

MATERIAL SAFETY DATA SHEET

KROP-KARE CROP OIL PLUS

MSDS DATE: 4/14/08

SUPERSEDES: None

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: KROP-KARE CROP OIL PLUS

MANUFACTURER: Heartland Ag, Inc.
ADDRESS: 407 W. Depot Road, Farmer City, IL 61842

EMERGENCY PHONE: INFORTAC 800 535 5053

CHEMICAL NAME: Proprietary mixture
CHEMICAL FAMILY: Crop oil concentrate
CHEMICAL FORMULA: Mixture

PRODUCT USE: Agricultural adjuvant oil

SECTION 1 NOTES: None

SECTION 2: HAZARDOUS INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>% WT</u>	<u>SARA 313 REPORTABLE</u>	<u>TWA</u>	<u>OSHA STEL</u>	<u>Ceiling</u>	<u>TWA</u>	<u>ACGIH STEL</u>	<u>Ceiling</u>
Ethylene Oxide	75-21-8	<1 ppm	@ 0.1%	1 ppm			1 ppm		

SECTION 2 NOTES: None

SECTION 3: HAZARDS IDENTIFICATION

ROUTES OF ENTRY: Eyes, skin, ingestion, inhalation

POTENTIAL HEALTH EFFECTS

EYES: Direct contact with material or exposure to vapors is not expected to cause irritation.

SKIN: Direct contact with material or exposure to vapors is not expected to cause irritation. Prolonged or repeated skin contact may cause drying, cracking or dermatitis.

INGESTION: High concentrations of vapors or mist may irritate the respiratory tract. Prolonged or repeated inhalation of oil mist may cause oil pneumonia, lung tissue inflammation and fibrous tissue formation.

INHALATION: May cause throat irritation, nausea, vomiting and diarrhea. Aspiration during ingestion may cause lung injury or possible death.

ACUTE HEALTH HAZARDS: None beyond those listed above

CHRONIC HEALTH HAZARDS: None known

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None known

CARCINOGENICITY

OSHA: No **ACGIH:** No **NTP:** No **IARC:** No **OTHER:** No

SECTION 3 NOTES: None

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SECTION 4: FIRST AID MEASURES

If in Eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses if present, after the first 5 minutes, then continue rinsing eye. Have the product container with you when calling a poison control center or doctor, or going for treatment.

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

If Swallowed: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible.

SECTION 4 NOTES: None

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER: Unknown
(% BY VOLUME) LOWER: Unknown

FLASH POINT:

F: >200

C: >93

METHOD USED:

PMCC

AUTOIGNITION TEMPERATURE:

F: Unknown

C: Unknown

NFPA HAZARD CLASSIFICATION

HEALTH: 1

FLAMMABILITY: 1

REACTIVITY: 0

OTHER: -

EXTINGUISHING MEDIA:

Carbon dioxide, dry chemical powder, chemical foam or water fog.

SPECIAL FIRE FIGHTING PROCEDURES:

Wear self-contained breathing apparatus when fire fighting in confined space.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Burning decomposition or combustion products may be toxic. Empty containers may retain residue and may be dangerous. Heated containers may rupture.

HAZARDOUS DECOMPOSITION PRODUCTS:

Burning may produce carbon monoxide.

SECTION 5 NOTES:

None

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:

Small Spills:

Flush the area thoroughly with water and scrub to remove residue.

Large Spills:
contain.

Contain spill, cover with inert absorbent and transfer to waste disposal

SECTION 6 NOTES:

None

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Maintain good housekeeping practices and clean up spills promptly. NFPA Class IIIB storage. Never siphon by mouth.

SECTION 7 NOTES:

None

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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ENGINEERING CONTROLS:

VENTILATION : Normal room ventilation (mechanical) should be satisfactory.

RESPIRATORY PROTECTION: None required under normal use. If necessary, use a respirator with a hydrocarbon insert.

