

SECTION 1 IDENTIFICATION	
<b>Company Name</b>	KALO, Inc.
<b>Address</b>	13200 Metcalf Ave, Suite 250
<b>City, State, Zipcode</b>	Overland Park, KS 66213
<b>Phone Numbers</b>	1-800-255-5196 / 1-913-491-9146 (fax)
<b>Website</b>	www.kalo.com
<b>Product Identity</b>	<b>Bio-Film Ultra</b> (for international use)
<b>Reference/Item Number</b>	BFULT55
<b>Intended Use</b>	Agricultural Adjuvant
<b>Application Method</b>	See technical data sheet.

**24 HOUR EMERGENCY NUMBER/CHEMTREC (USA)**  
**1-800-424-9300**

**Poison Control Center (USA)**  
**1-800-222-1212**

SECTION 2 HAZARD(S) IDENTIFICATION	
Using the toxicity data listed in Sections 11 and 12, the product is labeled as follows:	
<b>[CLASSIFICATION OF THE SUBSTANCE OR MIXTURE]:</b> In compliance with EC regulation No. 1272/2008: Skin Irritation, Category 3 In compliance with directives 67/548/EC, 1999/45 and its amendments: Irritating to skin.	
<b>[SKIN IRRITANT 3]:</b> <b>H316:</b> Causes mild skin irritation.	
<b>[PREVENTION]:</b> <b>P264:</b> Wash thoroughly after handling. <b>P280:</b> Wear protective gloves and eye/face protection.	
<b>[RESPONSE]:</b> <b>P333+313:</b> If skin irritation occurs, get medical advice/attention.	
<b>[STORAGE]:</b> <b>P404:</b> Store in a closed container. <b>P405+235:</b> Store in a well-ventilated space. Keep cool.	
<b>[DISPOSAL]:</b> <b>P501:</b> Dispose of contents/container in accordance with local/national regulations.	
<b>[PRODUCT IDENTIFIERS]:</b> <b>Bio-Film Ultra:</b> Nonionic Surfactant Blend	
<b>[RISK PHRASE]:</b> <b>R38:</b> Irritating to skin.	
<b>[SAFETY PHRASES]:</b> <b>S24:</b> Avoid contact with skin. <b>P37/39:</b> Wear suitable gloves and eye/face protection. <b>S28:</b> After contact with skin, wash immediately with plenty of soap and water. <b>S37/7:</b> Keep container tightly closed and in a cool place. <b>S9:</b> Keep container in a well-ventilated space.	
<b>Other Hazards:</b> No additional hazards.	

In compliance with EC regulation No. 1272/2008 and its amendments.


**HAZARD COMMUNICATION STANDARD (HCS) PICTOGRAM(S)**



**WARNING**

In compliance with directive 67/548/EC, 1999 and their amendments.

**HAZARD SYMBOLS**



irritant

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS	
All ingredients are Reach exempt or Reach registered. Classifications of hazardous ingredients have been determined according to EC regulation No. 1272/2008 and its amendments and directives 67/548/EC, 1999/45 EC and its amendments.	
<b>Ingredient/Chemical Designations</b>	<b>Weight %</b> <b>CAS Number</b> <b>EC Number</b> <b>Classification</b> <b>Notes</b>
Distillated (petroleum), hydrotreated heavy paraffinic, base oil unspecified	10-15 64742-54-7 265-157-1 Carc. 1B, H350/R45 [L]
Tall oil rosin	5-10 8052-10-6 232-484-6 Skin Sens. 1; H317/R43
[L] The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346. See Section 9 of this SDS.	
<b>H350:</b> May cause cancer. <b>R45:</b> May cause cancer. <b>H317:</b> May cause an allergic skin reaction. <b>R43:</b> May cause sensitization by skin contact.	

## SECTION 4 FIRST AID MEASURES

### [DESCRIPTIONS]:

<b>General:</b>	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
<b>Inhalation:</b>	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.
<b>Eyes:</b>	Irrigate copiously with clean fresh water for at least 10 minutes, holding the eyelids apart and seek medical attention.
<b>Skin:</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser. Do NOT use solvents or thinners.
<b>Ingestion:</b>	If accidentally swallowed, obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

