

# Safety Data Sheet

According To Regulation (EC) No 1907/2006 (REACH)

## AKESBO

 Version: 4.0  
 Form No: 193417

 Preparation Date: 11/26/2019  
 Revision Date: 11/26/2019

### 1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product Identifier

<b>Product Name</b>	AKESBO
<b>SDS<sup>1</sup> No</b>	193417/ GK01E
<b>CAS<sup>2</sup> No</b>	8013-07-8
<b>EINECS<sup>3</sup> No</b>	232-391-0
<b>Chemical Name</b>	Soybean oil, epoxidized

#### 1.2 Relevant Identified Uses Of The Product And Uses Advised Against

<b>Relevant Identified Uses</b>	ESBO is a secondary plasticizer that works in a synergistic way with metal stabilizers. It is used as a plasticizer component in flexible, semi-flexible and rigid PVC. Also prevents the yellowing that may occur with time in PVC product. ESBO gives flexibility to the product due to its high molecular weight and volatility, retards the adverse effects such as migration and extraction that may occur in PVC.
<b>Uses Advised Against</b>	No data available.

#### 1.3 Details Of The Supplier Of The Safety Data Sheet

<b>Supplier</b>	AK-KİM KİMYA SAN. VE TİC. A.Ş.
<b>Address – Factory</b>	Merkez Mahallesi, Ak-Kim Sokak, No:7 Taşkoprü, Çiftlikköy / TURKEY
<b>Telephone</b>	+90 226 815 33 00
<b>Fax</b>	+90 226 353 25 32
<b>E-mail</b>	www.akkim.com.tr
<b>Information Providing Authority About Safety Data Sheet</b>	Ali Haydar KETİR ali.ketir@akkim.com.tr

#### 1.4 Emergency Telephone Number

<b>Company Emergency</b>	+90 226 815 33 00
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### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

##### 2.1.1 Classification According to Regulation (EC) No 1272/2008

- This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].

#### 2.2 Label elements

##### 2.2.1. Labeling According to Regulation (EC) No 1272/2008 [CLP<sup>2</sup>/GHS<sup>3</sup>]

<b>Product Identifier</b>	
<b>Hazard Component for Labeling</b>	Not Applicable.
<b>Hazard Pictograms</b>	Not Applicable.
<b>Signal Word</b>	Not Applicable.
<b>Hazard Statements</b>	Not Applicable.

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Version: 4.0  
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### Precautionary Statements

#### General

-

#### Prevention

-

#### Response

-

#### Storage

-

#### Disposal

-

### Supplemental Hazard Information (EU) Statements

None

#### 2.2.2. Special Rules For Supplemental Label Elements For Certain Mixtures

· None.

#### 2.2.3. Additional Labeling

· Not Applicable.

### 2.3 Other Hazards

#### 2.3.1. Skin Contact

There is no known harmful effect.

#### 2.3.2. Eye Contact

There is no known harmful effect.

#### 2.3.3. Ingestion

There is no known harmful effect.

#### 2.3.4. Inhalation

There is no known harmful effect.

#### 2.3.5. Long term effects

No data available.

#### 2.3.6. Adverse Environmental Effects

None.

#### 2.3.7. Additional Information

None.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

NAME	EINECS NO	CAS NO.	CONTENT (%)	CLASSIFICATION
				CLP
Soybean oil, epoxidized	232-391-0	8013-07-8	<=100 %	Not Classified as hazardous

#### 3.1.1 Additional information

· None

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### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

##### 4.1.1 General information

*In case of emergency, seek medical advice by showing this safety data sheet.*

##### 4.1.2 Following inhalation

- *Remove exposed person to rest in fresh air. If breathing has stopped, give artificial respiration. Get medical attention.*

##### 4.1.3 Following skin contact

*Remove contaminated clothing and shoes, do not reuse without cleaning. Immediately flush affected areas with plenty of soap and water. Get medical attention.*