EYE PROTECTION: Chemical goggles

SKIN PROTECTION: Hydrocarbon resistant gloves

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Where spills and splashes are likely, wear protective clothing. Eye wash and safety shower should be available.

WORK HYGIENIC PRACTICES: None

EXPOSURE GUIDELINES: None

SECTION 8 NOTES: None

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, amber

ODOR: Slight

PHYSICAL STATE: Liquid

pH AS SUPPLIED: Not applicable

pH (Other): 5 – 6 @ 1% in water

BOILING POINT:

F: Unknown

C: Unknown

MELTING POINT:

F: Unknown

C: Unknown

FREEZING POINT:

F: Unknown

C: Unknown

VAPOR PRESSURE (mmHg):

@

F: Unknown

C: Unknown

VAPOR DENSITY (AIR = 1):

@

F: Unknown

C: Unknown

SPECIFIC GRAVITY (H₂O = 1):

@

F: 68

C: 20

EVAPORATION RATE: Unknown

BASIS (butyl acetate=1):

SOLUBILITY IN WATER: Dispersable

VISCOSITY: Unknown

@

F:

C:

SECTION 9 NOTES: None

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable ☒ Unstable ☐

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SUPERSEDES: None

CONDITIONS TO AVOID (STABILITY): Avoid intense heat, sparks or flame.

INCOMPATIBILITY (MATERIAL TO AVOID): Strong oxidizing agents

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Combustion may produce carbon monoxide and asphyxiants

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID (POLYMERIZATION): None known

SECTION 10 NOTES: None

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Acute oral toxicity, mg/kg (RAT): >5050

Acute dermal toxicity, mg/kg (RAT): >5050

Acute eye irritation, Draize (RABBIT): score of 6 at 1 hr., 0 at 24 hours and beyond

Acute dermal irritation, (RABBIT): score 0.6/8.0, none after 72 hours, slightly irritating

SECTION 11 NOTES: None

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Not available

SECTION 12 NOTES: None

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Liquid may be absorbed onto inert carrier and landfilled or may be burned, if allowed by law. Disposal must be made in accordance with applicable governmental regulations. Do not flush to drain/storm sewer.

RCRA HAZARD CLASS: Not regulated

SECTION 13 NOTES: None

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME:

HAZARD CLASS:

ID NUMBER:

PACKING GROUP:

LABEL STATEMENT:

OTHER AGENCIES:

SECTION 14 NOTES: None

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): Not listed

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): Not listed

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SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

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SUPERSEDES: None

311/312 HAZARD CATEGORIES: Not regulated

313 REPORTABLE INGREDIENTS: None present at reportable levels

STATE REGULATIONS:

WARNING! This product contains a detectable amount of ethylene oxide, which is known to the State of California to cause cancer and/or reproductive toxicity.

Ethoxylated products may contain residual amounts of ethylene oxide (EO) which can accumulate in the container headspace and be released into the ambient environment. This process is enhanced when the product is agitated, as during tank car loading and unloading, and blending operations. Ethylene oxide causes tumors in laboratory animals. The Occupational Safety and Health Administration (OSHA) Permissible Exposure Level (PEL) for EO is 1 ppm for an eight-hour time weighted average exposure. The standard regulates occupational exposure to EO from all sources, including products containing residual EO. It is the responsibility of the employer to comply with OSHA ethylene oxide standard (29) CFR 1910.1047).

INTERNATIONAL REGULATIONS: None known

SECTION 15 NOTES: None

SECTION 16: OTHER INFORMATION

OTHER INFORMATION: None

PREPARATION INFORMATION: Prepared on 4/14/2008

DISCLAIMER:

The recommendation for safe handling and protection procedures is believed to be generally suitable for the standard uses of this compound. However, each user should identify his intended uses of this material and determine whether they are appropriate. All data included in this document is released as typical values and should not be utilized to determine the suitability of this material for a particular use or purpose. No warranty, either expressed or implied, is hereby made, nor do we give permission, inducement, or recommendations to practice any patented invention without a license. All data is offered for consideration, investigation and verification purposes only.

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