

ELINEX AFFF 3% - EL 303 SG

Technical Information



Introduction

EL 303SG is a synthetic fire fighting foam concentrate designed for use on non-polar, hydrocarbon hazards. When proportioned with water and applied with conventional foam or water/fog equipment, **EL 303SG AFFF** provides excellent control and extinguishment of Class B fires by spreading a vapor sealing film over the liquid fuel. This vapor seal inhibits re-flash even when the foam blanket is ruptured and also allows the product to be used to secure non-ignited spills.

EL 303SG provides excellent penetrating and wetting qualities when used on Class A fires. This is important when extinguishing deep-seated fires in wood, paper, rubber tires and other ordinary combustibles.

Typical Properties

Nominal use concentration	:	3%
Specific gravity @ (25°C)	:	1.02 ± 0.01 g/cm ³
Viscosity @ (25°C)	:	100 ÷ 200 cP
(Brookfield Spindle No.1, 30 rpm)		
Minimum use temperature	:	-1 °C
Storage temperature	:	-2° C ÷ 50°C
Freezing point	:	-4°C
pH@ (25°C)	:	7.0 ÷ 8.5

Applications

EL 303SG can be used with conventional foam equipment with fresh , sea or brackish water.

Self-educing foam nozzles and foam nozzles with in-line educators are among the most common types of hardware for application.

In addition to its use in aspirating foam equipment, **EL 303SG** can be dispensed effectively through non-aspirating equipment including fog nozzles, water spray devices and standard sprinklers.

EL 303SG is listed by UL.

EL 303SG may be applied to fires simultaneously with dry chemical fire fighting agents because the two are compatible.

Features

Effectiveness : Rapid extinguishment reduces the chances of dangerous incidents and reduces the risk to property and equipment. **EL 303SG** also prevents re-flash and burn-back, which are major causes of injuries. The securing action of **EL 303SG** minimises re-flash and re-ignition during clean-up of flammable liquid spills.

Reliability : **EL 303SG** can be stored for virtually an indefinite period of time in approved equipment and systems. NFPA 11 recommends annual inspection of all foam systems.

Economics : **EL 303SG** offers faster extinguishment, so less agent is required in training and actual fire emergencies.

Storage & Design : **EL 303SG** provides maximum economies in storage space and design of fixed systems.

Environmental & Toxicity

EL 303SG is considered as biodegradable material with minimal environmental impact. More than 90% is biologically degradable within 28 days. The material is non toxic to Humans, Fish or Animals.

Storage

EL 303SG may be stored in its shipping container without change in its original physical or chemical characteristics. Shelf life is expected to be 20 years when stored at recommended temperatures and in original containers. It does not show significant sedimentation or precipitation in storage or after temperature cycling. Freezing and thawing have no effect on performance and the concentrate proportions satisfactorily in ordinary equipment at temperature above -2°C – thaw cycling may cause slight stratification which may be overcome with moderate agitation. Premix solutions in fresh water may be stored 5 years for ready use at temperatures above freezing.

Packing

EL 303SG is available in 25 liter pails or 200 liter drums or 1000 liter container

Important Notice to Purchaser :

All statements, technical information and recommendations herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed, and the following is made in lieu of all warranties, expressed or implied, including the implied warranties of merchantability and fitness for purpose: Seller's and manufacturer's only obligation shall be to replace such quantity of the product proved to be defective. Before using, user shall determine the suitability of the product for its intended use, and user assumes all risk and liability whatsoever in connection there within.

NEITHER SELLER NOR MANUFACTURER SHALL BE LIABLE EITHER IN TORT, IN CONTRACT OR ON THE BASIS OF STRICT PRODUCT LIABILITY FOR ANY LOSS OR DAMAGE, DIRECT, INCIDENTAL, OR CONSEQUENTIAL, ARISING OUT OF OR THE INABILITY TO USE THE PRODUCT. Any statement or recommendation not contained herein shall have any force or effect unless in an agreement signed by officers of seller and manufacturer.

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Material Safety Data Sheet

Product : ELINEX EL 303SG
Int. No.: 1.300.1.4.51

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

PRODUCT NAME: ELINEX EL 303SG

PRODUCER : KIDRON INDUSTRIAL MATERIALS LTD.

155 BIALIK ST.
RAMAT GAN, ISRAEL
TEL : (972) 3-7514171
FAX: (972) 3-7520445

2. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT	C.A.S. NO.	PERCENT
WATER	7732-18-5	78 - 85
DIETHYLENE GLYCOL BUTYL ETHER.....	112-34-5	0.5 - 3
EU Hazard Symbols and Risk : Xi ; R36		
ETHANOL.....	64-17-5	0.2 - 1.5
AMPHOTERIC FLUORINATED POLYMER....	34455-09-3	0.3 - 1.0
UREA.....	57-13-6	3.0 - 7.0
ALKYL SULFATE SALT.....		2.0 - 4.0

This product contains the following toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR Part 372: DIETHYLENE GLYCOL BUTYL ETHER, ETHANOL

3. HAZARDS IDENTIFICATION

Critical hazards:
None

4. FIRST AID MEASURES

Eye Contact:

Immediately flush eyes with large amounts of water. Get immediate medical attention.

Skin Contact:

Immediately wash skin with soap and large amounts of water.
Remove contaminated clothing. If signs/symptoms occur, call a medical doctor. Wash contaminated clothing before reuse and dispose of contaminated shoes.

