RÖHM
TRADITIONALLY INNOVATIVE

SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier: ACRIFIX® 1S 0117

Other means of identification
None.

Recommended restrictions
Recommended use: Adhesive
Restrictions on use: None known.

Manufacturer/Importer/Distributor Information

Company Name	:	Roehm America LLC 299 Jefferson Road Parsippany, NJ 07054 USA
Telephone	:	+1 800-225-0172
E-mail	:	product-regulatory-services@roehm.com

Emergency telephone number:

24-Hour Health Emergency	:	+1 800 424 9300 (CHEMTREC - US & CANADA) +1 703 527 3887 (CHEMTREC WORLD)

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids	Category 2

Health Hazards

Serious Eye Damage/Eye Irritation	Category 2A
Acute toxicity (Inhalation)	Category 4
Specific Target Organ Toxicity - Single Exposure	Category 3
Acute toxicity (Oral)	Category 4

Environmental Hazards

Acute hazards to the aquatic environment	Category 3

Chronic hazards to the aquatic environment	Category 3

Label Elements

Hazard Symbol:

Signal Word: Danger

Hazard Statement:
Highly flammable liquid and vapor.
Harmful if swallowed.
Causes serious eye irritation.
Harmful if inhaled.
May cause respiratory irritation.
Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention: Keep away from open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof [electrical/ventilating/lighting/…] equipment. Use non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash hands thoroughly with soap and water after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF SWALLOWED: Call a POISON CENTRE/doctor/… if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. If eye irritation persists: Get medical advice/attention. In case of fire: Use alcohol-resistant foam, carbon dioxide or dry sand to extinguish.

Storage: Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents/container according to the local / regional/national/international waste disposal regulations.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
ethyl formate		109-94-4	30 - 60%
nitroethane		79-24-3	30 - 60%
Ethanol, 2-phenoxy-		122-99-6	3 - 7%
Ethyl acetate		141-78-6	3 - 7%
butan-1-ol; n-butanol		71-36-3	1 - 5%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

General information: First aider needs to protect himself. Medical treatment is necessary if symptoms occur which are obviously caused by skin or eye contact with the product or by inhalation of its vapours. Take off all contaminated clothing immediately.

Inhalation: If inhaled, remove to fresh air. Give artificial respiration if breathing has stopped. If breathing is difficult, give oxygen. Get immediate medical advice/attention.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Obtain medical attention if irritation develops or persists. Wash clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Eye contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical advice/attention.

Ingestion: If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Get immediate medical advice/attention. Never give anything by mouth to an unconscious person.

Personal Protection for First-aid Responders: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear., Containers can build up pressure if exposed to heat (fire)., Cool with water spray.

Most important symptoms/effects, acute and delayed

Symptoms: May cause skin and eye irritation. cough, sneezing. confusion

Hazards: Harmful by inhalation. Harmful if swallowed.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. Fire-fighting measures

General Fire Hazards: Flammable liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Dry chemical. Carbon dioxide Alcohol resistant foam.

Unsuitable extinguishing media: Water. dry chemicals on a bicarbonate basis

Specific hazards arising from the chemical: May be released in case of fire: carbon monoxide, carbon dioxide, organic products of decomposition and nitric oxides.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Keep away from sources of ignition - No smoking. Take action to prevent static discharges. In the event of fire, cool the endangered containers with water. Vapours can form an explosive mixture with air. Use only explosion-proof equipment.

Special protective equipment for fire-fighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Containers can build up pressure if exposed to heat (fire). Cool with water spray.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Assure sufficient ventilation. Use personal protective clothing. Avoid contact with eyes, skin, and clothing. Keep away sources of ignition. Use breathing apparatus if exposed to vapours/dust/mist/aerosol. Avoid breathing dust/mist/vapors.

Accidental release measures: Evacuate area and do not approach spilled product. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). For personal protection see section 8.

Methods and material for containment and cleaning up: Larger quantities: Remove mechanically (by pumping). Use explosion-proof equipment! Smaller quantities and/or residues: Contain with absorbent material (e.g. sand, diatomaceous earth, acid absorbent, universal absorbent or sawdust). Dispose of in accordance with regulations.

