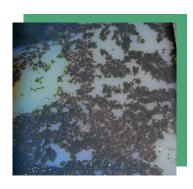
CLEANER

Application Sheet



QUAKER FORMULATM 613 DPD Sump and Maintenance Cleaner



APPLICATIONS

QUAKER FORMULATM 613 DPD is a cleaner specifically formulated for central systems, single machines, or premix tanks filled with machining and grinding fluids. With a unique balance of constituents, this product is designed to penetrate, loosen, lift, and emulsify a variety of tenacious soils. It can be added to the coolant and recirculated for 2-24 hours while continuing your machining operation.

BENEFITS

- Product Versatility Provides excellent cleaning in a number of maintenance applications.
- Cost Effective Minimizes operational down time during sump clean out.
- Excellent Cleaning Ensures good sump life for fresh coolant.
- Versatile Cleans a wide variety of soils.
 Safe on ferrous and non-ferrous surfaces.
- Low Foaming Good foam control over a wide temperature range.

CUSTOMERS

- General Motors
- Magna
- Safety-Kleen
- JTEKT

FLUID MAINTENANCE

QUAKER FORMULATM 613 DPD is to be used diluted in water. Always add product to water. The concentration of QUAKER FORMULATM 613 DPD is based upon the level of dirt of the sump/system to be cleaned. Typical concentration is 1.0% by volume. Heated water (120-180°F) improves the cleaning capability of the product, but the product may be used at ambient conditions.

QUAKER FORMULA™ 613 DPD should be added to fresh water at a fluid level sufficient enough to allow pumps to circulate the cleaner solution throughout all contact areas. Emphasis should be placed on making sure that the cleaner is flushed through coolant lines, spray nozzles, etc. The used solution should be discarded along with sludge, chips, dirt, and debris when completed. In badly contaminated systems, this process should be repeated. Thoroughly rinse all areas of the system and machine tool with a low concentration of the fresh coolant. This insures that the alkaline nature of the cleaner is neutralized. Checking the pH of the final rinse is the best method for determining whether or not the cleaner has been neutralized.

Sump Cleaning: 1 - 2%

Floor Scrubbers: 1 - 3% by volume

Hand Mop Operations: 5 - 15%

Soak Tank: 1 - 10%

Wipe On: 10 - 100%

Steam Cleaning: 1 - 10%

CLEANER

Application Sheet

QUAKER FORMULA™ 613 DPD

FLUID MAINTENANCE CONT.

This product may also be used in spray applications for cleaning machine tools (adequate ventilation should be provided, if this method is employed).

PROCESS COMPATIBILITY

To enhance process compatibility, use Quaker metalworking fluids and cleaners.

PACKAGING/STORAGE

QUAKER FORMULA™ 613 DPD is available in drums (54 gal/508 lb) or totes (320 gal/3008 lb). All containers are filled to volume by weight.

This product has a shelf life of 6 months. Like most chemicals, it should be stored out of direct sunlight in temperatures between 40°F (4°C) and 110°F (43°C).

PROPERTIES - CONCENTRATE

PROPERTY	TYPICAL VALUE
Appearance	Clear to slightly yellow
Pounds per gallon at 60°F	9.4 lb./gal.
Neat pH @ 77°F.	11.8
Odor	Soapy
Alkalinity	3.2 meq/gm
Flash Point via COC	Boils at 212°F./100°C.
Appearance (2.0% dilution)	Clear solution
pH (2.0% distilled water)	11.0

Prior to using this product, consult the Material Safety Data Sheet for instructions regarding safe handling and environmental issues. The information contained herein is based on data available to us and is believed to be accurate. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY USE, OR ANY OTHER WARRANTY IS EXPRESSED OR TO BE IMPLIED, REGARDING THE ACCURACY OF THESE DATA, THE RESULTS TO BE OBTAINED FROM THE USE THEREOF, OR THE HAZARDS CONNECTED WITH THE USE OF THE PRODUCT. Quaker Chemical Corporation assumes no liability for any alleged ineffectiveness of the product or any injury or damage, direct or consequential, resulting from the use of this product unless such injury or damage is solely attributable to negligence on the part of Quaker Chemical Corporation.

