ECOPOINT

TECHNICAL DATA SHEET

By nature,
for life

BIO BASED

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TECHNICAL DATA SHEET

Ecool 115. Fully synthetic cooling lubricant that harms neither people nor the environment.

Product Description

Ecool 115 is a unique cooling lubricant product due to very high-quality components promoting corrosion protection and bio-stability, which together form a cooling lubricant suitable for operations such as grinding and light machining. Suitable for various types of ferrous metals such as steel, stainless steel (Inox) and cast iron. Ecool 115 is a clear solution when mixed with water.

Also makes up a (synthetic) pressure-testing fluid suitable for pressure-testing compressors, heat exchangers and pumps, autoclaves and various other machines that have to be liquid-tight under pressure.

Solution Areas

- Poor lubrication and cooling during machining and grinding generates high levels of friction and hence rapid and expensive wear of the equipment.
- Wear also causes poor and inaccurate work as well as production losses.
- Poor coolant liquids cause major problems: bacteria growth, stink nuisance, blockages in pipelines and filters, risk of skin diseases, corrosion of the project and the machine.
- Many cooling lubricants contain carcinogenic substances such as phenol and nitrite as well as environmentally harmful ingredients such as heavy metals.
- Pressure testing with water alone usually leads to corrosion and scale formation on bare metals.
- Petroleum derivatives leave behind a greasy deposit in these systems.
- Many pressure-testing fluids contain harmful substances such as phenol and nitrite and also pollutants such as heavy metals.

Sustainable Solution

Ecool 115 is very friendly to people, the environment and machines. E.P. Hydrex 115 offers excellent long-term protection, guaranteeing a high-quality workpiece with the clear solution allowing for a better view of the operation. Eco-Point guides you in maintaining a premium-quality cooling medium.
When bleeding equipment, Ecool 115 offers perfect and long-lasting preservation.

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Special Advantages

- Ecool 115 is very economical in use because of the low dosage: 2-5%
- Based on sophisticated raw materials that ensure stable pH and effective corrosion resistance.
- Requires little maintenance or checking.
- Easily mixed with water.
- Prevents bacteria growth and does not emit any bad odour when stored.
- Is friendly to people, machines and the environment.
- Ecool 115 contains no amines, phenol, nitrite, zinc or other heavy metals and is also chlorine-free.
- Bacteriological examination of the Ecool 115 is possible.
- Has excellent hard-water stability.
- Has excellent corrosion-preventing properties and a stable pH.

Areas of Application

Ecool 115 is intended for:
- grinding various types of metal such as stainless steel, steel and cast iron

Also used for:
- light machining of (ferrous) metals
- metals with high demands on surface quality and tool service life

Also suitable for bleeding closed systems:
- Pumps, autoclaves, heat exchangers, compressors, radiators, etc.
- For pressurising heat exchangers, heaters, coolers and other closed systems to prevent corrosion

Remarks

Owing to its very low surface tension in solution, Ecool 115 dissolves the emulsions previously used on older machining equipment. It may be necessary to refresh the application on these machines after 6 to 8 weeks.

Given its multi-purpose characteristics, Ecool 115 is suitable for the food-processing industry.
It plays an essential role for food processing companies that have to work to HACCP standards. Contamination is a 'critical point' and must be monitored closely. Ecool 115 contributes to a controlled working environment.

*Is an independent German research institute that issues certificates on the adequacy of cleaning products for the food industry.

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Product Instructions

To facilitate maintenance and to carry it out professionally and thoroughly, Eco-Point has partnered with PH Plus Solutions. Ask your product advisor about the possibilities. PH Plus Solutions specialises in cleaning, disinfecting and producing cooling lubrication systems.
If you do not use the services of PH Plus Solutions, you will need to do the cleaning and disinfecting yourself. Use the following procedure:

Add 0.1-0.2% system disinfectant (ask your product advisor for appropriate product) and run for a few days. Drain the fluid (and goo) from the system, and flush with Ecool 115 dilution (2-3%). This is to remove the old emulsion. After this, bring the system to the desired percentage by mixing Ecool 115 with water. *Use fresh water! For example, if you use a fire hose to fill your system, let it run for 10 minutes first. Check the correct dilution percentage by using the refractometer. Consult your product advisor. Measure the concentration several times on the first day. The concentration should be between 4% and 5%. At concentrations below 2%, rust inhibition is no longer guaranteed. **Multiply refraction value (Brix) by 2.4 to determine the concentration. (So 2% on the refractometer corresponds to 4.8% concentration)** Measure the concentration several times on the first day.
Tip: Make one or two people responsible for the quality of the cooling emulsion. Use a logbook / sign-off list to record all measurements and observations.

For pressurising applications, we recommend a dilution of 3-5%. When making the dilution, we recommend adding the Ecool 115 to the water and not the other way around to avoid foaming. Lower than 3% is not recommended.

Packing Material

Eco-Point International products are packed in polyethylene H.D. or metal drums. When repeat orders are being delivered, used drums which are empty and not polluted are collected free of charge for recycling or reconditioning purposes. When incinerated, polyethylene has no harmful effect on the environment.