Environmental Precautions: Prevent product from getting into drains/surface water/groundwater. Contain spilled product and prevent any contamination of soil, the sewer system or water bodies. If the product contaminates rivers and lakes or drains inform respective authorities.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment.

Safe handling advice: Do not breathe vapors. Avoid contact with skin and eyes. It is essential for pregnant women to avoid inhaling the product and not to let it come in contact with the skin.Keep away from sources of ignition - No smoking. Take action to prevent static discharges. In the event of fire, cool the endangered containers with water. Vapours can form an explosive mixture with air. Use only explosion-proof equipment.Keep away from heat. Keep away from sparks, flames and other sources of ignition. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Wash thoroughly after handling. Do not inhale exhaust fumes, vapors, sprays or aerosols. Use only with adequate ventilation. The need for grounding and bonding of containers in accordance with OSHA 29 CFR 1910.106 and NFPA 77 should be assessed for all product transfers. Container hazardous when empty. Follow all SDS/label precautions even after the container is emptied because it may retain product residues. DO NOT CUT OR WELD ON OR NEAR THIS CONTAINER. Residual vapors might explode on ignition; do not apply heat, cut, drill, grind or weld on or near this container.To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product. A safety shower and eye wash fountain should be readily available.

Contact avoidance measures: No data available.

Hygiene measures: Take off all contaminated clothing immediately. Store work clothing separately. Follow the usual good standards of occupational hygiene. Clean skin thoroughly after work; apply skin cream.

Storage

Safe storage conditions: Improper disposal or re-use of this container may be dangerous and illegal.Keep in the original container at a temperature not exceeding 30 °C (86 °F). Keep container tightly closed and in a well-ventilated place.

Safe packaging materials: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values		Source
ethyl formate	STEL	100 ppm		US. ACGIH Threshold Limit Values, as amended (03 2016)
	REL	100 ppm	300 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	PEL	100 ppm	300 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as

				amended (03 2016)
nitroethane	TWA	100 ppm		US. ACGIH Threshold Limit Values, as amended (03 2016)
	REL	100 ppm	310 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	PEL	100 ppm	310 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (03 2016)
Ethyl acetate	TWA	400 ppm		US. ACGIH Threshold Limit Values, as amended (03 2016)
	REL	400 ppm	1,400 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	PEL	400 ppm	1,400 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (03 2016)
butan-1-ol; n-butanol	TWA	20 ppm		US. ACGIH Threshold Limit Values, as amended (03 2016)
	Ceil_Time	50 ppm	150 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	PEL	100 ppm	300 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (03 2016)

Appropriate Engineering Controls

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection:

Use safety glasses (ANSI Z87.1 or approved equivalent).

Skin Protection

Hand Protection:

Material: butyl rubber gloves (minimal thickness 0.3 mm)
Break-through time: 60 min
Guideline: EN 374
Additional Information: Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time., As the product is a mixture of several substances, the durability of the glove materials cannot be calculated in advance and has to be tested before use., Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin and Body Protection:

Use chemically resistant apron or other impervious clothing to avoid prolonged or repeated skin contact.

Respiratory Protection:

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

Hygiene measures: Take off all contaminated clothing immediately. Store work clothing separately. Follow the usual good standards of occupational hygiene. Clean skin thoroughly after work; apply skin cream.

