

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking**1.1 Product identifier****Product Name** • DTX RAD**Product Description** • Red liquid**1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant identified use(s)** • Acid resist inkjet fluid**1.3 Details of the supplier of the safety data sheet****Manufacturer** • IKONICS Corporation
4832 Grand Ave.
Duluth, MN 55807
United States
www.ikonics.com
sds@ikonics.com**Telephone (General)** • (218) 628-2217**Telephone (General)** • (800) 328-4261 - Toll free**1.4 Emergency telephone number****Chemtrec** • 1-800-424-9300 - Within USA and Canada
• +1 703-527-3887 - Outside USA and Canada (collect calls accepted)**Section 2: Hazards Identification****EU/EEC**

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 2015/830]

2.1 Classification of the substance or mixture**CLP** • Skin Irritation 2 - H315
Skin Sensitization 1 - H317
Eye Irritation 2 - H319
EUH208**2.2 Label Elements****CLP****WARNING****Hazard statements** • H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
EUH208 – Contains sensitizing substance (Acidic acrylate oligomer; Aromatic acrylate; Phosphine oxide, phenylbis (2,4,6-trimethyl benzoyl); Acrylic acid, tridecyl ester; Acrylic acid, 2-hydroxyethyl ester; p-Methoxyphenol). May produce an allergic reaction.**Precautionary statements****Prevention** • P261 - Avoid breathing dust, fume, gas, mist, vapors and/or spray.
P264 - Wash thoroughly after handling.
P272 - Contaminated work clothing should not be allowed out of the workplace.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

- Response** • P302+P352 - IF ON SKIN: Wash with plenty of water and soap.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P321 - Specific treatment, see supplemental first aid information.

Storage/Disposal • P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other Hazards

CLP • No data available

UN GHS

According to: **UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS): Eighth Revised Edition**

2.1 Classification of the substance or mixture

UN GHS • Skin Irritation 2
Skin Sensitization 1
Eye Irritation 2

2.2 Label elements

UN GHS

WARNING



Hazard statements • Causes skin irritation
May cause an allergic skin reaction
Causes serious eye irritation

Precautionary statements

Prevention • Avoid breathing dust, fume, gas, mist, vapors and/or spray.
Wash thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.

Response • IF ON SKIN: Wash with plenty of water and soap.
If skin irritation or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
IF IN 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.
Specific treatment, see supplemental first aid information.

Storage/Disposal • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other hazards

UN GHS • No data available

United States (US)

According to: **OSHA 29 CFR 1910.1200 HCS**

2.1 Classification of the substance or mixture

OSHA HCS 2012 • Skin Irritation 2
Skin Sensitization 1
Eye Irritation 2

2.2 Label elements

OSHA HCS 2012

WARNING



- Hazard statements**
- Causes skin irritation
 - May cause an allergic skin reaction
 - Causes serious eye irritation

Precautionary statements

- Prevention**
- Avoid breathing dust, fume, gas, mist, vapors and/or spray.
 - Wash thoroughly after handling.
 - Contaminated work clothing should not be allowed out of the workplace.
 - Wear protective gloves/protective clothing/eye protection/face protection.
- Response**
- If on skin: Wash with plenty of water and soap.
 - If skin irritation or rash occurs: Get medical advice/attention.
 - Take off contaminated clothing and wash it before reuse.
 - IF IN 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.
 - Specific treatment, see supplemental first aid information.

- Storage/Disposal**
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other hazards

OSHA HCS 2012

- No data available

Canada

According to: WHMIS 2015

2.1 Classification of the substance or mixture

WHMIS 2015

- Skin Irritation 2
- Skin Sensitization 1
- Eye Irritation 2

2.2 Label elements

WHMIS 2015

WARNING



- Hazard statements**
- Causes skin irritation
 - May cause an allergic skin reaction
 - Causes serious eye irritation

Precautionary statements

- Prevention**
- Avoid breathing dust, fume, gas, mist, vapors and/or spray.
 - Wash thoroughly after handling.
 - Contaminated work clothing should not be allowed out of the workplace.
 - Wear protective gloves/protective clothing/eye protection/face protection.
- Response**
- IF ON SKIN: Wash with plenty of water and soap.
 - If skin irritation or rash occurs: Get medical advice/attention.
 - Take off contaminated clothing and wash it before reuse.
 - IF IN 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.
Specific treatment, see supplemental first aid information.

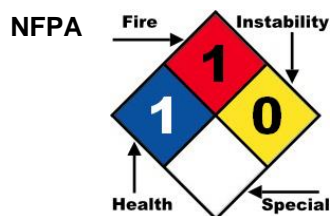
Storage/Disposal • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other hazards

WHMIS 2015

• No data available

2.4 Other information



See Section 12 for Ecological Information.