##### 4.1.4 Following eye contact

- *Immediately flush eyes with plenty of water for at least 15 minutes.*
- *Eyelids should be kept open to ensure that all parts of the eye are thoroughly washed, and the upper and lower lid should be held and opened by hand. Get medical attention.*

##### 4.1.5 Following ingestion

- *If person is conscious, rinse mouth with water and let water out. Give him a few glasses of water to drink.*
- *Do not induce vomiting. In case of sleep, unconsciousness or loss of consciousness, do not give anything by mouth. Get medical attention immediately.*

##### 4.1.6 Self-protection of the first aider

- *None.*

##### 4.1.7 Notes for the doctor

- *None.*

#### 4.2 Most important symptoms and effects, both acute and delayed

- *Treat according to symptoms.*

#### 4.3 Indication of any immediate medical attention and special treatment needed

- *None.*

### 5. FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media:

##### 5.1.1 Suitable Extinguishing media

- *Use extinguishing media suitable for the environment and type of fire.*

##### 5.1.2 Unsuitable extinguishing media

- *No data available.*

#### 5.2 Special hazards arising from the substance or mixture

- *The product is not flammable.*
- *In the event of fire, sulfur oxides (SOx) and sodium oxides are released.*

#### 5.3 Advice for fire-fighters

- *Wear protective gloves and clothing. Tanks and product*
- *cool the packaging with water spray. Cool the portable packaging to a safe environment.*
- *Do not approach containers that are suspected to be hot.*
- *Cool warmed packages from a sheltered area with water spray.*
- *Respiratory personnel during fire fighting*

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## AKESBO

Version: 4.0  
Form No: 193417

Preparation Date: 11/26/2019  
Revision Date: 11/26/2019

- Wear protective equipment and chemical protective clothing.
- Cool containers and tanks with water spray. In case of fire, evacuate area.
- In case of uncontrolled large fires, notify the competent authorities and evacuate the area.

### 5.3.1 Additional information

- Avoid contaminating the environment by using excess fire extinguishers.
- Fire-fighting residues must not be allowed to reach sewers or groundwater.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

- Apply personal protection measures as described in section 8 of Exposure Control.

#### 6.1.1 For non-emergency personnel

- Wear suitable protective equipment to prevent contamination of skin, eyes, personal clothing. See section eight of this form. Ensure adequate ventilation. Evacuate hazardous area. Consult an expert for emergency procedures. Do not touch or touch the product until all safety precautions have been read and understood.

#### 6.1.2 For emergency responders

- Wear suitable protective clothing, gloves and eye / face protection.
- Make sure there is good ventilation.
- Remove unrelated personnel, clear area.
- Move personnel to a safe area.
- Make sure that personnel thoroughly read and understand all safety precautions.

### 6.2 Environmental precautions

- Do not allow to enter into surface water / ground water / groundwater.
- In case of entering into water or sewage system, inform the authorities.

### 6.3 Methods and material for containment and cleaning up

#### 6.3.1 For containment

- Follow local regulations. Place contaminated material in a suitable container and dispose of in accordance with section 13.

#### 6.3.2 For cleaning up

- To prevent contamination of drains, surface and ground water, enter debris, vacuum or soak with inert material such as dry sand and soil.
- Collect in suitable waste containers for disposal.
- Clean up spilled area with a little water.

#### 6.3.3 Other information

- None.

### 6.4 Reference to other sections

- See section 7 for information on safe handling.
- See Section 8 for information on personal protective equipment.
- For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

#### 7.1.1 Protective measures

Personal preventions

# Safety Data Sheet

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## AKESBO

Version: 4.0  
Form No: 193417

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- Wear protective clothing and avoid contact with clothing.
  - In order to ensure safe handling of the substance or mixture, take precautions to prevent or control both fire and aerosol and dust formation. Smoking, eating and drinking should be prohibited in the application area.
- Special Rules for Handling:
- Avoid direct contact with the substance.
  - Use personal protective equipment, be sure not to exceed the specified exposure risk limit. Make sure the environment is well ventilated.
  - Keep away from heat, sources of ignition and do not smoke.

