Chema Industries

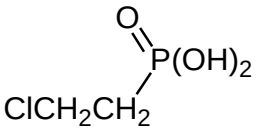
TECHNICAL DATA SHEET

Esrel 48% SL

(**Ethephon 48%**)

SECTION 1. IDENTIFICATION OF THE SUBSTANCE

Trade name: Esrel
Common Name: Ethephon
Form: SL
Chemical Name:
(2-chloroethyl)phosphonic acid
Chemical Class: ethylene generator
Formula: $C_2H_6ClO_3P$
Mol. wt: 144.5
Structure:



SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance	Conc.	Uses
Active ingredient		
Ethephon	48%	A plant growth regulator
Inert ingredient		
Other	52%	
Total	100%	

SECTION 3. HAZARDS IDENTIFICATION

Emergency Overview:
Danger! Corrosive - causes irreversible eye damage. Harmful if swallowed. Harmful if inhaled or absorbed through skin.

Immediate Effects

الإدارة:
٣٧ ميدان فيكتور عمانويل - سموحة
٢١٦١١ الإسكندرية
تليفون: ٤٢٥٠٠٦٢ (٠٣) / ٤٢٤١٣١٣ (٠٣)
فاكس: ٤٢٩٢١٢٠ (٠٣)

المصنع:
٢٧٨ المنطقة الصناعية الثانية
مدينة النوبارية الجديدة - البحيرة
تليفون: ٢٦٣٤٧٠٥ (٠٤٥)
فاكس: ٢٦٣٤٦٧٢ (٠٤٥)

Eye: Corrosive. Causes corneal opacity, irreversible eye damage. Vapors and mists can cause irritation, redness, tearing.
Skin: May be harmful if absorbed through skin. May cause redness, swelling on prolonged contact.
Ingestion: Harmful if ingested. May cause irritation, abdominal pain, chest pain, burns to mouth and esophagus.
Inhalation: Harmful if inhaled. Mists may cause respiratory tract irritation, coughing, a burning sensation.
Chronic or Delayed Long-Term: This product does not contain any ingredients designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

SECTION 4.FIRST AID MEASURES

Eye
Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek immediate medical attention, preferable with an phthalmologist.
If the physician is not immediately available, eye irrigation should be continued for an additional 15 minutes

Skin
In case of contact, wash with plenty of soap and water. Seek medical attention if irritation develops or persists.

Ingestion
If victim is conscious and alert, give 2-3 glasses of water. Do not induce vomiting. Material may enter lungs and cause severe damage.

Inhalation
Remove victim from immediate source of exposure and assure that the victim is breathing. If breathing is difficult, administer oxygen, if available. If victim is not breathing, administer CPR (cardio-pulmonary resuscitation). Seek medical attention.

SECTION 5.FIRE FIGHTING MEASURES

Suitable Extinguishing Media
Foam, water, carbon dioxide (CO2), dry chemical

Fire Fighting Instructions

الإدارة:
٣٧ ميدان فيكتور عمانويل - سموحة
٢١٦١١ الإسكندرية
تليفون: ٤٢٥٠٠٦٢ (٠٣) / ٤٢٤١٣١٣ (٠٣)
فاكس: ٤٢٩٢١٢٠ (٠٣)

المصنع:
٢٧٨ المنطقة الصناعية الثانية
مدينة النوبارية الجديدة - البحيرة
تليفون: ٢٦٣٤٧٠٥ (٠٤٥)
فاكس: ٢٦٣٤٦٧٢ (٠٤٥)

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Keep unnecessary people away, isolate hazard area and deny entry. Evacuate residents who are downwind of fire. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Persons who may have been exposed to contaminated smoke should be immediately examined by a physician and checked for symptoms of poisoning. The symptoms should not be mistaken for heat exhaustion or smoke inhalation.

SECTION 6.ACIDENTAL RELEASE MEASURES

Small Spill:
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Land Spill or Leaks
Containment of Spill: Stop leak if it can be done without risk. Dike spill using absorbent or impervious materials such as earth, sand or clay. Environmental and Regulatory Reporting: If spilled on the ground, the affected area should be removed to a depth of one or two inches and placed in an appropriate container for disposal. Prevent material from entering public sewer system or any waterway.

SECTION 7.HANDLING AND STORAGE

Handling Procedures
Do not breathe vapors and mists. Do not get on skin or in eyes. Do not ingest. Use handling, storage and disposal procedures that will prevent contamination of water, food or feed. Keep from freezing. If freezing occurs, thaw and remix before using.
Storing Procedures Store in an area that is away from ignition sources.

Work/Hygienic Procedures

الإدارة:
٣٧ ميدان فيكتور عمانويل - سموحة
٢١٦١١ الإسكندرية
تليفون: ٤٢٥٠٠٦٢ (٠٣) / ٤٢٤١٣١٣ (٠٣)
فاكس: ٤٢٩٢١٢٠ (٠٣)

المصنع:
٢٧٨ المنطقة الصناعية الثانية
مدينة النوبارية الجديدة - البحيرة
تليفون: ٢٦٣٤٧٠٥ (٠٤٥)
فاكس: ٢٦٣٤٦٧٢ (٠٤٥)

Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet. Wash exposed skin promptly to remove accidental splashes of contact with this material.

SECTION 8.EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Controls

Where engineering controls are indicated by use conditions of a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: local exhaust ventilation at the point of generation.

Eye/Face Protection

Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material. Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area. Face contact should be prevented through use of a face shield.

