

SAFETY DATA SHEET - SDS

Product : ALKEST E 150 D

Review : 02

June 05th, 2013

1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product	ALKEST E 150 D
Internal identification code	--
Relevant recommended uses	Industrial uses.
Company	Oxiteno México, S.A de C.V
Address	Insurgentes Sur 1685, Piso 11 Col. Gpe. Inn. C. P. 01020 México, D.F.
Phone number	(55) 5322-0560
Fax	(55) 5661-6242
Emergency Phone number	Coatzacoalcos: 52 (921) 2110903 Guadalajara: 52 (33) 3697 0202 San Juan del Rio: 52 (427) 101 1034 SETIQ: 01800 00 214 00 / 52 (55) 5559 1588 (D.F.) For Chemical Emergency - Spill, Leak, Fire, Exposure or Accident: Call CHEMTREC Day or Night 800-424-9300 (Domestic North America) International, Call +1 703-527-3887 (collect calls accepted)

2. HAZARDS IDENTIFICATION

Classification Skin corrosion/irritation, Category 2

Label Elements

• Hazard Pictograms



• Signal Word

WARNING

• Hazard Statements

H315 Causes skin irritation.

• Precautionary Statements

P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Brand or Generic Chemical Name	Polyethyleneglycol Distearate
Product Type	Mixture.
Ingredients or impurities which contribute to the classification	Poliethylene glycol distearate: 92,8% (minimum).
Composition Comments	CAS Number: 9005-08-7.

4. FIRST-AID MEASURES

Procedure in Case of:

• Ingestion

Seek prompt medical attention.
Do not induce vomiting.
Vomiting should only be induced by medical personnel.
If vomiting occurs, keep the head lower than chest to avoid aspiration into the lungs.
Never give anything by mouth to an unconscious or convulsing person.

• Inhalation

Seek prompt medical attention.
Remove victim to fresh air.
If breathing is difficult, give oxygen.
If not breathing, give artificial respiration.

SAFETY DATA SHEET - SDS

Product : ALKEST E 150 D**Review :** 02**June 05th, 2013**

- **Skin contact** Remove contaminated clothing and shoes. Wash affected areas with plenty of running water, preferably under a shower.
Seek prompt medical attention.
- **Eye contact** Immediately flush with plenty of running water for at least 15 minutes, keeping eyelids open.
Remove contact lenses if easy to do.
Seek prompt medical attention.

Most important symptoms/effects, acute and delayed

Ingestion- Low toxicity. In large amounts may cause: Gastrointestinal irritation. Nausea. Diarrhea.

Inhalation- No serious adverse effects are expected due to inhalation.

Skin- Causes: Irritation.

Eyes- No serious effect is expected if the product comes into contact with eyes.

Information for doctor

There is not known any specific antidote.

Direct the treatment in accordance with the symptoms and clinical conditions of the patient.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

In case of fire, use:
Alcohol resistant foam.
Water spray.
Carbon dioxide (CO₂).
Dry chemical powder.

Specific Hazards

Product is not flammable.
May form explosive mixtures with air above the flash point.
In case of combustion it may generate carbon monoxide, besides CO₂.

Protective measures for fire-fighters

Water jets should not be used directly on igniting products because it may disperse the material and intensify the fire.
Self-contained breathing apparatus and protective clothing are required.
Cool the intact fire-exposed containers with water spray and remove them.

NFPA Rating

- **Health** 1
- **Flammability** 1
- **Instability** 0
- **Special**

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Isolate and signalize area.
Keep heat and/or ignition sources away.
Use personal protection equipment as indicated in Section 8, in order to avoid contact with spilled product.

Environmental Precautions

Prevent product from entering into soil and waterways.
Notify the competent authorities if the product has run into drainage systems or watercourse or has contaminated the ground or vegetation.

Methods and materials for containment and cleaning up

Stop if possible.
Contain and dike spilled product with earth or sand.
Eliminate ignition or heat sources.
Transfer to proper container.
Collect remnants with an appropriate absorbent material.
Wash the contaminated surface with water, which should be collected for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Use in a well-ventilated area.
Avoid inhalation and contact with eyes, skin or clothing through proper protection.
If occurs accidental contact, exposed area should be washed immediately.
Emergency eyewashes and showers shall be located in accessible locations.
Wash hands and face thoroughly after handling.
Wash contaminated clothing before reuse.

Conditions for safe storage

Store in a covered and well-ventilated area, away from sunlight and sources of heat or open flames.
Ensure that the storage location has adequate moisture, pressure and temperature.
Keep containers tightly closed when not in use.
Provide proper grounding to prevent static electricity buildup.

Incompatibilities

Avoid contact with:
Strong oxidizing agents.
Strong acids and bases at high temperatures.

