CIMSTAR® 35-961

Boron and formaldehyde releasing agent free product for heavy duty aerospace applications

PRODUCT INFORMATION FLYER

Description

CIMSTAR 35-961 is an innovative hybrid type cutting fluid that combines synthetic lubricants and traditional mineral oil and ester based lubricant technology. It has superior lubricity that can be used on difficult-to-machine hard materials such as titanium, high nickel alloys, aluminium and stainless steel without the need for extreme pressure lubricants. CIMSTAR 35-961 is a water-miscible, micro fine emulsion type cutting fluid concentrate. This high-performance micro emulsion is free of boron, nitrite, chlorine and formaldehyde releasers.

Application

CIMSTAR 35-961 is a specialized cutting fluid recommended for heavy duty machining and grinding operations on a wide range of aerospace alloys such as titanium, nickel based superalloys and aluminium.

CIMSTAR 35-961 is designed for use in individual machines and central systems, and performs extremely well when used in softer water (5 to 15°dH) within the recommended concentration range.

Features and benefits

- Aerospace material compatibility - Excellent compatibility with high nickel based alloys and titanium used in Aeroengine manufacturing as well as with aluminium alloys used for manufacturing fuselage and wings.
- Hybrid - this innovative product combines traditional mineral oil and ester based lubricants with synthetic lubrication technology that puts lubricant at the cut zone-tooling interface.
- Cimstar 35-961 - is a clean high-performance micro emulsion free of boron, nitrite, chlorine and formaldehyde releasing biocides.
- Operator friendly - Mild, clean, no smell, no mist, pleasant to work with.
- Economical - Exceptionally low top up rate, long fluid and tool life.

Conformance

For the materials Aluminium 7075, RVS 316L, Stavax and Titanium Grade 5, Cimstar 35-961 conforms to outgassing specifications:

- OMNEO GSO 19 0622 Grade 2 Vacuum Cleanliness
  (Following specification described in ASML GSA 07 2220 Grade 2 Vacuum Cleanliness)29

Methods of application

Cimstar 35-961 is easy to mix, normal stirring only. For automatic mixing, the use of the Cimcool® MixMaster or Cimcool MixMaster S is recommended. Typical starting water temperature conditions should be 5 - 25°C.

Recommended starting concentration

Grinding and machining	6 - 10%

Mix Master S

Concentration** can easily be obtained by setting the regulator to the correct number. ** The concentration may vary depending on local conditions. It is therefore always advised to check using the refractometer or TA Kit.

Concentration analysis

For concentration analysis, use one of the below given methods or an appropriate laboratory procedure available from your local stockist.

Refractometer factor:	1.6

If the refractometer is used, the resultant reading multiplied by a factor of 1.6 will only be relevant when applied to a fresh mix.

Cimcool TA kit			Use 2 ml. mix							*: next syringe
%	1	2	3	4	5	6	7	8	9	10
Reading	0.90	0.81	0.72	0.63	0.54	0.45	0.36	0.27	0.17	0.08

Handling and storage

Protect from freezing, direct sun and store between 5 - 35°C.

Packaging type

5, 20, 200, 1000 litre.

Safety Data Sheet

The Safety Data Sheet should be consulted for specific information and information on Health, Safety and Environment when handling this product.

Cimcool Industrial Products
Schiedamsedijk 20
3134 KK Vlaardingen
The Netherlands
Tel: +31 (0)10-4600660
cimcool.eu@duboischemicals.com
www.cimcool.com