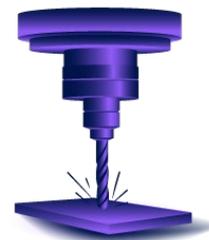


TECHNICAL PRODUCT SHEET

MATRIX



DESCRIPTION

MATRIX is a superior general purpose, water-miscible metal processing fluid that forms a stable milky white emulsion when mixed with water due to high content of emulsifiers for superior performance. It demonstrates excellent resistance to bacterial growth. It readily emulsifies and forms very stable emulsions, even with relatively hard water (350 ppm CaCO₃) and high dilution ratios. It does not contain any phenolic, chlorine or cresylic components. It is also free of secondary amine, boron and formaldehyde.

The product must be kept in a cool place and be used within six months of its production date.

Caution: The concentrate is added to water, under agitation, and not vice versa. Best results are obtained using a mixing device.

APPLICATIONS

MATRIX is intended for general-purpose metal treatment applications (grinding, drilling, threading, facing etc.) for various ferrous and non-ferrous (alloys of copper and of aluminum except manganese). Suggested dilution ratios vary according to the application and severity of the operation. The usual mixing ratio of 5% ensures adequate anticorrosion protection.

SPECIFICATIONS

ISO 6743-7 (ISO-L-MAA)

PROPERTIES

MATRIX is suitable for a wide range of applications and provides good corrosion protection to extend equipment life. Its formulation offers effective resistance to bacterial degradation and minimizes foam formation for stable system performance. Free of nitrites, chlorine, phenols, and cresols, it also features a low-odor profile, making it safer and more pleasant to use in various operating environments.

BENEFITS

MATRIX helps reduce rationalization costs while delivering very good machining performance across diverse operations. It provides good dilution stability even in hard-water conditions and supports improved overall operational efficiency. Safe and easy to work with, it offers reliable performance and user-friendly handling in daily machining applications.



TECHNICAL PRODUCT SHEET

PHYSICAL-CHEMICAL CHARACTERISTICS

MATRIX	METHOD	
Density at 15°C, g/cm ³	ASTM D4052	0.883
Viscosity, Kinematic (cSt) 40°C	ASTM D445	33.5
Viscosity, Kinematic (cSt) 100°C	ASTM D445	94.8
Viscosity Index	ASTM D2270	98
Emulsion stability, 5% v/v		
- 200ppm/ 24hrs	Visual	Stable; no oil separation
- 1000ppm/ 24hrs		Stable; no oil separation
Color (emulsion)	Visual	White-ish
p.H. solution (5% in DI-water) @20°C	-	9.2

The above mentioned characteristics represent mean values.

STORAGE

All packages must be stored in covered, well-ventilated areas. If outdoor storage cannot be avoided, barrels must be placed horizontally to prevent water ingress and to protect labels and markings from damage. Products must not be stored at temperatures above 60 °C and must not be exposed to direct sunlight, freezing conditions, or extreme temperature fluctuations.



HEALTH & SAFETY

This product is not considered to pose significant risks to health or safety when used as intended and in accordance with recommended personal hygiene practices. It must not be applied for purposes other than those for which it has been formulated. For detailed guidance on safe handling and use, refer to the Safety Data Sheet (SDS).



USED OILS

Used lubricants must be collected at designated collection points to prevent environmental contamination. They must not be mixed with solvents, brake fluids, or antifreeze.