SAFETY DATA SHEET - SDS

Product : ALKEST E 150 D

Review : 02

June 05th, 2013

Packaging Material

Recommended:
Stainless steel.
Polyethylene.
Polypropylene.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters

- TLV-TWA (ACGIH) 10 mg/m³ (as stearate).
- PEL-TWA (OSHA) Not established.
- TLV-STEL (ACGIH) Not established.
- LT(NR15) Not established.
- Odor Threshold Not available.
- IDLH Not available.
- Biological Exposure Indices (ACGIH) Not available.

Engineering Control Measures

In closed environments, this product should be handled keeping proper exhaust (general diluter or local exhauster).

Individual Protection Measures

- Eye Protection Side shields or wide vision safety goggles.
- Skin Protection PVC apron.
It is recommended to adopt safety boots/shoes.
- Hand Protection Gloves made of:
Rubber.
PVC (Polyvinyl chloride).
- Breathing equipment In case of emergency or contact with high concentrations of the product, wear an air supplied mask or self contained breathing apparatus.
It is recommended to wear a face mask with mechanical filter in case of exposure to the particulate material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Flakes. Yellowish.
Odour and Odour threshold	Not available.
pH	5,0 to 6,0 (25 °C).
Melting point/Freezing point	52,2 to 56,8 °C.
Initial Boiling Point and Boiling Range	Not available.
Flash point	272 °C (CC).
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	Not available.
Vapour density (air = 1)	Not available.
Relative density (water=1)	Not applicable.
Apparent density	1,066g/cm ³ .
Solubility	Soluble in: Soluble in water. Methanol.
Partition Coefficient n-octanol/water	Not available.

SAFETY DATA SHEET - SDS

Product : ALKEST E 150 D

Review : 02

June 05th, 2013

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

10. STABILITY AND REACTIVITY

Chemical stability Stable under normal conditions of use and storage.

Reactivity No hazardous reactivity is expected.

Possibility of Hazardous Reactions Not polymerize.

Conditions to avoid High temperatures, ignition sources and prolonged exposure to the air.

Incompatible materials Avoid contact with:
Strong oxidizing agents.
Strong acids and bases at high temperatures.Hazardous decomposition products In case of combustion it may generate carbon monoxide, besides CO₂.

Considerations on the use of the product Not applicable.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

- Oral The polyethyleneglycol distearate can be hydrolyzed through enzymes produced by the pancreas producing polyethyleneglycol monostearate and stearic acid. The toxicity of these metabolites is very low. Polyethyleneglycol stearate - LD₅₀, rat: > 10 g/kg. Stearic acid - LDLo, rat: 4640 mg/kg.
- Inhalation Stearic acid - LD₅₀, 4h, rat: > 0.1621 mg/L.
- Dermal Not available.

Skin corrosion/irritation Stearic acid - LD₅₀, rabbit: > 5000 mg/kg.
Polyethylene glycol - DL₅₀, rabbit: >20000 mg/kg.

Serious eye damage/eye irritation Based on the properties of other polyglycol stearates, it is expected that the product may cause slight irritation or no irritation.

Respiratory or skin sensitization Not available.

Germ cell mutagenicity Not available.

Carcinogenicity Based on studies done with other polyethyleneglycol stearates and with stearic acid, it is expected that the product does not present severe chronic effects and that there are no carcinogenic, mutagenic or teratogenic activity.

Reproductive toxicity Not available.

Specific target organ toxicity - Single exposure Not available.

Specific target organ toxicity - Repeated exposure Not available.

Aspiration hazard Not available.

12. ECOLOGICAL INFORMATION

Ecotoxicity Stearic acid - Fish - LC₅₀, 48h, *Leuciscus idus*: > 10000 mg/L.
Invertebrate - CE₅₀, 47h, *Daphnia magna*: > 32 mg/L.
Algae - CE₅₀, 72h, *Pseudokirchnerella subcapitata*: > 0.9 mg/L.

Polyethylene glycol - Fish - CL₅₀, 24h, *Carassius auratus*: >5000 mg/L.

Persistence and Degradability Expected to be biodegradable.

Bioaccumulative Potential It is not expected to bioaccumulate in the environment.

Mobility in soil Not available.

Other Adverse Effects Not available.

13. DISPOSAL CONSIDERATIONS

SAFETY DATA SHEET - SDS

Product : ALKEST E 150 D

Review : 02

June 05th, 2013

Recommended methods of disposal

- **Product**
The preferred options for disposal include reuse, recycling, co-processing, finding a use for a by-product, incineration or other thermal destruction process at licensed facilities. All procedures must follow specific operation standards in order to reduce health, safety and environmental risks. Perform co-processing, incineration or other thermal destruction process at facilities capable of minimizing or reducing air pollution emissions. The disposal must comply with federal, state, and local laws and regulations in accordance with the environmental agencies.
- **Product Remains**
Same method as indicated for product.
- **Packaging**
Do not cut or pierce the packaging, nor do hot work near them. Do not remove labels until the product has been fully removed and the packaging cleaned. The preferred options for disposal include reuse, recycling or reclamation at licensed facilities. All procedures must follow specific operation standards in order to reduce health, safety and environmental risks. The disposal must comply with local legislation and in accordance with standards from local environmental agencies.

