

Innovalt W**Section 1 - Product and Company Identification**

Material Name	▪ Innovalt W
Molecular Weight	▪ 210 to 322.4
Product Description	▪ Yellow to orange liquid, alcohol-like odor.
Synonyms	▪ Phosphated 2-ethyl hexanol
Manufacturer	▪ Innophos PO Box 8000 259 Prospect Plains Road Cranbury, NJ 08512-8000 United States
Telephone	
Technical	▪ 609-495-2495
<u>Emergency</u>	▪ 800-424-9300
<u>Emergency</u>	▪ 615-386-7816
<u>Emergency</u>	▪ 703-527-3887
Preparation Date	▪ 02/24/2005
Last Revision Date	▪ 07/15/2011

Section 2 - Hazards Identification**Emergency Overview****DANGER**

Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation. May be harmful if inhaled. May be harmful if swallowed.

Prevention Do not breathe dust, fume, gas, mist, vapours and/or spray. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Wear protective gloves, clothing -Full Body Suit, and eye/face protection -Face Shield & Eye Protection. Wash thoroughly after handling.

Response IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Storage/Disposal Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.



Flash Point
OSHA
WHMIS

- > 94 C(> 201.2 F)
- Flammable/Combustible - Class IIIB, Highly Toxic, Corrosive
- Class D - Poisonous and Infectious Materials - Division 2 - Subdivision B, Class E - Corrosive materials



EU

- Corrosive - C
R34



GHS

- Specific Target Organ Toxicity Single Exposure - Category 3, Skin Corrosion/Irritation - Category 1B, Serious Eye Damage, Eye Irritation - Category 1, Acute Toxicity - Category 5

Route Of Entry
Medical Conditions
Aggravated by Exposure

- Inhalation, Ingestion
- Disorders of the lungs, Skin

NFPA:



Potential Health Effects

Inhalation

Acute (Immediate)

- May cause irritation. May cause coughing, respiratory tract irritation, shortness of breath, fluid in lungs.

Chronic (Delayed)

- No data available.

Skin

Acute (Immediate)

- May cause severe irritation. Can cause blisters, destruction of skin tissue.

Chronic (Delayed)

- No data available.

Eye

Acute (Immediate)

- Corrosive. Can cause permanent damage to the cornea, blindness.

Chronic (Delayed)

- No data available.

Ingestion

Acute (Immediate)

- Causes corrosion, burns to mouth and esophagus, abdominal pain, chest pain, nausea, vomiting, diarrhea, seizures. Aspiration of the swallowed or vomited product can cause severe pulmonary complications.

Chronic (Delayed)

- No data available.

Other Information

- 2-Ethylhexanol at 1.25% of diets in male and female rats for 90 days showed evidence of kidney and liver effects. Dermally to rabbits at 2 ml/day for 12 days, it showed evidence of liver, lung, kidney and heart effects.

See Section 12 for Ecological Information.

Section 3 - Composition/Information on Ingredients

Hazardous Components						
Chemical Name	CAS	%(weight)	UN;EINECS	LD50/LC50	EU Classification & R Phrases	Other
2-ethylhexyl ester phosphoric acid	12645-31-7	> 82%	235-741-0	NDA	NDA	NDA
2-Ethylhexanol	104-76-7	< 8%	203-234-3	Ingestion/Oral-Rat LD50: =3730 mg/kg Skin-Rabbit LD50: =1970 mg/kg	NDA	NDA
Phosphoric acid	7664-38-2	< 8%	UN1805 (liquid), UN3453 (solid), 231-633-2	Ingestion/Oral-Rat LD50: =1.25 g/kg Inhalation-Rat LC50: =25.5 mg/m ³	C; R34	NDA
Non-Hazardous Components						
Chemical Name	CAS	%(weight)	UN;EINECS	LD50/LC50	EU Classification & R Phrases	Other
Water	7732-18-5	<= 2%	231-791-2	Ingestion/Oral-Rat LD50: >90 mL/kg	NDA	NDA

Under United States Regulations (29 CFR 1900.1200 - Hazard Communication Standard), this product is considered hazardous. In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS). This product is considered dangerous according to the European Directive 67/548/EEC. According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous. According to the Globally Harmonized Standard for Classification and Labeling (GHS) this product is considered hazardous.

See Section 11 for Toxicological Information.