## SECTION 5 FIRE FIGHTING MEASURES

<b>Suitable Extinguishing Media:</b>	Use dry chemical, foam, water-spray or water-fog or carbon dioxide to extinguish fire. Water-fog or alcohol-type or all-purpose-type foam water spray may be used to cool fire-exposed containers, structures and to protect personnel.
<b>Fire Fighting Instructions:</b>	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 full turnout gear and positive pressure self-contained breathing apparatus. Use water-spray to cool fire-exposed surfaces and personnel.
<b>Unusual Fire and Explosion Hazards:</b>	Can be dangerous when exposed to extreme heat and flame. Irritating or toxic substances may be emitted upon thermal decomposition. Thermal decomposition products may include oxides of carbon, nitrogen and sulfur, as well as smoke and fume.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions, Protective Equipment and Emergency Procedures:</b>	Remove sources of ignitions, do not turn lights, or unprotected electrical equipment, on or off. In case of a major spill, or spillage in a confined space, evacuate the area and check that solvent vapor levels are below the Lower Explosive Limit (LEL) before re-entering.
<b>Environmental Precautions:</b>	Do not allow spills to enter drains or water courses.
<b>Methods and Material For Containment and Cleaning Up:</b>	Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in Section 8. Contain and absorb spillage with non-combustible materials (e.g. sand/earth/vermiculite). Place in closed containers outside buildings and 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. If drains, sewers, streams or lakes are contaminated, inform the local water company immediately. In the case of contamination of rivers, streams, or lakes, the Environmental Protection Agency should also be informed.
<b>Spill Management:</b>	Land Spills: Stop leaks if you can do it without risk. Recover by pumping or with suitable absorbent (high absorption clays). Water Spills: Stop leaks if you can do it without risk. If spill can enter waterways, contact local authorities. In U.S. contact U.S. Coast Guard National Response Center: 800-424-8802. Small Spills: Take up with absorptive clay or other non-combustible absorbent material and place into containers for later disposal. Large Spills: Dike far ahead of liquid spill for later disposal.

## SECTION 7 HANDLING AND STORAGE

<b>Precautions For Safe Handling:</b>	Handle containers carefully to prevent damage and spillage. Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Keep container closed. Use only with adequate ventilation. Use good personal hygiene practices. Wash hands before eating, drinking, smoking. Remove contaminated clothing and clean before reuse. Unless heated, sprayed or agitated, normal ventilation should be adequate. See Section 2 for further details [PREVENTION].
<b>Conditions For Safe Storage:</b>	Store at ambient temperature. Keep containers tightly closed and upright when not in use. Protect containers against physical damage. See Section 2 for further details [STORAGE].
<b>Incompatible Materials:</b>	Strong acids, strong bases, strong oxidizers. See Section 2 for further details [STORAGE].
<b>Specific End Use(s):</b>	See technical data sheet.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Control Parameters Exposure:</b>	Contains mineral oil. The exposure limits for oil mist are 5mg/m3 OSHA PEL and 10mg/m3 ACGIH.
<b>Carcinogen Data:</b>	This product contains no ingredients (at greater than 0.1%) that are suspected of being or known to be a carcinogen under OSHA, NTP or IARC.
<b>[EXPOSURE CONTROLS]:</b>	
<b>Respiratory:</b>	If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.
<b>Eyes:</b>	Wear safety eyewear (e.g. safety spectacles/goggles/visors) to protect against the splash of liquids.
<b>Skin:</b>	Overalls, which cover the body, arms, and legs, should be worn. Skin should not be exposed. All parts of the body should be washed after contact.
<b>Engineering Controls:</b>	Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates, and any vapor below occupational exposure limits, suitable respiratory protection must be worn.
<b>Other Work Practices:</b>	No data available. Contains mineral oil. The exposure limits for oil mist are 5 mg/m3 OSHA PEL and 10 mg/m3 ACGIH. See Section 2 for further details [PREVENTION].

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Clear pale yellow liquid	<b>Upper Flammability Limits:</b>	Upper Explosive Limit: Not measured
<b>Odor:</b>	Not determined	<b>Lower Flammability Limits:</b>	Lower Explosive Limit: Not measured
<b>Odor Threshold:</b>	Not measured	<b>Vapor Pressure (Pa):</b>	Not measured
<b>pH:</b>	4.5-5.5	<b>Vapor Density:</b>	Heavier than air
<b>Melting/Freezing Points (°C):</b>	Not measured	<b>Solubility in Water:</b>	Dispersible
<b>Initial Boiling Point/Range (°C):</b>	No Established Limit (C) / No Established Limit (F)	<b>Partition Co-efficient n-octanol/water (Log Kow):</b>	Not measured
<b>Flash Point:</b>	>93°C / >200°F Tagged Closed Cup (TCC)	<b>Auto-Ignition Temperature (°C):</b>	Not measured
<b>Evaporation Rate (Ether=1):</b>	Not measured	<b>Decomposition Temperature:</b>	Not measured
<b>Flammability (Solid, Gas):</b>	Not applicable	<b>Viscosity (cps):</b>	725-1125
<b>Specific Gravity @ 20°C</b>	0.96-0.98	<b>VOC %:</b>	Not measured
<b>Other Information:</b>	DMSO extract by IP 346, less than 3.0 wt % (mineral oil component only)	<b>Density, g/ml @ 25°C:</b>	Not measured

## SECTION 10 STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	Stable under normal storage and handling conditions.
<b>Hazardous Reactions:</b>	Thermal decomposition in the presence of air may produce oxides of: carbon, nitrogen, and sulfur. Hazardous polymerization with not occur. No hazardous reactions or decomposition products under normal storage and handling conditions.
<b>Conditions To Avoid:</b>	Oxidizing agents. Extreme heat, open flame, sparks, and sources of ignition.
<b>Incompatible Materials:</b>	Strong oxidizers, strong acids, strong bases.
<b>Hazardous Decomposition Prod.:</b>	Product does not decompose at ambient temperatures.