### Fire preventions

#### Advice for protection against fire and explosion:

- Keep firefighting equipment ready.

### Environmental precautions:

- Do not allow to enter sewers / surface or ground water.
- In case of entering into water or sewage system, notify the competent authorities and inform the authorities.

### 7.1.2 Advice on general occupational hygiene

- Industrial hygiene standards must be followed to avoid ingestion, contact with eyes and skin during use of chemicals.
- After work, wash your hands with plenty of water and soap.
- Make sure there is good ventilation at work.
- Smoking, eating and drinking should not be allowed in the application area.
- Contaminated clothing and protective equipment should be removed before entering dining areas.

### 7.2 Conditions for safe storage, including any incompatibilities

- Store the product in its original packaging in a dry, cool and well-ventilated place. Smoking, eating and drinking should be prohibited in the environment.
- Observe the manufacturer's storage and handling recommendations. Keep out of direct sunlight. Store away from direct sunlight at temperatures between + 5 and +35 ° C.

#### 7.2.1 Advice on common storage

- Keep away from food, drink and animal feeding areas.
- Keep away from sources of open fire, sparks and heat.
- Follow the general rules for storing chemicals.

#### 7.2.2 Specific precautions on storage

- Control weather conditions, ambient temperature and pressure by aligning with product storage standards.

### 7.3 Specific end use(s)

- No data available

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

#### 8.1.1 Occupational exposure limits

- There is no current exposure limit for the product and its components.

# Safety Data Sheet

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## AKESBO

Version: 4.0  
Form No: 193417

Preparation Date: 11/26/2019  
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### 8.2 Exposure controls

- No data available.

#### 8.2.1 Appropriate engineering controls:

- Eye / face wash units and safety showers must be installed close to the work area for use in case of emergency, injury or exposure.
- If necessary, install the air filtration system in accordance with NIOSH and CEN systems.
- See Chapter 7.

#### 8.2.2 Personal protection equipment

- Use only in well-ventilated areas. Keep away from food, drink and animal feed. Remove contaminated, soiled clothing. Wash hands at the end of work and after work break, avoid direct contact with eyes and skin. Do not eat, drink or smoke any food while using this material. Personal protective equipment must comply with EN standards.

##### 8.2.2.1 Eye / Face protection:

- Wear chemical resistant gloves that comply with standards.



##### 8.2.2.2 Skin protection

###### Hand protection

- Wear chemical resistant gloves that comply with standards.



###### Body protection

- Wear protective apron, chemical protective clothing.



###### Other protection

- No data available.

##### 8.2.2.3 Respiratory protection

- Under normal use conditions, respiratory protection equipment is not required as long as adequate ventilation is provided. In case of emergency (spill, over-exposure), use respiratory protection equipment according to the standards.



#### 8.2.3 Environmental exposure controls

- The obligations under the existing legislation on environmental protection should be fully fulfilled.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	Liquid, Light yellow
<b>Odor</b>	Not available
<b>Odor Threshold</b>	No data available
	<b>Value</b>
pH	Not available
Melting point / freezing point;	0
Initial boiling point and boiling range;	Decomposes at high temperatures.

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Flash point (°C)	No data available
Evaporation rate;	No data available
Flammability (solid, gas);	No data available
Upper/lower flammability or explosive limits;	No data available
Vapour pressure;	No data available
Density (kg/L)	0.980- 0.990
Relative density;	No data available
Partition coefficient: n-octanol/water;	No data available
Ignition temperature (°C)	No data available
Decomposition temperature;	No data available
Viscosity; (cP)	410 (max.)
Explosive properties;	No data available
Oxidizing properties.	No data available
<b>9.2 Other information</b>	
Solubility;	No data available
Conductivity,	No data available

*Note:* The above features were determined according to prescribed methods at the Classification, Packaging and Labeling of Hazardous Substances Regulation Section A-3 or a method comparable to the other.

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

- Maintains stability when used and stored in accordance with specifications.

### 10.2 Chemical stability

- Stable at room temperature under normal storage and handling conditions in closed container.

