



MET-L-COOL

Cut Machining Costs. Power Profits

WS-40HW

WS-40HW is water-soluble, enriched with cationic surfactants for moderate machining and grinding operations on all ferrous and non-ferrous metals. It is formulated with refined naphthenic base oil, corrosion inhibitors, biocides and special emulsifiers to perform well even in high hard water (1000 ppm).

Features & Benefits

- ▶ Excellent hard water stability
- ▶ Special biocide package enhances the sump life
- ▶ Corrosion inhibitor package protects the job and machine from rusting
- ▶ Reduces wheel loading and dressing frequency
- ▶ Reduces machine downtime

Directions for use

WS-40HW should be diluted with water in the range of 10:1 to 60:1 depending upon the severity of the operation, work piece material and water hardness. The following practices help in achieving the full benefits of the product:

- ▶ Always add oil to water and never the other way
- ▶ Usage of low hardness (< 100 ppm), Low chlorides (< 30 ppm) water
- ▶ Never add product directly to the sump. Add in the emulsion form
- ▶ Always clean the sump thoroughly before a fresh charge

**Hard water
Compatible**

Typical Properties

Attributes	Ref. Method	Specifications
Appearance	Visual	Amber clear liquid
Odour		Mild odour
Specific gravity @ 27°C	ASTM D 1298	0,93 +/- 0.01
Viscosity @ 37.8°C	ASTM D 445	53 +/- 5.0 CST
Emulsion type	Visual	Milky white emulsion
Emulsion stability test 5% in 1000 ppm hard water	Internal	Passes
PH of 5% solution	Internal	9.4 - 10.2
Foam depression (in secs) 5% in D.M. water	IP 312/74	60 sec max
Cast iron corrosion test 5% in 1000 ppm	IP 287	Less than 1%
Hand Refractometer reading (1:20)	Internal	5.6 +/- 0.2
Oil content		70% max
HMIS Rating		
Health: 1	Reactivity: 1	Flammability: 1

Metal Compatibility		Operation	Concentration
Ferrous	Yes	Drilling	1: 15
Aluminum	Yes	Broaching	1: 10
Brass/copper	Yes	Tapping	1: 10
Magnesium	No	Milling	1: 25
Titanium	No	Boring	1: 15

Pack size: Available in 20 & 205 ltr drums

Note: For more details on storage and disposal please refer to material safety data sheet available on www.itwchemin.com

Other World Leading Products from ITW Chemin

Maintenance, Repair, Overhaul Solutions



Lubricants, Cleaners,
Degreasers



Metal-filled Epoxies
and Urethanes



High-performance
Industrial Grease



Loosens • Lubricates • Maintains
Instant Rust Fighter
in Aerosol Can



Contact Cleaner



Marking System, Staining Colours
and Steel Blue Layout Liquids

Automotive Solutions



Precision Chucks and Solutions
Workholding Devices



Eliminate Rust. Improve Profits.
Rust Preventive Chemicals



Aqueous Cleaners



Microlubrication Systems

Automotive After Market Solutions



Complete Automotive Maintenance



Brake & Parts Cleaner

Adhesive & Sealant Solutions



Structural Adhesives

ITW Chemin

A business unit of ITW Inc. USA

Speciality Chemicals, Lubricants and Equipment Manufacturers



ISO 9001

ISO 14001

OHSAS 18001

ITW India Limited, Plot No. 34 to 37, Phase-2, IDA, APIIC Pashamylaram, Medak Dist. - 502 307(35 km from Hyderabad), A.P. India.
Telephone: +91-8455-224700, 01, 03, 04, 06, 07, 08. Facsimile: +91-8455-224705. Website: www.itwchemin.com