

SAFETY DATA SHEET



SECTION 1: IDENTIFICATION

1.1. Company Information	KALO, Inc., 13200 Metcalf Ave., Ste. 250, Overland Park, KS 66213
1.2. Phone Numbers	800-255-5196 / 913-491-9146 FAX
1.3. Website	www.kalo.com
1.4. Product Identity	ECO-SHIELD
1.5. Reference/Item Number	ECOS01, ECOS02, ECOS30, ECOS55, ECOS265
1.6. Intended Use	Adjuvant for plant protection products and fertilizers.
1.7. Application Method	Refer to package label.
1.8. 24 HOUR EMERGENCY NUMBER/CHEMTREC (USA)	1-800-424-9300
1.9. POISON CONTROL CENTER (USA)	1-800-222-1212

SECTION 2: HAZARDS IDENTIFICATION

2.1. HAZARD COMMUNICATION STANDARD (HCS) PICTOGRAM(S) AND SIGNAL WORD(S) - Not Applicable For This Product	
2.2. Classification:	No GHS classification statements.
2.3. Prevention:	No GHS prevention statements.
2.4. Response:	No GHS response statements.
2.5. Storage:	No GHS storage statements.
2.6. Disposal:	P501: Dispose of contents/container in accordance with local/national regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

According to Regulation (EC) No. 1272/2008

3.1. Ingredient/Chemical Designations:	Hydroxy propyl starch
CAS No.:	Proprietary
Weight %:	Trade Secret
Notes:	Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

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SECTION 4: FIRST AID MEASURES

4.1. General:	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. Have the product container, label or safety data sheet with you when calling a poison control center or doctor or going for treatment.
4.2. Inhalation:	Remove to fresh air. Keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
4.3. Eyes:	Irrigate copiously with clean fresh water for at least 5 minutes, holding the eyelids apart and seek medical attention.
4.4. Skin:	Wash skin thoroughly with soap and water or use a recognized skin cleanser. Do NOT use solvents or thinners.
4.5. Ingestion:	If accidentally swallowed, obtain immediate medical attention. Keep at rest. Rinse mouth. Do NOT induce vomiting.
[MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED]	
4.6. Overview:	No adverse symptoms or effects anticipated under normal handling conditions. No significant reaction of the human body to the product known.
4.7. Note for Medical Personnel:	Symptomatic treatment.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing Media:	Alcohol resistant foam, CO ₂ , powder, or water spray. Do not use water jet.
5.2. Special Hazards:	Product is non-flammable.
5.3. Advice For Firefighters:	Evacuate area. Prevent contamination from run-off of adjacent areas, streams, drinking water and sewers. Do not flush down sewers or other drainage systems. Exposed firefighters must wear standard protective equipment and in enclosed areas self-contained breathing apparatus. Use water-spray to cool fire-exposed surfaces and personnel.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Precautions/Procedures:	Not classified.
6.2. Environmental Precautions:	Do not allow spills to enter drains or water courses.
6.3. Methods and Material For Containment and Cleaning Up:	Flush with water into sewage or soil. Take the personal protective measures listed in Section 8. Contain and absorb spillage with non-combustible materials (e.g. sand/earth/vermiculite). Dispose of according to the Waste Regulations (see Section 13). Clean, preferably with a detergent. Do not use solvents. Do not allow spills to enter drains or water courses.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions For Safe Handling:	Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used as soon as possible. Use good personal hygiene practices. Wash hands before eating, drinking, smoking. Have eyewash accessible to use in handling area.
7.2. Conditions For Safe Storage:	DO NOT FREEZE! Store product above 32°F and below 86°F. Keep container tightly sealed. Protect against heat and direct sunlight. Keep only in the original container in a cool, dry place away from direct sunlight and heat. Protect containers from physical damage. Do not return residues to the storage containers.
7.3. Incompatible Materials:	Not known.
7.4. Specific End Use(s):	See product label.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Exposure Data: This product contains no ingredients with established limits for exposure under OSHA, ACGIH and/or NIOSH.

8.2. Carcinogen Data: This product contains no ingredients that are suspected of being or known to be a carcinogen under OSHA, NTP or IARC.

[EXPOSURE CONTROLS]

- 8.3. Respiratory:** If workers are exposed to concentrations above the exposure limit, they must use the appropriate certified respirators.
- 8.4. Eyes:** Wear safety eyewear (e.g. safety spectacles/goggles/visors) to protect against the splash of liquids.
- 8.5. Skin:** Skin should not be exposed. Wear protective gloves and eye/face protection.
- 8.6. Engineering Controls:** Not required.
- 8.7. Other Work Practices:** Handle in accordance with good industrial hygiene and safety practice. Always wash hands before meals or after work.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light Brown Liquid	Initial Boiling Point/Range:	212°F / 100°C
Odor:	Odorless	Explosive Properties:	Does Not an Explosion Hazard
Odor Threshold:	Not Measured	Flammability (Solid, Gas):	No Indication of Flammability
pH:	5.5 - 65	Upper Flammability/Explosive Limits:	Not Measured
Specific Gravity:	1.0	Lower Flammability/Explosive Limits:	Not Measured
Flashpoint and Method:	Not Determined	Decomposition Temperature:	Not Measured
Solubility in Water:	Completely Soluble	Auto-Ignition Temperature:	Not Self-Igniting
Viscosity:	1,000 - 1,500 cps	Volatility:	Not Measured
Conductivity:	Not Measured	Molecular Weight:	Not Measured
VOC%:	Not Measured	Oxidizing Properties:	Not Measured
Vapor Pressure (Pa):	Not Measured	Partition Co-Efficient n-octanol/water (Log Pow):	Not Measured
Vapor Density (air=1):	Not Measured	Evaporation Rate (Butyl Acetate=1):	Not Measured
Density (water=1):	Not Measured	Surface Tension:	Not Measured
Density (liquid):	8.34 lbs/gallon	Particle Size:	Not Measured
Freezing Point:	32°F / 0°C	Other:	No other relevant information.

SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Not known.
- 10.2. Chemical Stability:** Stable under normal ambient and anticipated conditions of use.
- 10.3. Hazardous Reactions:** Hazardous reactions not anticipated.
- 10.4. Conditions To Avoid:** Extended exposure to high temperatures can cause decomposition. Avoid all possible sources of ignition. Avoid prolonged exposure to extreme heat or direct sunlight. Avoid contamination. Avoid prolonged storage.
- 10.5. Incompatible Materials:** Not known.
- 10.6. Hazardous Decomposition Products:** Not anticipated under normal conditions of use.

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SECTION 11: TOXICOLOGICAL INFORMATION

	[ACUTE TOXICITY ESTIMATE]
11.1. Ingredients:	Hydroxy propyl starch
11.2. Oral, LD50mg/kg:	>5,000 (rat) / Category IV
11.3. Skin, LD50mg/kg:	>5,000 (rat) / Category IV
11.4. Inhalation Vapor, LC50, mg/L/4hr:	No Data Available
11.5. Inhalation Dust/Mist, LC50, mg/L/4hr:	No Data Available
11.6. Inhalation Gas, LC50, ppm	No Data Available

ITEM	HAZARD	CATEGORY
Acute Toxicity (mouth):	Not Applicable	--
Acute Toxicity (skin):	Not Applicable	--
Acute Toxicity (inhalation):	Not Applicable	--
Skin Corrosion/Irritation:	Not Applicable	--
Eye Damage/Irritation:	Not Applicable	--
Sensitization (respiratory):	Not Applicable	--
Sensitization (skin):	Not Applicable	--
Germ Toxicity:	Not Applicable	--
Carcinogenicity:	Not Applicable	--
Reproductive Toxicity:	Not Applicable	--
Specific Target Organ Systemic Toxicity-Single Exposure:	Not Applicable	--
Specific Target Organ Systemic Toxicity-Repeated Exposure:	Not Applicable	--
Aspiration Hazard:	Not Applicable	--

SECTION 12: ECOLOGICAL INFORMATION

12.1. Aquatic Toxicity:	No adverse affects to the aquatic environment are known and expected.
12.2. Persistence and Degradability:	The product is entirely biodegradable and non-toxic.
12.3. Bioaccumulative Potential:	Not Applicable
12.4. Mobility In Soil:	Not Applicable
12.5. Results of PBT and vPvB Assess:	Not Applicable
12.6. Other Adverse Effects:	Not Applicable

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods:	The product is entirely water-soluble, biodegradable and non-toxic. Dispose of containers in accordance with local and national regulations.
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SECTION 14: TRANSPORT INFORMATION

14.1. DOT Proper Shipping Name:	Not Regulated
14.2. DOT Hazard Class:	Not Applicable
14.3. DOT Packing Group:	Not Applicable
14.4. DOT Label:	None
14.5. IMDG Proper Shipping Name:	Not Regulated
14.6. IMDG Hazard Class:	Not Applicable
14.7. IMDG Packing Group:	Not Applicable
14.8. IMDG Marine Pollutant:	Water pollution class 1 (slightly polluting substance).
14.9. ICAO/IATA:	See Bill of Lading

SECTION 15: REGULATORY INFORMATION

15.1. Regulatory Overview:	The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.
15.2. Toxic Substance Control Act (TSCA):	All ingredients of this product are listed on the TSCA inventory, or are not required to be listed on the TSCA inventory.
15.3. WHMIS Classification:	Not regulated.
15.4. U.S. EPA Tier II Hazards:	Fire=NQ Sudden Release of Pressure=NQ Reactive=NQ Immediate (acute)=NQ Delayed (chronic)=NQ
15.5. EPCRA 302–Extremely Hazardous (0.1%):	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
15.6. EPCRA 311/312–Chemicals and RQs (>0.1%):	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
15.7. EPCRA 313–Toxic Chemicals (>0.1%):	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
15.8. Proposition 65–Carcinogens (>0.0%):	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
15.9. Proposition 65–Developmental Toxins (>0.0%):	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
15.10. Proposition 65–Female Repro Toxins (>0.0%):	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
15.11. Proposition 65–Male Repro Toxins (>0.0%):	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
15.12. N.J. RTK Substances (>1%):	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.
15.13. PENN RTK Substances (>1%):	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

SECTION 16: OTHER INFORMATION

16.1. The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. Company accepts no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations and orders.