Section 4 - First Aid Measures

- Inhalation**
- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Seek medical attention.
- Skin**
- IF ON SKIN: Wash with plenty of soap and water. Get medical attention immediately. Remove and isolate contaminated clothing and shoes. Wash contaminated clothing before reuse.
- Eye**
- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. Seek immediate medical attention, preferably with an ophthalmologist. If the physician is not immediately available, eye irrigation should be continued for an additional 20 minutes. If it is necessary to transport the patient to a physician and the eye needs to be bandaged, use a dry sterile cloth pad and cover both eyes.
- Ingestion**
- Do NOT induce vomiting. If the person is conscious and has no trouble breathing a small (no more than one glass) amount of water may be given. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. If vomiting occurs do not re-administer water. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.
- Notes to Physician**
- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.
- Other Information**
- Call 911 or emergency medical service. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Keep victim warm and quiet.

See Section 2 for Potential Health Effects.

Section 5 - Fire Fighting Measures

- Extinguishing Media**
- Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media	▪ None known.
Firefighting Procedures	▪ Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.
Unusual Fire and Explosion Hazards	▪ Product will burn under fire conditions. Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.
Hazardous Combustion Products	▪ Oxides of phosphorus, oxides of carbon.
Protection of Firefighters	▪ Fire fighters should wear complete protective clothing including self-contained breathing apparatus.
Flash Point	▪ > 94 C(> 201.2 F) PMCC (Pensky-Martins Closed Cup)

Section 6 - Accidental Release Measures


Personal Precautions	▪ Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Emergency Procedures	▪ Keep unauthorized personnel away. Dike spill using absorbent or impervious materials such as earth, sand or clay. Ventilate closed spaces before entering.
Environmental Precautions	▪ Do not flush to drain. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.
Containment/Clean-up Measures	▪ Stop leak if you can do it without risk. Exercise caution during neutralization as considerable heat may be generated. Carefully neutralize spill with soda ash. Sweep or vacuum up and place in an appropriate closed container. Clean up residual material by washing area with water. Collect washings for disposal.
Prohibited Materials	▪ None known.

Section 7 - Handling and Storage

Handling	▪ Avoid breathing vapors and mists. Do not get on skin or in eyes. Do not ingest. This product reacts violently with bases liberating heat and causing spattering.
Storage	▪ Store in a cool/low-temperature, well-ventilated, dry place.
Special Packaging Materials	▪ Recommended container material: plastic. Container material to avoid: unprotected metal.
Incompatible Materials or Ignition Sources	▪ Bases, oxidizing agents, reducing agents.
Other Information	▪ 10 to 40 C (50 to 104 F) Min/Max Storage Temperatures.

Section 8 - Exposure Controls/Personal Protection

Personal Protective Equipment

Pictograms	▪ 
Respiratory	▪ Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.
Eye/Face	▪ Wear face shield and eye protection. An emergency eye wash must be readily accessible to the work area.
Hands	▪ Wear protective gloves -Gloves.
Skin/Body	▪ Wear protective clothing -Full Body Suit
General Industrial Hygiene Considerations	▪ Do not get in eyes or on skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Handle in accordance with good industrial hygiene and safety practice.
Engineering Measures/Controls	▪ Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other

engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Exposure Limits/Guidelines						
	Result	ACGIH	Argentina	Australia	Canada Ontario	Canada Quebec
Phosphoric acid (7664-38-2)	STELs	3 mg/m3 STEL	3 mg/m3 STEL	3 mg/m3 STEL	3 mg/m3 STEV	3 mg/m3 STEV
	TWAs	1 mg/m3 TWA	1 mg/m3 TWA	1 mg/m3 TWA	1 mg/m3 TWAEV	1 mg/m3 TWAEV
Exposure Limits/Guidelines (Con't.)						
	Result	China	Egypt	Germany DFG	Germany TRGS	India
Phosphoric acid (7664-38-2)	STELs	3 mg/m3 STEL	3 mg/m3 STEL	Not established	Not established	3 mg/m3 STEL
	TWAs	1 mg/m3 TWA	Not established	Not established	2 mg/m3 TWA (inhalable fraction, exposure factor 2)	1 mg/m3 TWA
	Ceilings	Not established	Not established	4 mg/m3 Peak (inhalable fraction)	Not established	Not established
	MAKs	Not established	Not established	2 mg/m3 MAK (inhalable fraction)	Not established	Not established
2-Ethylhexanol (104-76-7)	TWAs	Not established	Not established	Not established	20 ppm TWA (exposure factor 1); 110 mg/m3 TWA (exposure factor 1)	Not established
	Ceilings	Not established	Not established	20 ppm Peak; 110 mg/m3 Peak	Not established	Not established
	MAKs	Not established	Not established	20 ppm MAK; 110 mg/m3 MAK	Not established	Not established
Exposure Limits/Guidelines (Con't.)						
	Result	Indonesia	Japan	Korea	Malaysia	Mexico
Phosphoric acid (7664-38-2)	TWAs	1 mg/m3 NAB	1 mg/m3 OEL	1 mg/m3 TWA	1 mg/m3 TWA	1 mg/m3 TWA
	STELs	Not established	Not established	3 mg/m3 STEL	Not established	3 mg/m3 STEL
Exposure Limits/Guidelines (Con't.)						
	Result	New Zealand	NIOSH	OSHA	OSHA Vacated	Philippines
Phosphoric acid (7664-38-2)	TWAs	1 mg/m3 TWA	1 mg/m3 TWA	1 mg/m3 TWA	1 mg/m3 TWA	1 mg/m3 TWA
	STELs	Not established	3 mg/m3 STEL	Not established	3 mg/m3 STEL	Not established
Exposure Limits/Guidelines (Con't.)						
	Result	Singapore	South Africa	Switzerland	Taiwan	United States - California
Phosphoric acid (7664-38-2)	STELs	3 mg/m3 STEL	3 mg/m3 STEL	2 mg/m3 STEL	Not established	3 mg/m3 STEL
	TWAs	1 mg/m3 PEL	1 mg/m3 TWA	Not established	1 mg/m3 TWA	1 mg/m3 PEL
	MAKs	Not established	Not established	1 mg/m3 MAK	Not established	Not established
2-Ethylhexanol (104-76-7)	MAKs	Not established	Not established	20 ppm MAK; 110 mg/m3 MAK	Not established	Not established
	STELs	Not established	Not established	20 ppm STEL (15 min); 110 mg/m3 STEL (15 min)	Not established	Not established