Body Protection

Skin contact should be prevented through use of suitable protective clothing, gloves and footwear, selected with regard of use conditions and exposure potential. Consideration must be given both to durability as well as permeation resistance.

Respiratory Protection

When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations. Under normal conditions, in the absence of other airborne contaminants, the following should provide protection from this material up to the conditions specified by the appropriate OSHA, WHMIS or ANSI standard(s): Air-purifying (half-mask/full-face) respirator with cartridge/canister approved for use against dusts, mists and fumes, pesticides. Under conditions immediately dangerous to life or health, or emergency conditions with unknown concentrations, use a

الإدارة:
٣٧ ميدان فيكتور عمانويل - سموحة
٢١٦١١ الإسكندرية
تليفون: ٤٢٥٠٠٦٢ (٠٣) / ٤٢٤١٣١٣ (٠٣)
فاكس: ٤٢٩٢١٢٠ (٠٣)

المصنع:
٢٧٨ المنطقة الصناعية الثانية
مدينة النوبارية الجديدة - البحيرة
تليفون: ٢٦٣٤٧٠٥ (٠٤٥)
فاكس: ٢٦٣٤٦٧٢ (٠٤٥)

full-face positive pressure airsupplied respirator equipped with an emergency escape air supply unit or use a self-contained breathing apparatus unit.

General Protection
These recommendations provide general guidance for handling this product.Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations. Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Formulation Type:	SL
Appearance:	Colorless Liquid
Corrosion:	Non-corrosive

SECTION 10.STABILITY AND REACTIVITY

Chemical Stability
This material is stable under normal handling and storage conditions described in Section 7.
Conditions to Avoid Heat, flames and sparks.
Incompatibility zinc, iron, copper, bases, aluminum & tin
Hazardous Products of Decomposition
Decomposition Type: thermal hydrogen chloride carbon oxides
Hazardous Polymerization
Hazardous polymerization does not occur.

SECTION 11.TOXICOLOGICAL INFORMATION

Acute Oral Toxicity Rat: LD50: 2,000 - 5,000 mg/kg
Acute Dermal Toxicity Rabbit: LD50: > 2,000 mg/kg
Acute Inhalation Toxicity Rat: LC50: > 2.51 mg/l 4 h
Acute Respiratory Irritation:
No test data found for product.
Skin Irritation Rabbit: Moderately irritating

الإدارة:
٣٧ ميدان فيكتور عمانويل - سموحة
٢١٦١١ الإسكندرية
تليفون: ٤٢٥٠٠٦٢ (٠٣) / ٤٢٤١٣١٣ (٠٣)
فاكس: ٤٢٩٢١٢٠ (٠٣)

المصنع:
٢٧٨ المنطقة الصناعية الثانية
مدينة النوبارية الجديدة - البحيرة
تليفون: ٢٦٣٤٧٠٥ (٠٤٥)
فاكس: ٢٦٣٤٦٧٢ (٠٤٥)

Eye Irritation Rabbit: Severely irritating.
Sensitization Guinea pig: Non-sensitizing

SECTION 12. ECOLOGICAL INFORMATION

Birds
Acute oral LD_{50} for mallard ducks 84.6, bobwhite quail >2000 mg/kg.
Fish
LC_{50} (96 h) for rainbow trout 3.2, bluegill sunfish 9.6 mg/l.
Daphnia
EC_{50} (48 h) 0.34 ppb.
Algae
(72 h) for *Pseudokirchneriella subcapitata* >100 mg/l.
Other aquatic spp.
LC_{50} (96 h) for pink shrimps (*Panaeus duorarum*) 1.6, blue crabs (*Callinectes sapidus*) 153 ppb.

SECTION 13. DISPOSAL INSTRUCTION

Do not contaminate water, food, or feed by storage or disposal. Triple rinse (or equivalent) the container. Then offer for recycling or reconditioning. If allowed by state and local authorities, by burning. If burned, stay out of smoke.

SECTION 14.TRANSPORT INFORMATION

Should be transported or stored in clearly labeled rigid and leak proof containers, under lock and key, secure from access by unauthorized persons and children. No food or drink should be transported or stored in the same compartment.

ECTION 15. REGULATORY INFORMATION

Acute: Yes
Chronic: No
Fire: Yes
Reactivity: No
Read and follow all label directions.

SECTION 16. OTHER INFORMATION

الإدارة:
٣٧ ميدان فيكتور عمانويل - سموحة
٢١٦١١ الإسكندرية
تليفون: ٤٢٥٠٠٦٢ (٠٣) / ٤٢٤١٣١٣ (٠٣)
فاكس: ٤٢٩٢١٢٠ (٠٣)

المصنع:
٢٧٨ المنطقة الصناعية الثانية
مدينة النوبارية الجديدة - البحيرة
تليفون: ٢٦٣٤٧٠٥ (٠٤٥)
فاكس: ٢٦٣٤٦٧٢ (٠٤٥)

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements.

Proper use: The product used as PGR.

الإدارة:
٣٧ ميدان فيكتور عمانويل - سموحة
٢١٦١١ الإسكندرية
تليفون: ٤٢٥٠٠٦٢ (٠٣) / ٤٢٤١٣١٣ (٠٣)
فاكس: ٤٢٩٢١٢٠ (٠٣)

المصنع:
٢٧٨ المنطقة الصناعية الثانية
مدينة النوبارية الجديدة - البحيرة
تليفون: ٢٦٣٤٧٠٥ (٠٤٥)
فاكس: ٢٦٣٤٦٧٢ (٠٤٥)