PRODUCT DATA SHEET

Germ-Allcard Priamus X255

High performance multi-purpose wire drawing lubricant for copper and aluminium

Description

Priamus X255 is a highly detergent emulsifiable fluid designed for drawing all wire sizes, from rod to fine wire. The lubricity package extends the die life, minimizes wire breaks and increases productivity, while enhancing the surface finish. The careful balance of complex anionic emulsifiers enable a high detergency, ensuring the cleanliness required for fine wire sizes especially on multi-wire machines. With increased concentration, Priamus X255 provides the perfect lubricity needed for larger wire sizes up to rod sizes without compromising cleanliness.

Applications

Copper: Priamus X255 is suitable for drawing all wire sizes from rod to fine wire, on all types of wire drawing machines. It is especially suitable for both multi-wire and in-line drawing machines. Aluminium: Priamus X255 is successfully used for drawing aluminium alloys on slip machines with entry size of 9.5mm. Priamus X255 emulsions are fit for use in continuous annealers with a 1-2% concentration.

User instructions

- 1. Use a system cleaner during the disposal of previous emulsions, to ensure maximum results. To obtain its unique biostability it is essential to remove copper soap deposits before applying Priamus X255.
- 2. Priamus X255 will perform well in waters of up to 200 ppm Ca (as CaCO3). However, for maximum performance we recommend the use of soft or de-ionised water.
- 3. In order to preserve the integrity of this product, drums should be stored inside a building protected from frost and direct sunlight.
- 4. Avoid exposure to extreme temperatures and the ingress of moisture. Priamus X255 must have a temperature above 5°C before emulsion make-up.
- 5. The correct mixing procedure is to add Priamus X255 concentrate to water and stir. For this operation we recommend positive displacement (Dosatron type) mixing units.

| Copper | Entry diameter (mm) | Recommended concentration | |
|-----------------|---------------------|---------------------------|--|
| Rod | 6.0 – 14.0 | 10-12% | |
| Intermediate | 4.5 – 6.0 | 6-8% | |
| Medium | 2.0 – 3.0 | 4-6% | |
| Fine/Super fine | 0.4 | 2-4% | |

| Aluminium | Entry diameter (mm) | Recommended concentration |
|--------------|---------------------|---------------------------|
| Intermediate | 3.0 | 6-8% |

Note: In some circumstances, it is beneficial to exceed the recommendations shown above.

Environment, Health and Safety

Please consult the Material Safety Data Sheet for instructions regarding safe handling and environmental issues. Germ-Allcard Priamus X255 is biocide, boron and formaldehyde free. It is compliant with the TRGS 611 specification. This ensures environmental safety & operator health.

Properties

| | Method | Unit | Typical | |
|-----------------------|---------|------|------------------|--|
| Appearance (Neat) | Visual | - | dark brown oil | |
| Appearance (Emulsion) | Visual | - | semi translucent | |
| Density, 20 °C | D 4052 | g/ml | 0.96 | |
| pH 5% in DI water | E 70 | - | 8.6 | |
| Refractometer Factor | | - | 1.0 | |
| Acid Split Factor | Babcock | - | 1.15 | |

The figures above are not a specification. They are typical figures obtained within production tolerances.

Remarks

Please contact your Q80ils representative for further advice and support on your specific application and equipment.

Sustainability

The product Carbon Footprint (PCF), cradle-to-gate (Q80ils state of the art facility in Belgium), of Germ-Allcard Priamus X255 is $\bf 2.02$ kg CO $_2$ eq / kg. Please contact Q80ils to learn more about the positive environmental impact, the handprint, of this product. For more info check here