14. TRANSPORT INFORMATION

Land Transport ANTT	Product not classified as hazardous in accordance with Resolution 420/2004 - Transport Ministry.
• UN number	N/A
• Proper Shipping Name	Not classified.
• Hazard Class	Not classified.
• Hazard Number	Not classified.
• Packaging Group	Not classified.
Maritime Transport IMDG	Product not classified as hazardous in accordance with IMDG Code - 2010 Edition - IMO (International Maritime Organization).
• UN number	N/A
• Proper Shipping Name	Not classified.
• IMDG Class	Not classified.
• Packaging Group	Not classified.
• EmS	Not classified.
Air Transport ICAO-TI and IATA-DGR	Product not classified as hazardous in accordance with Dangerous Goods Regulations - 52nd Edition - IATA (International Air Transport Association).
• UN number	N/A
• Proper Shipping Name	Not classified.
• ICAO/IATA Class	Not classified.
• Label	Not classified.
• Packaging Group	Not classified.
Land Transportation ADR/RID (cross-border)	Product not classified as hazardous in accordance with Dangerous Goods by Road - Applicable from 1st January 2011 - Unece (United Nations Economic Commission for Europe).
• UN number	N/A
• Proper Shipping Name	Not classified.
• ADR/RID class	Not classified.
• Packaging Group	Not classified.
• Danger code (Kemler)	Not classified.
• Restriction Code	Not classified.

15. REGULATORY INFORMATION

SAFETY DATA SHEET - SDS

Product : ALKEST E 150 D

Review : 02

June 05th, 2013

Applicable standards

Resolution 420 / 2004 – Transport Ministry.
IMDG Code - 2010 Edition - IMO (International Maritime Organization).
Dangerous Goods by Road (ADR) – Available from January 1st, 2011 – Unece (United Nations Economic Commission for Europe).
Dangerous Goods Regulations - 53rd Edition - IATA (International Air Transport Association).
Brazilian Technical Standards Association (ABNT) – NBR 14725 - Part 1 to 4.

16. OTHER INFORMATION

Remarks

Not applicable.

Sources

NTP - National Toxicity Program, National Institute of Environmental Health (EUA).
European Chemicals Bureau - <http://ecb.jrc.it>
2012 TLVs and BEIs – Based on the Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices – ACGIH.
2012 Guide to Occupational Exposure Values – ACGIH.
Final Report "PEG-2, -3, -4, -6, -8, -9, -12, -20, -32, -50, -75, -120, -150, and -175 Distearate"
Cosmetic Ingredient Review, Washington DC, 20 de Setembro de 1996.

Abbreviations and acronyms

ACGIH: American Conference of Governmental Industrial Hygienists (USA).
ADR: European agreement concerning the international carriage of dangerous goods by road.
CAS: Chemical Abstracts Service (American Chemical Society - EUA).
EC50: Average concentration for 50% of maximum response.
LC: Lethal Concentration - substance concentration in the environment that leads to death after a certain period of exposure.
LC50: Lethal concentration for 50% of the test animals.
BOD: Biochemical Oxygen Demand.
LD50: Lethal Dose for 50% of the test animals.
LDLo: Lethal Dose Low - minimal amount of a chemical lethal to animals in testing.
EINECS: European Inventory of Existing Commercial Chemical Substances.
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.
IARC: International Agency for Research on Cancer.
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods by Regulations by the IATA
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the ICAO.
IMDG: International Maritime Code for Dangerous Goods.
IDLH - Immediately Dangerous To Life or Health Concentrations.
Kow: Octanol/water partition coefficient.
LT (NR 15): Exposure limits of the standard number 15 - Unhealthy Operations and Activities from the Ministry of Labour and Employment of Brazil.
LOAEL: Lowest Adverse Effect Level
LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database
NLP: No Longer Polymers.
NIOSH: National Institute for Occupational Safety and Health.
NOAEL: No Observed Adverse Effect Level
NTP: National Toxicology Program.
OSHA: Occupational Safety and Health Administration (EUA).
PEL-TWA: Exposure Limit Allowed – time-weighted average.
RID: Regulations concerning the international transport of dangerous goods by rail.
TLV-STEL: Tolerance Limit - short period of time (15 minutes, maximum).
TLV-TWA: Tolerance Limit – time weighted average.
WGK: Wassergefährdungsklasse (Germany) - Water Hazard Class.

This Safety Data Sheet was authored according to our current knowledge and experience, however cannot imply guarantee of any nature. Considering the variety of factors that can affect their process or application, the information on this sheet does not exempt the processors from the responsibility of executing their own tests and experiments.

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