

MATERIAL SAFETY DATA SHEET (MOTIVATE)

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS:

Fine Americas, Inc.
1850 Mt. Diablo Blvd., Ste. 405
Walnut Creek, CA 94596

EMERGENCY TELEPHONE NUMBERS:

FOR 24 HOUR EMERGENCY MEDICAL ASSISTANCE CALL:

1 – 866 – 303 – 6952

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure,
Or accident call CHEMTREC 1 – 800 -424 – 9300

PRODUCT NAME : MOTIVATE
CHEMICAL NAME : (2-chloroethyl) phosphonic acid
CHEMICAL FAMILY : ethylene generator
PRODUCT CODE : EPA Reg. No. 85678-9-82917

SECTION 2 – COMPOSITION, INFORMATION OF INGREDIENTS

COMPONENT	PERCENTAGE	CAS NUMBER	OSHA PEL	ACIGH TLV
ETHEPHON	21.7	16672-87-0	NE	NE

NE=not established

SECTION 3 – HAZARDS IDENTIFICATION SUMMARY

(As defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200)

EMERGENCY OVERVIEW: Danger! Corrosive – causes irreversible eye damage. Hazard to humans and domestic animals. Harmful if swallowed, inhaled or absorbed through the skin. Do not get in eyes, on skin, or on clothing. Do not breathe vapors or spray mist. Irritation of mucous membranes

PHYSICAL STATE: Translucent, yellow liquid
Odorless

ROUTES OF EXPOSURE: Inhalation, Ingestion, Skin contact, Eye contact

IMMEDIATE EFFECTS:

EYE	Corrosive – causes irreversible eye damage. Liquid or vapor can cause irritation, redness, tearing. Eye injury may persist for several days. Do not get in eyes.
SKIN	May cause irritation, redness, swelling on prolonged contact. Avoid contact with skin.
INGESTION	May cause burns to mouth and esophagus, chest pain, abdominal pain. Harmful if swallowed.
INHALATION	Mists may cause upper respiratory tract irritation, coughing, sore throat. Irritation of mucous membranes Harmful if inhaled.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE Skin contact may aggravate existing skin disease. Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may yield the following: oxides of carbon, oxides of phosphorus, hydrogen chloride.

SECTION 4 – FIRST AID MEASURES

IF SWALLOWED: Never give anything by mouth to an unconscious person. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Have person sip a glass of water if able to swallow. Call a poison control center or doctor immediately for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

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IF INHALED:	If person is not breathing call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice. Take affected person to fresh air.
IF ON SKIN OR CLOTHING:	Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a poison control center or doctor for treatment advice.
NOTE TO PHYSICIAN:	
HAZARDS	Consideration should be given to the possibility that over exposure to materials other than this product may have occurred.
TREATMENT	There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient. Probable mucosal damage may contraindicate the use of gastric lavage. In case of ingestion, the stomach should be emptied by gastric lavage under qualified medical supervision. This material is an acid, but the use of alkaline substances to neutralize is contraindicated.

SECTION 5 – FIRE FIGHTING MEASURES

FLASHPOINT (METHOD):	Not applicable
FLAMMABLE LIMITS (LFL – UFL):	Not applicable
FIRE AND EXPLOSION HAZARD:	This product itself does not burn. Under fire conditions, toxic,, corrosive fumes are emitted.
EXTINGUISHING MEDIA:	Product itself is non-combustible. Fire extinguishing measures to suit surroundings Water spray, dry chemical, foam, or CO ₂
FIRE FIGHTING INSTRUCTIONS:	Remain upwind. Avoid breathing smoke/fumes. Use water spray to cool containers exposed to fire. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
FIRE FIGHTING EQUIPMENT:	Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.
HAZARDOUS COMBUSTION PRODUCTS:	Thermal decomposition may yield the following: oxides of carbon, oxides of phosphorus, hydrogen chloride.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Clean up spills immediately, observing precautions described in Section 8 of this document. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

ACTION TO TAKE FOR SPILLS/LEAKS:	Pump any free liquid into an appropriate closed container. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Clean floors and contaminated objects with plenty of water. Collect washings for disposal. Decontaminate tools and equipment following cleanup.
ADDITIONAL ADVICE	Do not empty into drains. 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. Do not allow to enter soil, waterways or waste water canal.