Exposure Control Notations

Switzerland

- Phosphoric acid (7664-38-2): **Developmental Risk Groups:** (Developmental Risk Group C)
- 2-Ethylhexanol (104-76-7): **Developmental Risk Groups:** (Developmental Risk Group C)

IMO/IMDG –International Maritime Transport

Shipping Name: Corrosive Liquid, Acidic, Organic, n.o.s. (2-Ethylhexyl Phosphate; Phosphoric Acid)

ID Number: 3265

Hazard Class: 8

Labeling Class: 8

Packing Group: III

ADN - Europe Transport of Dangerous Goods by Road/Inland Waterway

Shipping Name: Corrosive Liquid, Acidic, Organic, n.o.s. (2-Ethylhexyl Phosphate; Phosphoric Acid)

ID Number: 3265

Hazard Class: 8

Labeling Class: 8

Packing Group: III

IATA - International Air Transport Association

Shipping Name: Corrosive Liquid, Acidic, Organic, n.o.s. (2-Ethylhexyl Phosphate; Phosphoric Acid)

ID Number: 3265

Hazard Class: 8

Labeling Class: 8

Packing Group: III

ADR - Europe Transport of Dangerous Goods by Road/Inland Waterway

Shipping Name: Corrosive Liquid, Acidic, Organic, n.o.s. (2-Ethylhexyl Phosphate; Phosphoric Acid)

ID Number: 3265

Hazard Class: 8

Labeling Class: 8

Packing Group: III

RID - Europe Transport of Dangerous Goods by Railways

Shipping Name: Corrosive Liquid, Acidic, Organic, n.o.s. (2-Ethylhexyl Phosphate; Phosphoric Acid)

ID Number: 3265

Hazard Class: 8

Labeling Class: 8

Packing Group: III

Section 15 - Regulatory Information

SARA Hazard Classifications

- Acute

Risk & Safety Phrases

- R34 Causes burns.
- S1 Keep locked up.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Inventory

Component	CAS	Australia AICS	Canada DSL	Canada NDSL	China	EU EINECS
Water	7732-18-5	Yes	Yes	No	Yes	Yes
2-ethylhexyl ester phosphoric acid	12645-31-7	Yes	Yes	No	Yes	Yes
2-Ethylhexanol	104-76-7	Yes	Yes	No	Yes	Yes
Phosphoric acid	7664-38-2	Yes	Yes	No	Yes	Yes

Inventory (Con't.)

Component	CAS	EU ELNICS	Japan ENCS	Korea KECL	New Zealand	Philippines PICCS
Water	7732-18-5	No	No	Yes	Yes	Yes
2-ethylhexyl ester phosphoric acid	12645-31-7	No	Yes	Yes	Yes	Yes
2-Ethylhexanol	104-76-7	No	Yes	Yes	Yes	Yes
Phosphoric acid	7664-38-2	No	Yes	Yes	Yes	Yes

Inventory (Con't.)

