants and refining and petrochemical processes.

Product usage may vary depending on the metals loading to the system being treated. Jar testing a range of dosages to determine optimum removal efficiency is recommended, followed by on-system adjustments, as needed.

treatment and feeding requirements

MetClear MR2445 can be added to the existing treatment process provided the application pH is greater than 4.0. It is miscible with water in all dilutions, therefore it may be diluted to any desired concentration to meet existing chemical feed pump capacity. Dilution water should be good quality with a pH near neutral or higher. Lower quality water may be used, but performance may be negatively impacted.

If day tanks are used to feed diluted product, fresh solutions should be made daily. The product is commonly applied as purchased to an area of high turbulence, such as the suction side of a pump.

In practice, after the addition of MetClear MR2445 to a batch solution or continuous stream, the treated water must be exposed to mixing so product-metal precipitate formation occurs and subsequent removal as a suspended solid will happen.

general properties

Physical properties of MetClear MR2445 are listed on the Safety Data Sheet, a copy of which is available on request.

packaging information

MetClear MR2445 is a liquid product, available in a variety of containers. Consult your SUEZ representative for packaging options.

storage and handling

MetClear MR2445 should be stored in a cool, dry environment. Keep container closed when not in use. Protect from freezing.

Many storage and feed system materials of construction are compatible with MetClear MR2445. Details related to specific applications should be discussed with your SUEZ representative.

safety precautions

A Safety Data Sheet containing detailed information about this product is available on request.

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