

# GOLDENSTONE® EMULSIN EXTRA

## Technical Data Sheet (TDS) METALWORKING FLUIDS

### Description and Application

**Goldenstone® Emulsin Extra** is water-miscible metal working fluid, which is formulated with base oils of low aromatic contents and neutralised products of boric acid, anionic and non-ionic emulsifiers as well as yellow metals rust & corrosion inhibitors. This product contains amines but is free from lactic acid.

**Goldenstone® Emulsin Extra** is universal, water-miscible cutting fluid for all chip-removal metalworking operations and is especially recommended for preparation of working solutions with water of hardness 7-30°dH.

### Benefits

- Produces stable tight emulsions with excellent wetting properties in waters of different hardness up to 60°dH (1080 ppm)
- Ensures superior cutting tool cooling and detergency
- Suitable for machining of cast iron, steel and aluminium alloys
- Designed for use at wide concentration ranges from 4% to 15%
- Ensures long life of the emulsion by protecting the emulsion system from bacteria and fungi.

### Use and applicable operations

|                                      | Water-Miscible MWF             |
|--------------------------------------|--------------------------------|
| Cast iron                            | Very suitable                  |
| Steel                                | Extremely suitable             |
| Yellow metals                        | Suitable with some limitations |
| Aluminium                            | Suitable                       |
| Grinding                             | Suitable                       |
| Cutting                              | Suitable                       |
| Forming                              | Not suitable                   |
| Additional properties: lubricity/ EP | None                           |

Refractive index – 1.1% per °Brix

### Specifications

|            | Water-Miscible MWF |
|------------|--------------------|
| ISO 6743/7 | ISO-L-MAE          |

### Typical Characteristics

| Parameter   | Test Method   | Typical Value  |
|---|---|--|
| Properties of the concentrate:<br>- Appearance<br>- Kinematic Viscosity at 20°C, cSt<br>- Density at 20°C, g/ml<br>- Mineral oil content, %                               | Visual<br>EN ISO 3104<br>EN ISO 3675<br>-           | Clear brown fluid<br>130<br>0.987<br>42                  |
| Properties of water solutions:<br>- pH (at 4 %)<br>- pH (at 10 %)<br>- Corrosion protection (Herbert test at 3%)<br>- Corrosion protection (chip/filter paper test at 4%) | ISO 4316<br>ISO 4316<br>DIN 51360/I<br>DIN 51360/II | 9.1<br>9.4<br>R0/S0 - no corrosion<br>0/0 - no corrosion |

Important note: typical data values do not constitute a specification but are an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved.

## Health, Safety and Handling

Based on current available information, this product is not expected to produce adverse effects on health when used for the intended application.

For more information about product MSDS, terms and conditions for storage and shelf life please visit:

<http://www.goldenstoneoils.com>

Fluid must be stored in closed and dry warehouses. The concentrate will stay stable if stored at temperatures from 10°C to 25°C for up to 12 months. After opening keep the container with concentrate tightly closed.

## Packages

20L, 206 kg

Version: March 15, 2018