9. Physical and chemical properties

Appearance	
Physical state:	liquid
Form:	liquid
Color:	colourless to slightly yellow
Odor:	like fruit
Odor Threshold:	No data available.
pH:	Not applicable
Freezing point:	No data available.
Boiling Point:	54 °C (1,013 hPa) 130 °F
Flash Point:	< -3 °C < 26 °F
Evaporation Rate:	No data available.
Flammability (solid, gas):	Not applicable liquid
Explosive limit - upper (%):	13.5 %(V) (ethyl formate)
Explosive limit - lower (%):	2.7 %(V) (ethyl formate) 3.4 %(V) (nitroethane)
Vapor pressure:	approx. 260 hPa (ethyl formate) (68 °F) (ethyl formate) approx. 20.8 hPa (nitroethane) (68 °F) (nitroethane)
Vapor density (air=1):	> 1 20 °C 68 °F
Density:	0.98 g/cm3 (20 °C) (68 °F)
Relative density:	No data available.
Solubility in Water:	118 g/l (20 °C) (ethyl formate) 45 g/l (20 °C) (nitroethane)
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable Mixture
Self Ignition Temperature:	440 °C (ethyl formate) 410 °C (nitroethane) Auto Ignition Temperature 770 °F The substance or mixture is not classified as pyrophoric.
Decomposition Temperature:	The following applies to the component nitroethane: May explode if heated. Shock and heat sensitive.
Kinematic viscosity:	No data available.
Dynamic viscosity:	approx. 0.8 mPa.s (20 °C) | (68 °F)
Other information	
Explosive properties:	see item 10
Oxidizing properties:	The substance or mixture is not classified as oxidizing.

10. Stability and reactivity

Reactivity: see section "Possibility of hazardous reactions"

Chemical Stability:	The following applies to the component nitroethane: May explode if heated. Shock and heat sensitive.
Possibility of hazardous reactions:	Reactions with strong oxidizing agents. Reactions with lead, copper and their alloys. Forms shock sensitive compounds with strond alcalis, acids or mixtures of amines and heavy metal oxides.
Conditions to avoid:	Avoid high temperatures and sources of ignition.
Incompatible Materials:	Reactions with strong oxidizing agents. Reactions with lead, copper and their alloys. Forms shock sensitive compounds with strond alcalis, acids or mixtures of amines and heavy metal oxides.
Hazardous Decomposition Products:	None when used as directed.

11. Toxicological information

General information: no specific test data available

Information on likely routes of exposure

Inhalation: Harmful if inhaled.

Skin Contact: Prolonged or repeated skin contact may cause drying, cracking, or irritation.

Eye contact: May irritate eyes.

Ingestion: Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: Drowsiness, dizziness, disorientation, vertigo.

Skin Contact: May cause skin irritation.

Eye contact: Eye may become red, tear, and become painful.

Ingestion: If handled correctly, not a relevant route of exposure. Information on effects are given below.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral
Product: ATEmix: > 800 mg/kg

Dermal
Product: ATEmix: > 5,000 mg/kg

Inhalation
Product: Acute inhalation toxicity category 4 (UN-GHS), Expert judgement
ATEmix : 5.31 mg/l Vapour
ATEmix : 0.86 mg/l Dusts, mists and fumes

Repeated dose toxicity

Product:	No data available.

Components:

Ethanol, 2-phenoxy-	NOAEL (Rat, Oral): 1,000 mg/kg
Ethyl acetate	NOAEL (Rat(male and female), Oral): 900 mg/kg LOAEL (Rat(male and female), Oral): 3,600 mg/kg

Skin Corrosion/Irritation

Product:	Calculation method Not irritating

Serious Eye Damage/Eye Irritation

Product:	No data available.

Components:

ethyl formate	Rabbit: Irritating.
nitroethane	Rabbit: Not irritating Not irritating
Ethyl acetate	Irritating.

Respiratory or Skin Sensitization

Product:	No data available.

Components:

ethyl formate	Not a skin sensitizer. Not classified for respiratory sensitization
nitroethane	(Guinea Pig)Not a skin sensitizer. Not classified for respiratory sensitization
Ethanol, 2-phenoxy-	, OECD 406 (Guinea Pig)Not a skin sensitizer. Not classified for respiratory sensitization
Ethyl acetate	, OECD 406 (Guinea Pig)Not a skin sensitizer. Not classified for respiratory sensitization
butan-1-ol; n-butanol	Local Lymph Node Assay (LLNA), OECD TG 429 (Mouse): Not a skin sensitizer.

Carcinogenicity

Product:	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogens present or none present in regulated quantities

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogens present or none present in regulated quantities

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:
No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity

In vitro

Product:	No data available.

Components:

nitroethane	(Ames-test)negative
Ethyl acetate	Ames test (OECD 471): negative
butan-1-ol; n-butanol	(OECD Test Guideline 476)negative Chromosome aberration test in vitro: negative Ames test: negative

In vivo

Product:	No data available.