### 10.3 Possibility of hazardous reactions

- Decomposes at high temperatures.

### 10.4 Conditions to avoid:

- None

### 10.5 Incompatible materials:

- Strong oxidizing agents

### 10.6 Hazardous decomposition products:

- No hazardous decomposition products are known.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

- Acute or chronic health hazards result from the substance.

#### 11.1.1 Acute toxicity

- LD50 Oral - Rat - male and female: > 5.000 mg/kg (OECD Test Guideline 401)
- LD50 Dermal – Rabbit: > 2.000 mg/kg

#### 11.1.2 Skin corrosion/irritation and Eye damage/irritation:

Skin: Rabbit Result: Mild skin irritation.

Eye: Rabbit Result: Mild eye irritation (OECD Test Guideline 405)

# Safety Data Sheet

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## AKESBO

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Form No: 193417

Preparation Date: 11/26/2019  
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### 11.1.3 CMR effects (Carcinogenity):

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

### 11.1.4 CMR effects (Mutagenicity and Toxicity for reproduction):

Reproductive toxicity:

None

Mutagenicity:

None

### 11.1.5 Other Toxicological Effects:

Allergic Effects	No data available
Effects on Repeated Doses Chronic Exposures	No data available
Sensitization	No data available.
Developmental Toxicity (Teratogenicity)	No data available.
Fertility	No data available

### 11.1.6 STOT-single/repeated exposures:

STOT-single exposure	No data available
STOT-repeated exposure	No data available

### 11.1.7 Symptoms related to the physical, chemical and toxicological characteristics:

In case of inhalation	There is no known harmful effect.
In case of skin contact	There is no known harmful effect.
In case of eye contact	There is no known harmful effect.
In case of ingestion	There is no known harmful effect.

### 11.1.8 Additional Toxicological Information:

- The overall toxicity of the mixture may differ from that of the ingredients.
- Failure to classify the mixture as carcinogenic, mutagenic or toxic to reproduction is calculated from the available information on the substances in the mixture and the substance concentrations are taken into account.
- For other health effects, the concentration of each substance is sufficient to contribute to the overall health effects of the mixture.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

- Toxicity to fish;
  - LC50 - *Leuciscus idus* (Golden orfe): 900 mg/l - 48 h
- Toxicity to daphnia and other aquatic invertebrates;
  - EC50 - *Daphnia magna* (Water flea): > 100 mg/l - 24 h
- Toxicity to algae;
  - EC50 - *Desmodesmus subspicatus* (green algae): 8 mg/l - 72 h

### 12.2 Persistence and degradability

Decomposition Potential of the products	No data available
The half-life of degradation	No data available



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Potential degradation of product content in the evaluation of wastewater treatment plants	No data available
<b>12.3 Bioaccumulative potential</b>	
Biological environment (biota) accumulation potential	No data available
Potential - nutrients pass through	No data available
Reference Values - Log Kow , Sw and BCF	No data available
<b>12.4 Mobility</b>	
Liquid, miscible with water. Refer to eco toxicity.	
Water threat class	No data available
Clean Water Impact	No data available
Known or predicted environmental distribution	No data available
<b>12.5 Results of PBT and vPvB assessment</b>	
<b>Biotic</b>	
Ready biodegradability:	Aerobic - Exposure time 28 d Result: 92 % - Readily biodegradable. (OECD Test Guideline 301B)
<b>Abiotic:</b>	
Hydrolysis as a function of pH:	No data available
Photolysis:	No data available
Atmospheric oxidation:	No data available
<b>12.6 Other adverse effects</b>	
· None	

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Waste and used packaging must be disposed of in accordance with official regulations.  
Do not allow to enter surface and ground water, drinking water supplies, standing and flowing water, sewage system.

#### 13.1.1 Contaminated packaging

- Dispose of in accordance with applicable regulations.
- Uncleaned packages should be disposed of in the same way as the product.

#### 13.1.2 Disposal Methods

- None

#### 13.1.3 European Waste Catalogue

- No data available.