SECTION 7 – HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN!

HANDLING:	Smoking, eating and drinking should be prohibited in the application area.
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(HANDLING CONTINUED)

Avoid inhalation of vapors or mist. Do not contaminate water sources, food or feedstuffs when disposing of left-over material. Avoid getting material on clothing. Do not ingest. Do not get in eyes, on skin, or on clothing.

STORAGE:

Keep out of reach of children. Protect against frost. Store in original container in a secured dry storage area. Do not contaminate water, food, or feed by storage or disposal. Store in cool place.

WORK/HYGIENIC PROCEDURES

Handle in accordance with good industrial hygiene and safety practice. Wash hands always before eating, drinking, smoking or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Wash contaminated clothing before reuse.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Then wash thoroughly and put on clean clothing. Keep and wash PPE separately from other laundry.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your local and regional regulatory agencies, consult the agency responsible for pesticide regulation.

SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

EYE PROTECTION:

Use protective eyewear or face shield.

SKIN PROTECTION:

Wear coveralls over short or long pants and short or long-sleeved shirt, and chemical-resistant footwear plus socks. Use rubber boots since calcium absorbs moisture from leather footwear causing shrinking. Chemical-resistant headgear for overhead exposure - Chemical-resistant apron when mixing, loading or cleaning equipment.

HAND PROTECTION:

Use chemical-resistant gloves made of any waterproof material such as nitrile, butyl, neoprene, and barrier laminate.

RESPIRATOR REQUIREMENTS:

For typical handling/use conditions, no respiratory protection is needed.

ADDITIONAL PROTECTIVE MEASURES:

Do not get in eyes or on skin. Avoid breathing vapors or mists. Do not ingest. Do not store, use and/or consume foods, beverages, tobacco products or cosmetics in areas where this product is stored. Wash hands and face before eating, drinking, using tobacco, applying cosmetics or using the toilet.

USER SAFETY RECOMMENDATIONS:

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Wash contaminated clothing before reuse. Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

EXPOSE GUIDELINES:

Refer to Section 2

ENGINEERING CONTROLS:

Refer to product label

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SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION:

Appearance	Translucent, yellow liquid
Odor	Odorless
FLASH POINT:	Not applicable
BOILING POINT:	212° F (100°C)
MELTING /FREEZING POINT:	-5°C / 23°F
pH:	0.8 Determined in the undiluted form
VAPOR PRESSURE:	< 0.013 hPa at 25°C
WATER SOLUBILITY:	Miscible
SPECIFIC GRAVITY	1.106 at 25°C
DENSITY	1.11 g/cm at 20°C

SECTION 10 – STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable under normal conditions
CONDITIONS TO AVOID:	Elevated temperatures. – Extreme humidity
INCOMPATIBILITY WITH OTHER MATERIALS:	zinc – iron – copper – strong oxidizing agents – bases – mild steel - aluminum
HAZARDOUS DECOMPOSITION PRODUCTS:	Thermal decomposition – Carbon monoxide – Carbon dioxide (CO ₂) – Hydrogen chloride (HCl) – Nitrogen oxides (NO _x)
HAZARDOUS REACTIONS:	Corrodes metals in the presence of water or moisture. Risk of ethylene emission in case of increasing pH No dangerous reaction known under conditions of normal use.

SECTION 11 – TOXICOLOGICAL INFORMATION

NOTE: Acute inhalation and sensitization studies were bridged from studies on the technical-grade active ingredient, ethephon. All other acute toxicity data have been bridged from similar formulations containing similar percentages of ethephon. The non-acute information pertains to technical-grade ethephon.