Components:

nitroethane	Oral (Mouse, male and female)negative
Ethyl acetate	Micronucleus test (OECD 474) (Chinese hamster): negative
butan-1-ol; n-butanol	(OECD TG 474) (Mouse)negative

Reproductive toxicity

Product:	No data available.

Components:

ethyl formate	Not classified
nitroethane	An Expert Judgment stated that no classification is necessary based on present knowledge.
Ethanol, 2-phenoxy-	Not classified
Ethyl acetate	Not classified
butan-1-ol; n-butanol	Not classified

Specific Target Organ Toxicity - Single Exposure

Product:	No data available.

Components:

ethyl formate	May cause respiratory irritation.
nitroethane	Not classified
Ethanol, 2-phenoxy-	Not classified
Ethyl acetate	Category 3 with narcotic effects.
butan-1-ol; n-butanol	Category 3 with narcotic effects. Category 3 with respiratory tract irritation.

Specific Target Organ Toxicity - Repeated Exposure

Product:	No data available.

Components:

ethyl formate	Not classified
nitroethane	Not classified
Ethanol, 2-phenoxy-	Not classified
Ethyl acetate	Not classified
butan-1-ol; n-butanol	Not classified

Aspiration Hazard

Product:	Not applicable

Other effects: High solvent concentrations will cause irritations of the eyes and respiratory system and may cause headache, dizziness and disorder of the central nervous system. Inhalation of high concentrations of solvent vapors may have narcotic effects. On chronic overexposition damages to the liver and kidneys cannot be excluded. Methämoglobin formation cannot be ruled out. Carefully avoid contact with skin and eyes as well as inhalation of product vapours. Frequent and prolonged contact can lead to skin irritation No tests were performed with this mixture. The properties of this product which are hazardous to health have been calculated as per regulation (EC) No. 1272/2008. See section 2 "Hazards Identification".

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Components:

ethyl formate	LC 50 (Danio rerio (zebra fish), 96 h): > 100 mg/l literature
nitroethane	LC 50 (Pimephales promelas (fathead minnow), 96 h): 596 mg/l
Ethanol, 2-phenoxy-	LC 50 (Pimephales promelas (fathead minnow), 96 h): 460 mg/l
Ethyl acetate	LC 50 (Pimephales promelas (fathead minnow), 96 h): 230 mg/l
butan-1-ol; n-butanol	LC 50 (Pimephales promelas (fathead minnow), 96 h): 1,376 mg/l

Aquatic Invertebrates

Product: No data available.

Components:

nitroethane	EC 50 (Daphnia magna (Water flea), 48 h): > 21.9 mg/l
Ethanol, 2-phenoxy-	EC 50 (Daphnia magna (Water flea), 48 h): > 500 mg/l
butan-1-ol; n-butanol	EC 50 (Daphnia magna (Water flea), 48 h): 1,328 mg/l

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Components:

nitroethane	NOEC (Daphnia magna (Water flea), 21 d): 2.44 mg/l
Ethyl acetate	NOEC (Daphnia magna (Water flea), 21 d): 2.4 mg/l

butan-1-ol; n-butanol	NOEC (Daphnia magna (Water flea), 21 d): 4.1 mg/l EC50 (Daphnia magna (Water flea), 21 d): 18 mg/l

Toxicity to Aquatic Plants

Product: No data available.

Components:

nitroethane	EC 50 (Pseudokirchneriella subcapitata (green algae), 96 h): 12.3 mg/l EC 50 (Pseudokirchneriella subcapitata (green algae), 72 h): 17.4 mg/l
Ethanol, 2-phenoxy-	EC 50 (Desmodesmus subspicatus (green algae), 72 h): > 500 mg/l
Ethyl acetate	NOEC (Desmodesmus subspicatus (green algae), 72 h): > 100 mg/l
butan-1-ol; n-butanol	EC 50 (Pseudokirchneriella subcapitata (green algae), 96 h): 225 mg/l growth rate

Persistence and Degradability

Biodegradation

Product: The product is potentially degradable. Values refer to the main component.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: no specific test data available no evidence for hazardous properties (structure-activity-relationships) (analogy)

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: Not applicable Mixture

Mobility in soil: No data available.