## 14. TRANSPORT INFORMATION

	ADR <sup>4</sup> /RID <sup>5</sup>	ADNR	IMDG <sup>6</sup>	ICAO <sup>7</sup> /IATA <sup>8</sup>
<b>TRANSPORTATION</b>	Road	River	Marine	Airways
<b>14.1 UN/ID No.</b>	-	-	-	-
<b>14.2 UN Proper Shipping Name</b>	Not classified as dangerous in the meaning of transport regulations.			
<b>Symbol</b>	-	-	-	-

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## AKESBO

 Version: 4.0  
 Form No: 193417

 Preparation Date: 11/26/2019  
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<b>14.3 Transport Hazard Class(es)</b>	-	-	-	-
<b>14.4 Packaging Group</b>	-	-	-	-
<b>Labelling No</b>	-	-	-	-
<b>Classification Code</b>	-	-	-	-
<b>Hazard No (HIN No)</b>	-	-	-	-
<b>EmS</b>	-	-	-	-
<b>14.5 Environmental Hazards</b>				
<b>MARINE Pollutant</b>			No	
<b>14.6 Special Precautions for User</b>	No data available			
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable			
<b>Road Transport Notes:</b> This product is NOT regulated as a hazardous material.				

## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Substance is found on the following regulatory lists;

- "European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)"

### 15.2 Chemical Safety Assessment

- No data available

#### 15.2.1 HAZARD

CLP classification according to Annex VI of CLP (Regulation (EC) No 1272/2008)

- Not classified.

#### 15.2.2 INTERNATIONAL REGULATIONS

- This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006 and ISO 11014:2009. This product is classified according to EU Directive GHS/CLP.

## 16. OTHER INFORMATION

### 16.1 Other information

- For additional information regarding AK-KIM KIMYA SAN. VE TIC. ŞTİ. Products please contact the AK-KIM KIMYA SAN. VE TIC. A.S
- Ali Haydar KETİR [ali.ketir@akkim.com.tr](mailto:ali.ketir@akkim.com.tr)
- The above information complies with the 1907/2006 Directive and its amendments.
- In all cases of potential poisoning supportive therapy is of the utmost importance.

#### 16.1.1 Related Person

- Prepared by: M. Selçuk BİLGİN ([selcuk.bilgin@doruksistem.com.tr](mailto:selcuk.bilgin@doruksistem.com.tr))
- **Competent Person Accreditation No: TSE GBF-A-0-2707 21.12.2017**
- [www.MsdsMarket.com](http://www.MsdsMarket.com) ; [info@doruksistem.com.tr](mailto:info@doruksistem.com.tr) ;
- +902163378383 (contact for further information if needed)

#### 16.1.2 Revision Date, Version and SDS no

- Date: November 26, 2019
- Version :4.0
- SDS No: 193480

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### 16.1.3 Reason of re-issue

- Compiling according to Regulation (EC) No 1272/2008

### 16.1.4 Relevant H- and EUH-phrases (number and full text):

Not classified.

### 16.1.5 Legal disclaimer

- The purpose of the above information is to describe the products only in terms of health and safety requirements.
- The information given should not, therefore, be construed as guaranteeing specific properties or as specification.
- Customers should satisfy themselves as to the suitability and completeness of such information for their own particular use.
- The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication.
- The above information relates only to the specific material(s) designated herein and may not be valid for such material(s) used in combination with any other materials or in any process or if the material is altered or processed, unless specified in the text.
- The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. Due to the many factors outside our control when using this product, we cannot accept liability for any injury, accident, loss or damage caused through its use.

<sup>1</sup> SDS: Safety Data Sheet

<sup>2</sup> CLP: Classification Labelling and Packaging

<sup>3</sup> GHS: Global Harmonised System

<sup>4</sup> ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

<sup>5</sup> RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

<sup>6</sup> IMDG: International Maritime Code for Dangerous Goods

<sup>7</sup> ICAO: International Civil Aviation Organization

<sup>8</sup> IATA: International Air Transport Association