Component	CAS	Switzerland SWISS	TSCA
Water	7732-18-5	No	Yes
2-ethylhexyl ester phosphoric acid	12645-31-7	No	Yes
2-Ethylhexanol	104-76-7	No	Yes
Phosphoric acid	7664-38-2	No	Yes

Australia

Labor

Australia - Hazardous Substances - Substances Requiring Health Surveillance

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Australia - High Volume Industrial Chemicals List

- Phosphoric acid 7664-38-2 < 8%
- 2-Ethylhexanol 104-76-7 < 8%
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Australia - List of Designated Hazardous Substances - Classification

- Phosphoric acid 7664-38-2 < 8% C R34
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Australia - Major Hazard Facilities - Threshold Quantity (Table 1)

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Australia - Major Hazard Facilities - Threshold Quantity for Materials (Table 2)

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Australia - South Australia - Hazardous Substances Prohibited for Specified Uses

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Australia - South Australia - Hazardous Substances Requiring Health Surveillance

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Australia - Tasmania - Workplace Health and Safety - Hazardous Substances Prohibited for Specific Uses

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Australia - Tasmania - Workplace Health and Safety - Hazardous Substances Requiring Health Surveillance

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Australia - Western Australia - Hazardous Substances Prohibited for Specified Uses

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Australia - Western Australia - Hazardous Substances Requiring Health Surveillance

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Environment

Australia - National Pollutant Inventory (NPI) Substance List

- Phosphoric acid 7664-38-2 < 8% 10 tonnes/year Threshold category 1
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Australia - Ozone Protection Act - Scheduled Substances

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Australia - Priority Existing Chemical Program

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Canada

Labor

Canada - WHMIS - Classifications of Substances

- Phosphoric acid 7664-38-2 < 8% E (including 85% or less)
- 2-Ethylhexanol 104-76-7 < 8% B3, D2B
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Canada - WHMIS - Ingredient Disclosure List

- Phosphoric acid 7664-38-2 < 8% 1 %
- 2-Ethylhexanol 104-76-7 < 8% 1 %
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Environment

Canada - CEPA - Priority Substances List

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

China

Other

China - Annex I & II - Controlled Chemicals Lists

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

China - Classification and Labeling of Dangerous Chemical Substances Commonly Used

- Phosphoric acid 7664-38-2 < 8% Primary Symbol: 16 Primary Class: corrosive Statements: 5.46, 5.99, 5.112
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

China - Dangerous Goods List

- Phosphoric acid 7664-38-2 < 8% UN1805 (solution); UN3453 (solid)
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Egypt

Environment

Egypt - Air Pollutants - Emissions Limits - Overall Particles

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Egypt - Air Pollutants - Maximum Limits

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Europe

Other

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

- Phosphoric acid 7664-38-2 < 8% C; R34
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

- Phosphoric acid 7664-38-2 < 8% 25%≤C: C; R34 10%≤C<25%: Xi; R36/38
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

- Phosphoric acid 7664-38-2 < 8% C R:34 S:(1/2)-26-45
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

- Phosphoric acid 7664-38-2 < 8% B
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

- Phosphoric acid 7664-38-2 < 8% S:(1/2)-26-45
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

India**Environment****India - Hazardous Chemical Rules - List of Hazardous and Toxic Chemicals**

- Phosphoric acid 7664-38-2 < 8%
- 2-Ethylhexanol 104-76-7 < 8%
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

India - Ozone Depleting Substances - Schedule I

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Indonesia**Environment****Indonesia - Hazardous Waste from Non-Specific Sources**

- Phosphoric acid 7664-38-2 < 8% Waste Code: D1006c (Acid/bases)
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Indonesia - Hazardous Waste from Specific Sources

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Indonesia - Hazardous Waste from Overdue Chemicals

- Phosphoric acid 7664-38-2 < 8% Waste Code D3097
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Japan**Labor****Japan - ISHL Dangerous Substances**

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Japan - ISHL Designated Carcinogens

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Japan - ISHL Harmful Substances Prohibited for Manufacture

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Japan - ISHL Notifiable Substances

- Phosphoric acid 7664-38-2 < 8% 1 % weight
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Environment

Japan - Air Pollution Control Law - Emission Standards for Air Pollutants

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Inventory - Japan - Industrial Safety and Health Law Substances (ISHL)

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Korea

Labor

Korea - MOE - Harmful Substances

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Korea - ISHA - Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Malaysia

Labor

Malaysia - Control of Industrial Major Accident Hazards - Threshold Quantities

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Malaysia - Occupational Safety & Health - Risk Phrases

- Phosphoric acid 7664-38-2 < 8% R-34
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Malaysia - Occupational Safety & Health - Safety Phrases

