
SAFETY DATA SHEET - SDS

Product : ALKEST TW 20 K

Review : 03

March 23th, 2013

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

Product	ALKEST TW 20 K
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

Relevant Hazards	There are no relevant hazards.
Adverse effects to human health	
• Ingestion	Low toxicity. Toxic effects are not expected due to significant acute toxic ingestion of small amounts of this product.
• Inhalation	Due to your low vapor pressure, is unlikely to cause inhalation problems at room temperature.
• Skin	It is unlikely that exposure to small amounts for short periods, may have any irritant or toxic effect.
• Eyes	May cause: Irritation of the conjunctiva.
Environmental Effects	Soluble in water. It is expected to be biodegradable.
Classification	No classification is assigned according to NBR 14725-2.
Specific Hazards	See Section 5 for specific hazards.
Label Elements	
• Hazard Pictograms	Not applicable.
• Signal Word	Not applicable.
• Hazard Statements	Not applicable.
• Precautionary Statements	Not applicable.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Product Type	Substance.
Brand or Generic Chemical Name	POE (20) SORBITAN MONOLAURATE USP /NF FCC
Synonyms	Polyoxyethylene Sorbitan Monolaurate (20); Polysorbate 20; Polysorbate 20 (INCI - CTFA).
CAS Number	9005-64-5 (generic).
EINECS/NLP number	500-018-3 (generic).
Dangerous components	There are no hazardous ingredients.
Chemical Nature	Ethoxylated sorbitan esters.

4. FIRST-AID MEASURES

Procedure in Case of:

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- **Ingestion** Seek prompt medical attention.
Vomiting should only be induced by medical personnel.
If vomiting occurs, keep the head lower than chest to avoid aspiration into the lungs.
- **Inhalation** Seek prompt medical attention.
Remove victim to fresh air.
If breathing is difficult, give oxygen.
If not breathing, give artificial respiration.
- **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.
- **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: Water spray. Alcohol resistant foam. Carbon dioxide (CO2). Dry chemical powder.
Hazards Relating to Firefighting Measures	Water jets should not be applied directly on the product in flames, for it may spread and increase the intensity of the fire. In case of combustion it may generate carbon monoxide, besides CO2.
Special Firefighting Methods	Cool the intact exposed containers, with water mist, and remove them.
Protective equipment to people involved in fire fighting	Self-contained respiratory protection and protective clothes required.
Specific Hazards	Product is not flammable.
NFPA Rating	
• Health	1
• Flammability	1
• Instability	0
• Special	
Additional information	Not applicable.

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.
Precaution Emergency and alarm system	Not available.
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.
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Conditions for safe storage	Store in a covered and well-ventilated area, away from sunlight and sources of heat or open flames. Keep containers tightly closed when not in use. The product can be stored, in liquid state, at temperatures slightly between 20 and 50°C, which, as recommended, is maintained at inert gas atmosphere.
Incompatibilities	Avoid contact with: Strong oxidizing agents.
Packaging Material	Recommended: carbon steel coated with vinyl ester resin, stainless steel and polyester resin reinforced with glass fiber. Inadequate: zinc (galvanized steel) and zinc alloys.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Control Measures	In closed environments, this product should be handled keeping proper exhaust (general diluter or local exhauster).
TLV-TWA (ACGIH)	Not established.
PEL-TWA (OSHA)	Not established.
TLV-STEL (ACGIH)	Not established.
LT(NR15)	Not established.
IDLH	Not available.
Odor Threshold	Not available.
Biological Exposure Indices (ACGIH)	Not available.
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 face mask with organic vapors cartridge in case of exposure to vapors/aerosols.
Hand Protection	Gloves made of: Rubber. PVC (Polyvinyl chloride).
Eye Protection	Side shields or wide vision safety goggles.
Skin Protection	PVC apron. It is recommended to adopt safety boots/shoes.
Special Precautions	Emergency eye-washes and showers.
Hygienic Measures	Wash contaminated clothes before reusing them; wash hands and face after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid. Clear. Yellowish.
Odour and Odour threshold	Odorless.
pH	5,5 - 6,5 (5% p/p 25°C).
Melting point/Freezing point	Not available.
Initial Boiling Point and Boiling Range	Not available.
Pour Point	Not applicable.
Dropping Point	Not applicable.
Flash point	> 149 °C (open glass).
Fire point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	Not available.

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Vapour density (air = 1)	Not available.
Relative density (water=1)	1,098 g/cm ³ (25 °C).
Apparent density	Not applicable.
Solubility	Soluble in water (20 °C for 1 hour / 0.5% concentration).
Partition Coefficient n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	~ 400 mPa.s (25 °C).
Viscosity Index	Not applicable.
Penetration Index	Not applicable.
Sulfur content	Not applicable.
Water content	Not applicable.
Bromine Index	Not applicable.
Aromatics Content	Not applicable.

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.
Hazardous decomposition products	In case of combustion it may generate carbon monoxide, besides CO ₂ .
Considerations on the use of the product	The product can form a gel at temperatures < 20 °C.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

- Inhalation Not available.
- Skin contact Not available.
- Eye contact Draize eye irritation score was an 5.3 out of a possible 110.
- Ingestion LD₅₀,rat: 36700µL/Kg.

Chronic toxicity

There are no known serious chronic effects and/or references on carcinogenic, mutagenic or teratogenic product activity.
None of this products components are listed as carcinogenic by ACGIH, IARC, NTP, DFG or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicity	The aquatic toxicity is not known.
Persistence and Degradability	Expected to be biodegradable.
Bioaccumulative Potential	It is not expected to bioaccumulate in the environment.
Mobility in soil	The product is slightly volatile and water soluble.
Other Adverse Effects	Not available.

13. DISPOSAL CONSIDERATIONS

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Product	Reprocessing whenever possible. Co-processing or incineration in authorized facilities, able to prevent emission of pollutants to the atmosphere. Incineration should be done in accordance with prevailing municipal, state and federal laws and standards from local 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. Properly dispose as residue or send for recovery in accredited firms.

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 - 53rd 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

Applicable standards	Resolution 420 / 2004 – Transport Ministry. IMDG Code - 2010 Edition - IMO (International Maritime Organization). Dangerous Goods Regulations - 53rd Edition - IATA (International Air Transport Association). Dangerous Goods by Road (ADR) – Available from January 1st, 2011 – Unece (United Nations Economic Commission for Europe).
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16. OTHER INFORMATION

Remarks	Not available.
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Sources

2011 TLVs and BEIs – Based on the Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices – ACGIH.
2011 Guide to Occupational Exposure Values – ACGIH.
European Chemicals Bureau - <http://ecb.jrc.it>
SAX's Dangerous Properties of Industrial Materials - 10th Edition, Ricard J. Lewis, SR John Wiley & Sons, Inc, 2000.

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.
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.
Kow: Octanol/water partition coefficient.
LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database
NIOSH: National Institute for Occupational Safety and Health.
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.

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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