Components:

ethyl formate	No data available.
nitroethane	No data available.
Ethanol, 2-phenoxy-	No data available.
Ethyl acetate	No data available.
butan-1-ol; n-butanol	Not expected to adsorb on soil.

Other adverse effects: Prevent substance from entering soil, natural bodies of water and sewer systems. The properties of this product which are characteristics posing a threat to the environment have been calculated as per regulation (EC) No. 1272/2008. See section 2 "Hazards Identification". No ecotoxicological studies with the product available.

13. Disposal considerations

General information: Dispose of waste and residues in accordance with local authority requirements.

Disposal methods:	Waste must be disposed of in accordance with federal, state and local regulations. Incineration is the preferred method. Evonik encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste.
Contaminated Packaging:	Contaminated packaging should ideally be emptied; it can then be recycled after having been decontaminated. Packaging that cannot be cleaned should be disposed of professionally. Uncontaminated packaging may be taken for recycling. Empty containers must be handled with care due to product residue. DO NOT HEAT OR CUT THE EMPTY CONTAINER WITH ELECTRIC OR GAS TORCH.

14. Transport information

Domestic regulation

49 CFR

UN/ID/NA number	:	UN 1133
Proper shipping name	:	Adhesives
Class	:	3
Packing group	:	II
Labels	:	3
ERG Code	:	128
Marine pollutant	:	no

International Regulations

IATA-DGR

UN/ID No.	:	UN 1133
Proper shipping name	:	Adhesives
Class	:	3
Packing group	:	II
Labels	:	3
Packing instruction (cargo aircraft)	:	364
Packing instruction (passenger aircraft)	:	353

IMDG-Code

UN number	:	UN 1133

Proper shipping name	:	ADHESIVES
Class	:	3
Packing group	:	II
Labels	:	3
EmS Code	:	F-E, S-D
Marine pollutant	:	no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Flammable (gases, aerosols, liquids, or solids), Acute toxicity (any route of exposure), Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure)

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

US. EPCRA (SARA Title III) Section 312 Extremely Hazardous Substances Reporting Quantities (40 CFR 355, Appendix A)

Chemical Identity	Threshold Planning Quantity

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

Chemical Identity	Reporting threshold for other users
Ethanol, 2-phenoxy-	Otherwise used (non-manufacturing/processing)
butan-1-ol; n-butanol	Otherwise used (non-manufacturing/processing)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65
No ingredient requiring a warning under CA Prop 65.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity
ethyl formate
nitroethane
Ethyl acetate
Ethanol, 2-phenoxy-
butan-1-ol; n-butanol

US. Massachusetts RTK - Substance List
No ingredient regulated by MA Right-to-Know Law present.

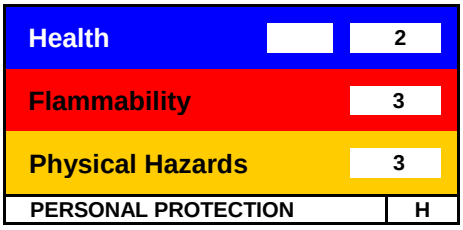
US. Pennsylvania RTK - Hazardous Substances

Chemical Identity
ethyl formate
nitroethane
Ethyl acetate
Ethanol, 2-phenoxy-
butan-1-ol; n-butanol

US. Rhode Island RTK
No ingredient regulated by RI Right-to-Know Law present.

16.Other information, including date of preparation or last revision

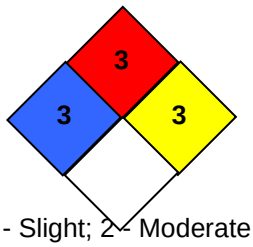
HMIS Hazard ID



H - Goggles, Gloves, Apron & Vapor Respirator

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Flammability
Health
Reactivity
Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date:	02/18/2020
Version #:	1.3
Further Information:	none
Revision Information	Changes since the last version are highlighted in the margin. This version replaces all previous versions.
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