- Phosphoric acid 7664-38-2 < 8% S-26
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Malaysia - Occupational Safety & Health Conc. Cut-Offs for Corrosive Category

- Phosphoric acid 7664-38-2 < 8% 25.0 % (above this concentration ingredient to be classified with R41 in addition to R34 or R35)
- 2-Ethylhexanol 104-76-7 < 8% Not Listed

- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Malaysia - Occupational Safety & Health Conc. Cut-Offs for Irritant Category

- Phosphoric acid 7664-38-2 < 8% 10.0 % (ingredient to be classified with R36/38 instead of R34 or R35)
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Malaysia - Occupational Safety and Health - Prohibition of Use of Substances

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Environment

Malaysia - Chlorofluorocarbons (CFCs) Prohibition Order

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Malaysia - Scheduled Wastes

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Other

Malaysia - Pesticides Act - List of Active Ingredients

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Mexico

Environment

Mexico - Ecological Criteria for Water Quality - Drinking Water Supply Source

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Mexico - Ecological Criteria for Water Quality - Protection of Fresh Water Aquatic Life

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Mexico - Ecological Criteria for Water Quality - Protection of Marine Water Aquatic Life

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Other

Mexico - Hazard Classifications

- Phosphoric acid 7664-38-2 < 8% Class = 8
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Mexico - Regulated Substances

- Phosphoric acid 7664-38-2 < 8% UN1805 (liquid or solid)
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

New Zealand

Other

New Zealand - Ozone Depleting Substances

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Philippines

Environment

Philippines - Air Quality - Long Term Guidelines for Criteria Pollutants

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Philippines - Ozone Depleting Substances - Annex A - Group I

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Philippines - Prescribed Hazardous Wastes

- Phosphoric acid 7664-38-2 < 8% Class: Acid Waste; Waste Number: B204
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Other

Philippines - Priority Chemical List

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Singapore

Labor

Singapore - Factories Act - Medical Examinations

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Environment

Singapore - Air Impurities Emission Limits

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Singapore - Hazardous Substance Transport Quantities

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Singapore - List of Hazardous Substances

- Phosphoric acid 7664-38-2 < 8% Exclusions: Substances containing not more than 50%, weight in weight, of phosphoric acid
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Singapore - Ozone Depleting Substances - Annex A - Group I

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Other

Singapore - Corrosive and Explosive Substances - Corrosive Substances

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

South Africa

Labor

South Africa - General Machinery Regulations - Notifiable Substances

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Taiwan

Environment

Taiwan - Effluent Standards - Maximum Effluent Limitations

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Taiwan - Toxic Chemical Substances Control Act - Threshold Regulated Quantities

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Taiwan - Toxic Chemical Substances Control Act - Classification and Control Levels

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Thailand

Labor

Thailand - Air Contaminant Standards

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Environment

Thailand - Banned Persistent Organic Pollutants (POPs)

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed

- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Thailand - Quantities of Chemicals

- Phosphoric acid 7664-38-2 < 8% 1 mg/m3 Quantities of Chemicals
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Other

Thailand - Hazardous Substances

- Phosphoric acid 7664-38-2 < 8% Type 1 Hazardous Substance (concentration >25%)
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Thailand - Hazardous Substances - Duties and Civil Liabilities

- Phosphoric acid 7664-38-2 < 8% (>25% w/w)
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

United States

Environment

U.S. - CAA (Clean Air Act) - Class I Ozone Depletors

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

U.S. - CAA (Clean Air Act) - Class II Ozone Depletors

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

- Phosphoric acid 7664-38-2 < 8% 5000 lb final RQ; 2270 kg final RQ
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

U.S. - SDWA (Safe Drinking Water Act) - CCL (Contaminant Candidate List)

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Vietnam

Environment

Vietnam - Air Quality - Ambient Air Quality Standards

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Vietnam - Air Quality - Industrial Emission Standards

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Vietnam - Air Quality - Maximum Allowable Concentration of Highly Hazardous Chemicals

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Other

Vietnam - Banned Agrochemicals

- Phosphoric acid 7664-38-2 < 8% Not Listed
- 2-Ethylhexanol 104-76-7 < 8% Not Listed
- 2-ethylhexyl ester phosphoric acid 12645-31-7 > 82% Not Listed

Section 16 - Other Information

- Preparation Date** ▪ 02/24/2005
- Last Revision Date** ▪ 07/15/2011
- Disclaimer/Statement of Liability** ▪ The information herein is given in good faith but no warranty, expressed or implied, is made.

Key to abbreviations

NDA = No Data Available