

MATERIAL SAFETY DATA SHEET

1. Identification:

Product identifier:	Refine® 24.2L
Distributed by:	Fine Americas, Inc. 1850 Mt. Diablo Blvd., Suite 405, Walnut Creek, CA 94596, USA Tel: 925-932-8800
Emergency phone number:	Chemtrec 1-800-424-9300
Recommended use:	A hormone type product for thinning apples, citrus, olives, pears and for control of pre-harvest drop of apples and pears.
EPA reg. number:	62097-38-82917

2. Hazard(s) identification (as defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200):

Signal word: WARNING

Symbol(s): none

Eye Irritation category 2B

PRECAUTIONARY STATEMENTS

P264 Wash hands thoroughly after handling

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

P337+313 If eye irritation persists get medical advice / attention.

HAZARD STATEMENTS

H320 Causes eye irritation

Environmental Hazards

Do not apply directly to water, 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 wash waters or rinsate. Do not contaminate irrigation ditches or water used for irrigation or domestic purposes. Do not apply when weather conditions favor drift from treated areas.

3. Composition:

Chemical name and concentration:	1-Naphthaleneacetic Acid, Potassium Salt (NAA K)
Concentration:	24.2%
CAS No.:	15165-79-4 (active ingredient)

4. First aid measures:

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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Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-858-7378 (National Pesticide Information Center) for emergency medical treatment information, 6:30 AM to 4:30 PM Pacific time (PT), seven days a week.

Note to Physician: No specific antidote is available. All treatments should be based on observed signs and symptoms of distress in the patient. Over exposure to materials other than this product may have occurred.

5. Fire fighting measures:

Extinguishing media:	Water, foam, carbon dioxide or dry powder.
Specific hazards:	None
Protective equipment:	No applicable information available

6. Accidental release measures:

Personal precautions:	Refer to Section 8 "Exposure controls/personal protection"
Methods for cleaning up:	On soil: Collect by use of vacuum cleaner or sweep up avoiding formation of dust clouds, damping down with water if necessary and place in suitable, closable container for safe disposal. On water: No applicable information available. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

7. Handling and storage:

KEEP OUT OF REACH OF CHILDREN	
Precautions for safe handling:	Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.
Conditions for safe storage:	Keep container tightly closed when not in use. Store in a cool, dry place. Protect from temperatures below 32°F. This product may freeze. If freezing should occur, thaw and shake gently to unify the product. Do not store diluted product.
8. Exposure controls/personal protection:	
Exposure limit:	OSHA PEL: Not listed ACIGH TLV: Not listed
Engineering controls:	No applicable information available.
Individual protection measures:	Applicators and other handlers must wear: <ul style="list-style-type: none"> • Long-sleeved shirt and long pants. • Chemical-resistant gloves made of any waterproof material (except pilots). • Socks plus shoes. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.
9. Physical and chemical properties:	
Appearance:	Clear yellow homogenous liquid with low viscosity
Odor:	No discernible odor
Odor threshold:	Not applicable
pH (1% in water):	6.5
Melting point/freezing point:	No applicable information available.
Boiling point:	Not applicable
Flash point:	>100°C
Evaporation rate:	Expected to be low
Flammability:	Not flammable up to and including 100°C
Explosive properties:	Not explosive
Vapor pressure:	No applicable information available.
Vapor density:	No applicable information available.
Relative density (@ 20°C):	1.09-1.11 g/cm ³
Solubility(ies):	Water: @ 20°C miscible Fat: No applicable information available
Partition coefficient:	No applicable information available.
Auto-ignition temperature:	No applicable information available.
Decomposition temperature:	No applicable information available.
Viscosity (mPa.s at 100s ⁻¹):	3.8 mm ² /s
10. Stability and reactivity:	
Reactivity:	Stable under recommended storage and handling conditions.
Chemical stability:	Stable under recommended storage and handling conditions.
Hazardous reactions:	Stable under recommended storage and handling conditions.
Conditions to avoid:	Protect from high temperatures and sources of ignition.
Incompatible materials:	Avoid accidental contact with strong acidic or alkaline solutions or oxidizing materials.
Hazardous decomposition products:	None known.
11. Toxicological information:	
Routes of exposure/acute toxicity	

Oral:	LD ₅₀ Rat: >5,000 mg/kg (EPA category IV)
Inhalation:	LC ₅₀ Rat: >5.24 mg/l (EPA category IV)
Dermal:	LD ₅₀ Rat: >5,050 mg/kg (EPA category IV)
Irritation	
Eye:	Moderately irritating (EPA category III)
Skin:	Non-irritant (EPA category IV)
Respiratory tract:	Non-sensitizing
Sensitization	
Skin:	Non-sensitizing
Carcinogenicity:	No evidence of carcinogenic effects
Mutagenicity:	No evidence of mutagenic effects
Reproductive Toxicity:	No evidence of reproductive effects
Chronic Toxicity:	No applicable information available.
NTP/IARC/OSHA listing(s):	No applicable information available.

12. Ecological information:

Ecotoxicity:	Based on the limited data set available, EPA believes that the naphthalene acetates risks are not of concern to non-target organisms, including mammals, birds, aquatic organisms, and non-endangered, non-target plants. Risks to terrestrial insects cannot be quantified, but the available data do not suggest a substantial potential for adverse effects. Therefore, no measures are needed to mitigate risk to non-target species and non-endangered, non-target plants. (Citation, NAA RED October 2007)
Mobility:	No applicable information available.
Persistence and degradability:	No applicable information available. Active ingredient degrades >95% over 1 year so is ultimately completely biodegradable.
Bioaccumulation potential:	No applicable information available.

13. Disposal considerations:

Pesticide disposal:	Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.
Container disposal:	Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, if available, 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.

14. Transport information:

UN number:	Not applicable
Proper shipping name:	Plant growth inhibitor, modifier or regulator
Class:	Not applicable
Packaging group:	Not applicable
NMFC number/class:	101685/65
Marine pollutant:	Not applicable

15. Regulatory information:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.	
EPA signal word:	CAUTION Classifications under 40 CFR 156.62 stated in sections 9 and 11 where applicable.
Precautionary statements:	HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION: Causes moderate eye irritation. Avoid contact with eyes or



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	clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Wear long-sleeved shirt and long pants, shoes and socks.
Pictograms/Symbols:	None

16. Other information:

The information contained within this SDS is correct to the best of Fine Americas' knowledge at the time of preparation. It does not purport to be an exhaustive assessment. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. Fine Americas assumes no responsibility for any incidental or consequential damages arising from the use of this data and expressly disclaims any liability for loss, injury, damages or expenses arising from any failure to take into account the information or advice contained in this document.

This SDS does not replace or modify the EPA-approved product labelling (attached to the product container). It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

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