ACUTE TOXICITY:

Oral LD ₅₀	(rat)	–	> 5,000 mg/Kg
Dermal LD ₅₀	(rat)	–	> 2,000 mg/Kg
Inhalation LC ₅₀	(rat)	–	4.5 mg/L
Eye Irritation	(rabbit)	–	Corrosive
Skin Irritation	(rabbit)	–	Moderate
Sensitization	(guinea pig)	–	Non-sensitizing

CHRONIC TOXICITY: Ethephon caused decreased body weights, cholinesterase inhibition, and organ effects (thyroid, kidney, liver) in chronic toxicity studies in rats. Cholinesterase inhibition, smooth muscle atrophy in the gut and decreases in body weight, spleen weight, hemoglobin and hematocrit, were observed in chronic toxicity studies in dogs treated with ethephon.

MUTAGENICITY: The ethephon mutagenicity studies, taken collectively, demonstrate that the active ingredient is not genotoxic or mutagenic.

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SECTION 12 – ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: Do not contaminate water used for irrigation or domestic purposes. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Avoid spray drift to nearby crops, as this product will cause modifications in plant growth. Plant injury or reduced yields may result.

NON - HAZARDOUS TO BEES

SECTION 13 – DISPOSAL CONSIDERATIONS

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS

WASTE: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER: Triple rinse containers. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

SECTION 14 – TRANSPORT INFORMATION

DOT SHIPPING CLASSIFICATION: Corrosive Liquids, Acidic, Organic, N.O.S. (Ethephon)//8//UN3265//PG III

NOTE: Combination packages with inner packaging less than 5 liters (1.3 gallons) may be reclassified as a Consumer Commodity (ORM-D). These packages cannot be shipped by air freight.

NOTE: Consumer Commodity (ORM-D) classification is for domestic surface/ground shipments only (4X1-gallon and 4X1-quart packages). Air shipments remain regulated.

INTERNATIONAL TRANSPORTATION:

IMO (vessel): UN3265, Corrosive liquid, acidic, organic, N.O.S. (ethephon), 8, PG III

IATA (air): UN3265, Corrosive liquid, acidic, organic, N.O.S. (ethephon), 8, PG III

SECTION 15 – REGULATORY INFORMATION

US FEDERAL REGULATIONS:

TSCA LIST None

US TOXIC SUBSTANCES CONTROL ACT (TSCA) SECTION 12(B) EXPORT NOTIFICATION (40 CFR 707, SUBPT D) None

SARA TITLE III – SECTION 302 – NOTIFICATION AND INFORMATION None

SARA TITLE III – SECTION 311/312 Acute health hazard (immediate)

SARA TITLE III - SECTION 313 - TOXIC CHEMICAL RELEASE REPORTING None

CERCLA RQ: Not applicable

RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal whether a material containing the product or derived from the product should be classified as a hazardous waste.

US STATES REGULATORY REPORTING

CALIFORNIA PROP 65

This product does not contain any substances known to the State of California to cause cancer. This product does not contain any substances known to the State of California to cause reproductive harm.

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SECTION 16 - OTHER INFORMATION

NFPA HAZARD RATINGS

0 (Minimal) 1 (Slight) 2 (Moderate) 3 (High) 4 (Severe)

Health: 3

Flammability: 1

Reactivity: 0

DISCLAIMER: Fine Americas, Inc. ("FINE") warrants that this Product conforms to the specifications on this label. To the extent consistent with applicable law, FINE makes no other warranties and disclaims all other warranties, express or implied, including but not limited to warranties of merchantability and fitness for a particular purpose. No agent of FINE or any other person is authorized to make any representation or warranty beyond those contained herein.

It is impossible to eliminate all risks associated with this Product. Plant injury, lack of performance, or other unintended consequences may result because of factors such as abnormal weather conditions, use of the Product other than in strict accordance with this label's instructions, presence of other materials, the manner of application or other factors, all of which are beyond the control of FINE or the seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

To the extent consistent with applicable law: 1) FINE disclaims any liability whatsoever for special, incidental or consequential damages resulting from the handling or use of this Product and 2) FINE's liability under this label shall be limited to the amount of the purchase price or, at the election of FINE, the free replacement of the Product.

REVISION DATE: new