



Advantage P3-HD-FS

Biostatic, Synthetic Machining and Grinding Fluid

Description

Advantage P3-HD-FS is a fully synthetic coolant with low Ph designed to exceed today's challenging applications for machining and grinding of aluminium alloys and ferrous metals along with its superior ability to drop and prevent the reticulation of fine particles. It retains a clear transparent solution that facilitates tool setup and close tolerance grinding operations. The extreme pressure additive package incorporated into **Advantage P3-HD-FS** provides excellent anti-weld properties enabling its solutions to perform difficult machining operations such as milling, drilling, boring, reaming, tapping, sawing, broaching and multiple grinding operations.

With a clean fresh odour, **Advantage P3-HD-FS** is mild and non-irritating to operators' skin whilst its synthetic additives ensure economical long life performance.

Advantage P3-HD-FS combines excellent rust protection with low foaming characteristics, promotes long sump life through superior microbial resistance virtually eliminating the need for sump side additions of biocides and fungicides and is formulated to remain clear throughout the life of the coolant and reject tramp oil that can cause smoking misting and premature spoilage.

Features & Benefits

FEATURES	BENEFITS
Excellent machining	Increased tool life, improved capabilities surface finish, allows increased feeds and speeds
Long sump life	Less down time, lowered maintenance costs, lower effluent treatment costs
Clean running	Drops fines quickly, keeps machine tools clean
Rejects tramp oil	Eliminates coolant spoilage due to oil contamination

Applications

Advantage P3-HD-FS is formulated for use under a wide variety of conditions and in many different applications. Solutions of **Advantage P3-HD-FS** are extremely tolerant to hard water. In individual sumps or central systems **Advantage P3-HD-FS** performance will exceed the most demanding expectations.

Typical Physical and Chemical Properties

Appearance

Neat	Dark blue liquid
5% Dilution	Clear blue liquid

pH @5% 9.2

Density @15oC 1.052 kg/L

Recommended Usage Concentration

The recommended usage concentration of **Advantage P3-HD-FS** for Machining is from 1:10 (10%) to 1:25 (4.0%) and Grinding is 1:25 (4.0%) to 1:30 (3.0%). This may be customised to suit individual needs or solutions, which may vary from time to time. For further advice please contact your Sales Representative.

Concentration Checks

Periodic solution concentration checks of **Advantage P3-HD-FS** should be carried out using a hand held refractometer. The Refractometer factor for **Advantage P3-HD-FS** is 2.6. Multiply the refractometer reading by this factor to obtain the emulsion concentration in percent (%). Please contact your sales representative for further information about this service.

Usage, Storage and Disposal

Usage

Before using **Advantage P3-HD-FS** please ensure that all safety requirements as set out on the Material Safety Data Sheet are observed and adhered to, if ever in doubt please contact your sales representative who will be happy to help by addressing any concerns or questions.

Storage

Store according to instructions given on Material Safety Data Sheets.

Disposal

Use an accredited Trade Waste Disposal Company, which complies with all the local environmental laws and regulations when disposing of any waste product.

Health and Safety

Refer to Material Safety Data Sheet for the proper handling, use and disposal of this product. Product MSDS can be found at www.mapal.com.au for additional information contact MAPAL Australia on 1300 825 267.

Product Shelf Life

Under normal conditions the recommended shelf life for **Advantage P3-HD-FS** is a minimum of Six (6) months, unless otherwise specified.

Availability and Shipping Classification

Advantage P3-HD-FS is available in 205 litre drums. Other sizes may be available upon request, please contact your sales representative.

Transportation of **Advantage P3-HD-FS** should be done in accordance to the Material Safety Data sheets, local laws and regulations. It is highly recommended that an accredited transportation company should always be used.

Warranty

The information given here is considered to be correct and is offered for your consideration, investigation and verification. No warranties are expressed or implied, since the use of our products is beyond our control.

Advantage P3-HD-FS is made in Australia



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