Product Data Sheet

KX460
Experimental Product

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KX460 is a rust preventive additive that is designed to be added to mineral oil and then emulsified. The resulting emulsions provide exceptional rust prevention in harsh environments, including salt fog and acid atmosphere. If emulsions are going to be maintained for more than two weeks, addition of a biocide‡ should be considered.

CHEMICAL COMPOSITION: Calcium alkylaryl sulfonate with carboxylates and emulsifiers.

APPEARANCE: Dark brown liquid.

TYPICAL PROPERTIES:

Viscosity @ 40ºC (ASTM D445, DIN 51 550)	3770 mm^2/s (cSt)
Viscosity @ 100ºC (ASTM D445, DIN 51 550)	89 mm^2/s (cSt)
Density @ 25ºC (ASTM D4052)	0.978 g/ml
Weight per Gallon @ 25ºC	8.2 lbs.
Flash Point, COC (ASTM D92, DIN 51 376)	>90°C
pH (10% in deionized water)	8-8.5

Note: The above analytical data are not specifications. Supplying the information shown in this data sheet does not obligate King Industries to manufacture this product commercially.

APPLICATIONS: Emulsifiable rust preventive for metal protection.

USE LEVEL: 5% to 15% **KX460** with 5% to 25% mineral oil emulsified in water.

ANTIMICROBIAL (BIOCIDE) RECOMMENDATION:
‡ Mergal® K12N is recommended for microbe control in emulsions of **KX460**. It should be added to the additive/oil mixture and heated briefly to 50°C at a level of 0.1% by weight of the final emulsion. Alternatively, it can be added to the final emulsion and heated briefly to 50°C.

KX460 is a rust preventive concentrate that is designed to be dissolved in oil and then emulsified in water. The resulting emulsions have good stability and provide exceptional performance protecting steel, galvanized steel, and aluminum in harsh environments, including salt fog and acid atmosphere. The resulting films are oily with excellent edge protection. **KX460** emulsions are also recommended to protect steel, aluminum, galvanized steel and brass for extended periods in 100% humidity environments. **KX460** can be spray, dip or brush applied.

ADVANTAGES:
*** Outstanding salt fog protection**
*** Good oil solubility and excellent emulsion stability**
*** Excellent edge protection**
*** Effective on steel, galvanized steel, aluminum and brass**

(See reverse side)

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Blending Instructions: **KX460** is designed to be added to oil (Group I paraffinic oils are particularly recommended) and then emulsified by adding to water. Heating to about 50°C (120°F) is helpful for easier emulsion formation. The resulting emulsion should be allowed to stand for at least 6 hours before final use. This tends to thicken the emulsion resulting in better performance.

SOLUBILITY: Soluble in petroleum, esters and vegetable oils. These solutions are then emulsifiable. It is recommended to verify the solubility in the base oils used and the resulting emulsion stability.

STANDARD PACKAGING: 400 lbs. (181 kg) closed head drum.

STORAGE CONDITIONS: Store tightly capped in a cool, dry place away from any direct source of heat and moisture. Maximum recommended storage temperature: 46ºC (115ºF) Avoid freezing.

SHELF LIFE: Not determined.

HANDLING: Avoid all personal contact. Observe good personal hygiene. For additional information, it is advised to consult the Safety Data Sheet (SDS) for **KX460**.

REGISTRATION: Please refer to Section 15 of the Safety Data Sheet for information.

‡ Mergal K12N is a registered trademark of Troy Corporation.

For Samples or Technical Service, contact King Industries or your King representative.

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Revision date: 5 MAY 2020