## SECTION 11 TOXICOLOGICAL INFORMATION

<b>Acute Toxicity:</b>	<b>Ingredients</b>	<b>Oral LD50 mg/kg</b>	<b>Skin LD50mg/kg</b>	<b>Inhalation Vapor/Dust/Mist LC50mg/L4hr</b>
	Nonionic Surfactant Blend	>5,000 (rat): Category NA	>5,000 (rabbit): Category NA	No data available
<b>Category --:</b>	Item: Acute Toxicity (mouth) / Hazard: Not applicable.			
<b>Category --:</b>	Item: Acute Toxicity (skin) / Hazard: Not applicable.			
<b>Category --:</b>	Item: Acute Toxicity (inhalation) / Hazard: Not applicable.			
<b>Category 3:</b>	Item: Skin Corrosion/Irritation / Hazard: <b>Causes mild skin irritation.</b>			
<b>Category --:</b>	Item: Eye Damage/Irritation / Hazard: Not applicable.			
<b>Category --:</b>	Item: Sensitization (respiratory) / Hazard: Not applicable.			
<b>Category --:</b>	Item: Sensitization (skin) / Hazard: Not applicable.			
<b>Category --:</b>	Item: Germ Toxicity / Hazard: Not applicable.			
<b>Category --:</b>	Item: Carcinogenicity / Hazard: Not applicable.			
<b>Category --:</b>	Item: Reproductive Toxicity / Hazard: Not applicable.			
<b>Category --:</b>	Item: Specific Target Organ Systemic Toxicity (single exposure) / Hazard: Not applicable.			
<b>Category --:</b>	Item: Specific Target Organ Systemic Toxicity (repeated exposure) / Hazard: Not applicable.			
<b>Category --:</b>	Item: Aspiration Hazard / Hazard: Not applicable.			

## SECTION 12 ECOLOGICAL INFORMATION

<b>Toxicity:</b>	No additional information provided for this product. See Section 3 for chemical specific data.
<b>Aquatic Ecotoxicity:</b>	This product is not expected to be toxic to the aquatic environment.
<b>Persistence and Degradability:</b>	No data available.
<b>Bioaccumulative Potential:</b>	Not measured.
<b>Mobility in Soil:</b>	No data available.
<b>Results of PBT and vPvB Assess:</b>	This product contains no PBT/vPvB chemicals.
<b>Other Adverse Effects:</b>	No data available.

## SECTION 13 DISPOSAL CONSIDERATIONS

<b>Waste Treatment Methods:</b>	Do not allow into drains or water courses. Wastes and emptied containers should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act. Using information provided in this data sheet advice should be obtained from the Waste Regulation Authority, whether the special waste regulations apply.
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## SECTION 14 TRANSPORT INFORMATION

<b>UN Number:</b>	Not applicable	
<b>UN Proper Shipping Name:</b>	Not regulated	
<b>Transport Hazard Class(es):</b>	<b>DOT (Domestic Surface Transportation):</b>	<b>IMO/IMDG (Ocean Transportation):</b>
	DOT Proper Shipping: Not regulated	IMDG Proper Shipping Name: Not regulated
	DOT Hazard Class: Not applicable	IMDG Hazard Class: Not applicable
	DOT Label: None	Sub Class: Not applicable
	UN/NA Number: Not applicable	IMDG Packing Group: Not applicable
	DOT Packing Group CERCLA/DOT RQ: NA gal. / NA lbs.	
<b>Special Precautions For User:</b>	Not applicable	
<b>Transport:</b>	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable	
<b>Environmental Hazards IMDG:</b>	Marine Pollutant: No	
<b>Packing Group:</b>	Not applicable	

**SECTION 15****REGULATORY INFORMATION**

**Regulatory Overview:** The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented. All ingredients of this product are listed on the TSCA (Toxic Substance Control Act) inventory or are not required to be listed on the TSCA inventory.

**WHMIS Classification:** D2B

**US EPA Tier II Hazards:** Fire: No / Sudden Release of Pressure: No / Reactive: No / Immediate (acute): Yes / Delayed (chronic): No

**EPCRA 311/312:** Chemicals and RQs (>0.1%): No product ingredients listed

**EPCRA 302:** Extremely Hazardous (>0.1%): No product ingredients listed

**EPCRA 313:** Toxic Chemicals (>0.1%): No product ingredients listed

**Proposition 65:** Carcinogens (>0.0%): 1-4 Dioxane / Acetaldehyde / Anthracenedione / Oxirane

**Proposition 65:** Developmental Toxins (>0.0%): No product ingredients listed

**Proposition 65:** Female Repro Toxins (>0.0%): Oxirane

**Proposition 65:** Male Repro Toxins (>0.0%): Oxirane

**N.J. RTK Substance (>1%):** No product ingredients listed

**Penn RTK Substances (>1%):** No product ingredients listed

**SECTION 16****OTHER INFORMATION**

*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. We accept 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.*