Inhalation:

If signs or symptoms occur, remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

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Ingestion:

If swallowed, call a medical doctor immediately. Only induce vomiting at the instruction of a medical doctor. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Product is a fire-extinguishing agent.

Hazardous Decomposition:

Carbon Monoxide and Carbon Dioxide, Oxides of Nitrogen, Oxides of Sulphur, Hydrogen Fluoride, Thermal decomposition of usage concentrations does not present a hazard.

Fire-Fighting Procedures:

Not applicable

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Observe precautions from other sections.

Methods for Cleaning up:

Ventilate area. Contain spill. Cover with absorbent material.

Collect spilled material. Clean up residue with water. Place in a closed container.

7. HANDLING AND STORAGE

Precautions for Safe Storage:

Store away from areas where product may come into contact with food or pharmaceuticals. Store at temperatures below 49 C.

Store at temperatures above 0 C. Keep container closed when not in use.

Ventilation:

Keep container in a well-ventilated area.

Fire Prevention:

Not applicable.

Precautions for Safe Handling:

Prohibit sources of sparks and ignition, Do not smoke.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye Protection:

Avoid eye contact with vapour, spray, or mist. Wear vented goggles.

Hand Protection:

Wear appropriate gloves when handling this material. A pair of gloves made from the following material(s) are recommended: Butyl rubber.

Skin Protection:

Avoid skin contact.

Respiratory Protection:

Avoid inhalation of airborne material. Select one of the following respirators based on airborne concentration of contaminants and in accordance with national regulations:
Half-mask organic vapour respirator with dust/mist prefilter.

Ingestion:

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Wash hands after handling and before eating.

Recommended Ventilation:

If exhaust ventilation is not adequate, use appropriate respiratory protection. Provide ventilation adequate to control vapour concentrations below recommended exposure limits and/or control spray or mist.

Exposure Limits:

DIETHYLENE GLYCOL BUTYL ETHER (112-34-5)

CMRG TWA Exposure Limit: 35 ppm

ETHANOL

TLV TWA Exposure Limit: 1000 ppm

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odour:	Clear, colored liquid.
pH:	7.0 – 9.0
Boiling point/boiling range:	100 C (Typical)
Melting point/melting range:	Not applicable
Autoflammability:	Not applicable
Vapour pressure:	Approximately 17.8 mmHg Calc @ 23C
Water Solubility:	Miscible
Specific gravity:	1.02 Water=1
Vapour density:	Approximately 0.69 Air=1 Calc @ 23C
Volatile organic compounds:	42 gms/litre
Evaporation rate:	Less Than 1 BuOAc=1
Viscosity:	Not determined
Percent volatile:	90 % by wt

10. STABILITY AND REACTIVITY

STABILITY : Stable

Materials to Avoid: Not applicable.

Hazardous Decomposition: Stable. Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

Effects from Eye Contact:

Minimal Eye Irritation: signs/symptoms disappear after 21 days with no damage.

Effects from Skin Contact:

Mild Skin Irritation (after prolonged or repeated contact): signs/symptoms can include redness, swelling, and itching. Symptoms disappear after 21 days with no damage.

Prolonged or repeated exposure may cause:

Allergic Skin Reaction: signs/symptoms can include redness, swelling, blistering, and itching.

Effects from Inhalation:

No effects known.

Effects from Ingestion:

Not applicable.

Other Effects and Information:

None

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12. ECOLOGICAL INFORMATION

Persistence/Biodegradability:

This product does not contain any ingredients reportable as not biodegradable.

Other Effects and Information:

BIODEGRADATION :

14 Day (OECD 301 A-F) BOD14 \geq 55%

20 Day (OECD 301 A-F) BOD20 \geq 65%

28 Day (OECD 301 A-F) BOD28 \geq 90%

AQUATIC TOXICITY :

LD50 Rats $>$ 2000 mg/Kg ;

Vibrio fischeri NRRL-B-11177 30-min EC20 $>$ 1000 mg/L , 30-min EC50 $>$ 1000 mg/L

Brachydanio rerio OECD 203 24-hr LC50 $>$ 1000 mg/L , 24-hr LC100 $>$ 1000 mg/L

13. DISPOSAL CONSIDERATIONS

Special Instructions:

Discharge spent solutions and small quantities (less than 0.25%)to a wastewater treatment system. Reduce discharge rate if foaming occurs. Larger quantities may adversely affect biological wastewater treatment systems. Incinerate large quantities in an industrial or commercial incinerator.

Since regulations vary, consult applicable regulations or authorities before disposal.

14. TRANSPORT INFORMATION

UN NUMBER:

Not restricted for transportation

ADR/RID CLASSIFICATION:

Not regulated

ICAO/IATA CLASSIFICATION:

Not regulated

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15. REGULATORY INFORMATION

EC CLASSIFICATION/ LABELLING (*) -

DANGEROUS PREPARATIONS (*) D.1999/45/EC (*)

R43_May cause sensitization by skin contact (*)

S26_ In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S36/37/39_Wear suitable protective clothing, gloves and eye/face protection (*)

INVENTORIES (*) EINECS (EU) : conforms (*)

16. OTHER INFORMATION

Regulatory Information:

Since regulations vary, consult applicable regulations or authorities before disposal. In the event of an uncontrolled release of this material, the user should determine if the release qualifies as a reportable quantity.

The information on this Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law).

The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials.

For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.