

# TECHNICAL DATA SHEET

## QH DIE SLICK™ AF SERIES DIE RELEASE AGENTS - WATER-BASED

QH DIE SLICK™ AF series products are high performance siloxane-free water-based die lubricants for demanding post casting processes that preclude the use of siloxane-containing products.

### Applications

QH DIE SLICK™ AF series products are water-based high pressure die casting lubricants designed to offer maximum benefits when used diluted in water.

Products in this range are formulated for compatibility with operations with strict surface compatibility requirements.

These versatile products are ideal for zinc and some aluminum high pressure die casting operations.

### Recommendation for Use

QH DIE SLICK™ AF series products are designed to be used in diluted form and applied to the die face before each casting cycle, with water to lubricant dilution ratios typically in the range 40:1 to 140:1. Application of the lubricant can be tailored to the specific needs of each die casting facility to ensure optimum amount of product is applied.

To maximize the benefits of QH DIE SLICK™ AF Series lubricants, Quaker Houghton recommends use of one of its high specification QH FLUIDCAST™ lubricant mixing and delivery systems to ensure accurate control of die lubricant concentration and application quantity, improving process consistency, efficiency and part quality.

### Benefits

- Siloxane-free formulation, for processes with strict compatibility requirements
- Excellent protection on all areas of the die, prevents solder and minimizes die maintenance
- Promotes excellent metal flow, enhanced wetting and lubricating properties
- Castings are bright and shiny, does not cause paint or coating problems

### Concentration Control

QH DIE SLICK™ AF series products perform optimally within the established concentration range determined for your operation. Regular monitoring of product dilution ratio in water is recommended to ensure effective application. QH FLUIDCAST™ application equipment offers automated monitoring and control capabilities.

For manual monitoring, Quaker Houghton recommends the use of a handheld colorimeter in conjunction with a standard calibration curve for rapid determination of product dilution ratio. Please consult your Quaker Houghton representative for assistance or calibration samples.

### Health, Safety and Handling

Please consult the Safety Data Sheet (SDS) for information on storage, safe handling and disposal. The conditions or methods of handling, storage, use and disposal of the product are beyond our reasonable control - we assume no liability for any ineffectiveness of the product or any injury or damage, arising out of or in connection with these conditions. This product has a shelf life of 12 months, and it should be stored in a tightly sealed container in temperatures between 41°F (5°C) and 95°F (35°C). Do not freeze.



# QH DIE SLICK™ AF SERIES

## DIE RELEASE AGENTS - WATER-BASED

### Properties

The series comprises a range of lubricants with varying amounts of lubricating power, to suit a wide range of customer needs.

Series consists of the following products:

| PROPERTY                 | AF 240VX        | AF 241VX        | AF 242VX        | AF 243VX        | AF 244VX        | UNIT    |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------|
| Appearance               | White liquid    | White liquid    | White liquid    | White liquid    | White liquid    |         |
| Odor                     | Mild            | Mild            | Mild            | Mild            | Mild            |         |
| Specific Gravity at 15°C | 0.979           | 0.983           | 0.987           | 0.990           | 0.994           | g/cc    |
| Bulk Density at 15°C     | 8.17            | 8.20            | 8.23            | 8.26            | 8.29            | lbs/gal |
| Flash Point              | None to boiling | None to boiling | None to boiling | None to boiling | None to boiling |         |
| Boiling Point            | 100   212       | 100   212       | 100   212       | 100   212       | 100   212       | °C   °F |

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