



TECHNICAL DATASHEET

PRODUCT NAME – RUST-X WATER SOLUBLE CUTTING OILS

PRODUCT CODE – WS 50

PRODUCT DESCRIPTION

Water Soluble Coolants -WS50's main function is to remove heat from the cutting tool, chip and work piece.

The cutting oils are manufactured from highly refined Group 2 base oils that are low in Sulphur content. Group II base oils are defined as being more than 90 percent saturates, less than 0.03 percent sulfur and with a viscosity index of 80 to 120. They are often manufactured by hydrocracking, which is a more complex process than what is used for Group I base oils. This gives better life to the tank compared to cutting oils made from Group 1 base oils.

To perform the cooling function properly in a given operation, the viscosity of a finished cutting oil should be low enough to clear the chips and not insulate the heat from the operation, but high enough to control oil misting.

RUST-X specialized cutting oils provide added benefits and specialized properties none other oils provide. These are achieved through Rust-X careful blending of select oils with appropriate additives which provide higher lubrication, excellent corrosion protection & longer tank life.

For the maximum performance, from either mineral

oil based, synthetic oil based or water soluble cutting fluids, Rust-x offers a complete selection of top quality metalworking oils for the industry.

Soluble Oils are used where rapid heat removal is the major requirement. Rust X water Soluble Oils are blended from mineral oils, emulsifiers, rust inhibitors, extreme pressure additives and other coupling agents. The products are mixed with water in normal starting proportions of 3% to 10% for most operations.

All RUST-X rust preventive oils are Barium & Heavy Metal Free.

FEATURES

- Rust prevention to the component from cutting oils and water after machining
- Cutting efficiency 1.5 to 2 times compared to conventional oils
- Longer tank life 6-9 months without fouling owing to world class biocides
- Higher lubrication due to better quality oils
- Low concentration of blend 1:20 to 1:40 m Operational up to 700 ppm of hard water
- Fewest nicks and wear ability on tools
- Lower operational temperatures.



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TECHNICAL SPECIFICATION

Physical Properties	Values
Colour	Milky white
Base Oil	Group II
Viscosity @ 40° C before solution	52 cSt
Emulsion Test Hard Water - No Oil and No Cream	700ppm
Water by % (by weight)	0%
Corrosion - Number of pits and intensity of staining -	NIL
Froth Test at 400ppm	Hard Water - No
Cast Iron Corrosion Test	Pass
Specific gravity	0.88-0.96
Flash point	100 ° C
pH @ 5 %	8-9
Odour	Slight
Oil Content	30-40%

APPLICATION

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APPLICATION PICTURES



PACKAGING AND STORAGE

Store in a cool dry place and always keep Oil sealed when not in use.



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USAGE

Add WS50 in water by the proportions of 1:20 to 1:50 depending upon the operation and severity

Other Product Use RPA 4500 to increase corrosion prevention

Use of gloves while handling the components as well as immediate packaging is important. In case the components carry cutting oils or water from previous processes, dewatering with CL005 is recommended

DISPOSAL

Recommendation: Do not allow product to reach sewage system.

Disposal of product or waste must comply with official local regulations.

Packaging that cannot be recycled must be disposed in the same manner as the product.

HEAVY METALS DECLARATION

RUST-X Rust Preventive products do not contain Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent Chromium (Cr6), Polybrominated biphenyls (PBB), or Polybrominated di-phenylether complying with the restricted substances listed in Article 4(1) of the RoHS Directive. RUST-X Rust Preventive Oils are also REACH Compliant for exports to the European Union.

SAFETY INFORMATION

- Keep Out Of Reach Of Children
- Keep Container Tightly Closed
- Not For Internal Consumption
- Consult Material Safety Data Sheet For More Information
- This product does not pose a health hazard to users due to its classification as an article according to EU REACH, UN GHS, US OSHA HazCom and CA WHMIS regulations.
- Rust-X VCI chemistry is safe for sensitive electronics.
- Rust-X VCI chemistry imposes No galvanic effects, residues or changes in the properties of metals. The protective molecules dissipate upon opening of package.

DECLARATION

This Data sheet and information it contains is considered to be accurate at the date of printing. No representation or warranty, expressed or implied is made as to the accuracy or completeness of the data and information contained in this publication. It is the User's obligation to evaluate and use products safely and within the scope advised in the data sheet and to comply with all applicable laws and regulations.

LIMITED WARRANTY

All statements, technical information and recommendations contained herein are based on validations and tests conducted by HI TECH INTERNATIONAL/RUST-X or its partners and are



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believed to be reliable, but the accuracy or completeness thereof is not guaranteed. We warrant our products will be free from defects when shipped to customer. Our obligation under this warranty shall be limited to replacement of product that proves to be defective. To obtain replacement product under this warranty, the customer must notify Rust-X, Hi Tech International or its partners or agent of the claimed defect within 3 months after shipment of product to customer. Customer shall pay all freight charges for replacement products. We shall have no liability for any injury, loss or damage arising out of the use of or the inability to use the products. And any financial claims shall be limited to the value of the film sold.

Before using, user shall determine the suitability of the product for its intended use, and user assumes all risk and liability whatsoever in connection therewith. No representation or recommendation not contained herein shall have any force or effect unless in a written document signed by an officer of the company. The foregoing warranty is exclusive and in lieu of all other warranties, express, implied or statutory, including without limitation any implied warranty of merchantability or of fitness for a particular purpose. In no case shall HI TECH INTERNATIONAL/RUST-X be liable for incidental or consequential damages.

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