

SAFETY DATA SHEET

1. Identification:		
Product Identifier:	Refine® 24.2L	
Other Means of Identification:	EPA registration number 62097-38-82917	
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 (24 hours)	
Recommended Use:	A hormone type product for control of pre-harvest drop of apples and pears	
Restrictions on Use:	Keep out of reach of children	
2. Hazard(s) Identification (This product is classified as hazardous as defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200):		
Class/Category:	Eye irritation, category 2B	
Route of Exposure:	Most likely exposure by Dermal or oral route	
Hazards Not Otherwise Classified:	None	
Signal word:	WARNING	
Symbol(s):	None	
Hazard Statements:	H320 Causes eye irritation	
Precautionary Statements:	Prevention: P264 Wash hands thoroughly after handling. Response: 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. Storage: None assigned Disposal: None assigned	
3. Composition:		
This product contains the following components classified as hazardous under 29 CFR 1910.1200		
CAS number:	Component:	Percent:
15165-79-4	1-Naphthaleneacetic Acid, Potassium Salt (NAA K)	24.2%
68515-73-1	Alkylpolysaccharides	5%
9046-01-9	Surfactant	0.5%
The remainder of the mixture is not required to be disclosed by 29 CFR 1910.1200.		
4. First Aid Measures:		
Inhalation:	Move person to fresh air. 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	
Eyes:	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If eye irritation persists get medical advice / attention.	
Skin:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice	
Ingestion:	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an unconscious person.	
Symptoms/Effects:	Acute: No available information Delayed: No available information	

Indication of immediate medical attention and special treatment needed, if necessary:	No available information				
5. Fire Fighting Measures:					
Extinguishing Media:	Suitable: Water (mist), foam, carbon dioxide or dry powder. Unsuitable: High power water jet				
Specific Hazards Arising from the Chemical:	None known				
Protective Equipment and Precautions for Firefighters:	Wear protective gloves/protective clothing/eye protection/face protection.				
6. Accidental Release Measures:					
Personal Precautions, Protective Equipment and Emergency Procedures:	Refer to Section 8 "Exposure controls/personal protection"				
Methods for Containment and Clean-Up:	<p>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.</p> <p>On water: No applicable information available.</p> <p>Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. See also Section 13. Disposal Considerations.</p>				
7. Handling and Storage:					
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. See also Section 10. Stability and Reactivity.				
8. Exposure Controls/Personal Protection:					
Component Exposure Limits:					
Substance	OSHA PEL		Cal/OSHA PEL	NIOSH REL	ACGIH TLV
	ppm	Mg/m3	8-hr TWA (ST) STEL (C) Ceiling	Up to 10 hr TW (ST) STEL (C) Ceiling A	8-hr TWA (ST) STEL (C) Ceiling
No listed components	-	-	-	-	-
Appropriate Engineering Controls:	No applicable information available.				
Personal Protective Equipment:	<p>Eyes/Face: Wear suitable eye/face protection.</p> <p>Skin: Wear long sleeved shirt and long pants, socks, shoes, and gloves. Remove and wash contaminated clothing before reuse.</p> <p>Respiratory: A respirator is not normally required when handling this substance.</p>				
9. Physical and chemical properties:					
Appearance:	Clear yellow homogenous liquid with low viscosity				
Odor:	No discernible odor				
Odor Threshold:	No data available				
pH:	6.5 (1% solution)				
Melting Point/Freezing Point:	No data available				

Boiling Point:	>212°F (100°C)
Flash Point:	>212°F (100°C) (closed cup)
Evaporation Rate:	Expected to be low
Flammability/Limits:	Not flammable up to and including 212°F (100°C) LFL: not applicable UFL: not applicable
Vapor Pressure:	No data available
Vapor Density:	No data available
Relative Density:	1.09-1.11 g/cm ³
Solubility (H₂O):	Miscible
Partition Coefficient:	No data available
Auto-Ignition Temperature:	No data available
Decomposition Temperature:	No data available
Viscosity:	3.8 cSt at 68°F (20°C)
10. Chemical Stability and Reactivity Information:	
Reactivity:	No applicable information available
Chemical Stability:	Stable under recommended storage and handling conditions. (40-70°F)
Possibility of Hazardous Reactions:	No applicable information available
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:	
Likely Routes of Exposure:	Most likely exposure by Dermal or oral route
Symptoms:	Inhalation: No data available Eye: mild, transient irritation Skin: none Ingestion: No data available
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)
Skin Corrosion/Irritation:	Non-irritant (rabbit) (EPA category IV)
Serious Eye Damage/Eye Irritation:	Moderately irritating (rabbit) (EPA category III)
Sensitization:	Non-sensitizing (mouse)
Germ Cell Mutagenicity:	No evidence of mutagenic effects
Carcinogenicity:	None of the components of this product are listed as carcinogens by NTP, IARC or OSHA.
Reproductive/Developmental Toxicity:	No evidence of reproductive effects
Specific Target Organ Toxicity:	Single Exposure: No data available Repeated Exposure: No data 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)
Persistence and Degradability:	Active ingredient degrades >95% over 1 year so is ultimately completely biodegradable.
Bioaccumulation Potential:	No data available.
Mobility in Soil:	No data available.

Other Adverse Effects:	None known						
13. Disposal Considerations:							
Disposal Instructions:	<p>Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.</p> <p>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.</p>						
14. Transport Information:							
UN Proper Shipping Name:	Not applicable						
Hazard Class:	Not applicable						
UN Number:	Not applicable						
Packaging Group:	Not applicable						
Marine Pollutant:	Not applicable						
NMFC number/class:	101685/065 Plant growth inhibitor, modifier or regulator, NOIBN						
15. Regulatory Information:							
SARA: No reportable components							
CERCLA:	No reportable components						
TSCA:	All components of this product are either listed or are exempt on the TSCA inventory. The following components of this product are subject to the reporting requirements of Section 12(b) of TSCA: None						
Component Analysis – State: The following components appear on one or more of the following state hazardous substances lists:							
Component	CAS	CA	MA	MN	NJ	PA	RI
Propylene glycol	57-55-6				✓	✓	✓
California Prop 65:	No listings						
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 156.63 are given 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 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:							
Fine Agrochemicals Limited ("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							

Product: Refine 24.2L
Issue Date: 04/03/18
Version: 6



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.

Issue Date/Version:	04/03/18 version 6
Supersedes:	10/18/16 version 5