Section 3 - Composition/Information on Ingredients

3.1 Substances

3.2 Mixtures

Composition				
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive
Acidic acrylate oligomer	NDA	60% TO 70%		CLP / GHS / OSHA / WHMIS: Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1
Aromatic acrylate	NDA	20% TO 30%		CLP / GHS / OSHA / WHMIS: Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1
Phosphine oxide, phenylbis (2,4,6-trimethyl benzoyl)	CAS: 162881-26-7 EC Number: 423-340-5 EU Index: 015-189-00-5	1% TO 3%		CLP / GHS: Skin Sens. 1; Aquatic Chronic 4 OSHA / WHMIS: Skin Sens. 1
n-Lauryl acrylate esters	CAS: 2156-97-0 EC Number: 218-463-4 EINECS: 218-463-4	2% TO 3%		CLP / GHS: Skin Irrit. 2; Eye Irrit. 2; Aquatic Chronic 2 OSHA / WHMIS: Skin Irrit. 2; Eye Irrit. 2
Acrylic acid, tridecyl ester	CAS: 3076-04-8 EINECS: 221-351-8	2% TO 3%	Ingestion/Oral-Rat LD50 • 44700 µL/kg Skin-Rabbit LD50 • 6300 µL/kg	CLP / GHS: Skin Sens. 1; Aquatic Chronic 4 OSHA / WHMIS: Skin Sens. 1
Acrylic acid, 2-hydroxyethyl ester	CAS: 818-61-1 EC Number: 212-454-9 EU Index: 607-072-00-8 EINECS: 212-454-9	0.5% TO 1%		CLP / GHS: Acute Tox. 3; Skin Corr. 1; Eye Dam. 1; Skin Sens. 1; Aquatic Acute 1 OSHA / WHMIS: Acute Tox. 3; Skin Corr. 1; Eye Dam. 1; Skin Sens. 1
p-Methoxyphenol	CAS: 150-76-5 EC Number: 205-769-8 EU Index: 604-044-00-7 EINECS: 205-769-8	< 0.1%	Ingestion/Oral-Rat LD50 • 1600 mg/kg	CLP / GHS / OSHA / WHMIS: Acute Tox. 4; Eye Irrit. 2; Skin Sens. 1

See Section 11 for Toxicological Information.

Section 4 - First Aid Measures

4.1 Description of first aid measures

- Inhalation**
 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Call 911 or emergency medical service.
- Skin**
 - IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
- Eye**
 - IF IN 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.
- Ingestion**
 - If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Rinse mouth. Never give anything by mouth to an unconscious person. If large quantities are swallowed, call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Section 5 - Firefighting Measures

5.1 Extinguishing media

- Suitable Extinguishing Media**
 - SMALL FIRES: Dry chemical, CO₂, water spray or regular foam.
 - LARGE FIRE: Water spray, fog or regular foam.

- Unsuitable Extinguishing Media**
 - No data available

- Firefighting Procedures**
 - LARGE FIRES: Use extinguishing agent suitable for type of surrounding fire. Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep unauthorized personnel away. Ventilate closed spaces before entering.

5.2 Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards**
 - Material may burn, but does not ignite readily.

- Hazardous Combustion Products**
 - Products of combustion include: carbon oxides (CO_x).

5.3 Advice for firefighters

- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible. Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal Precautions**
 - Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate enclosed areas.
- Emergency Procedures**
 - No emergency procedures are expected to be necessary if material is used under ordinary conditions as recommended. Use normal clean up procedures.

6.2 Environmental precautions

- LARGE SPILLS: Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

- Containment/Clean-up Measures**
 - Use appropriate Personal Protective Equipment (PPE) Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in suitable container.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling • Use good safety and industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Storage • Keep container closed when not in use. Store away from extreme heat. Do not freeze. Store material in its original packaging to prevent UV exposure.

7.3 Specific end use(s)

• Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines						
	Result	ACGIH	Argentina	Australia	Belgium	Canada Alberta
p-Methoxyphenol (150-76-5)	TWAs	5 mg/m3 TWA	5 mg/m3 TWA [CMP]	5 mg/m3 TWA	5 mg/m3 TWA	5 mg/m3 TWA
Exposure Limits/Guidelines (Con't.)						
	Result	Canada British Columbia	Canada Manitoba	Canada New Brunswick	Canada Northwest Territories	Canada Nova Scotia
p-Methoxyphenol (150-76-5)	TWAs	5 mg/m3 TWA	5 mg/m3 TWA	5 mg/m3 TWA	5 mg/m3 TWA	5 mg/m3 TWA
	STELs	Not established	Not established	Not established	10 mg/m3 STEL	Not established
Exposure Limits/Guidelines (Con't.)						
	Result	Canada Ontario	Canada Quebec	Canada Saskatchewan	Denmark	France
p-Methoxyphenol (150-76-5)	TWAs	5 mg/m3 TWA	5 mg/m3 TWAEV	5 mg/m3 TWA	5 mg/m3 TWA	5 mg/m3 TWA [VME]
	STELs	Not established	Not established	10 mg/m3 STEL	Not established	Not established
Exposure Limits/Guidelines (Con't.)						
	Result	Indonesia	Ireland	Korea	New Zealand	NIOSH
p-Methoxyphenol (150-76-5)	TWAs	5 mg/m3 TWA	5 mg/m3 TWA	5 mg/m3 TWA (Serial No. 165)	5 mg/m3 TWA	5 mg/m3 TWA
	STELs	Not established	15 mg/m3 STEL (calculated)	Not established	Not established	Not established
Exposure Limits/Guidelines (Con't.)						
	Result	Norway	Poland	Portugal	Singapore	South Africa
p-Methoxyphenol (150-76-5)	TWAs	5 mg/m3 TWA	5 mg/m3 TWA [NDS]	5 mg/m3 TWA [VLE-MP]	5 mg/m3 PEL	5 mg/m3 TWA
Exposure Limits/Guidelines (Con't.)						
	Result	Spain		Taiwan	Venezuela	
p-Methoxyphenol (150-76-5)	TWAs	5 mg/m3 TWA [VLA-ED]		5 mg/m3 TWA	5 mg/m3 TWA [VTRE-L-8/40]	

Exposure Control Notations

Spain

•p-Methoxyphenol (150-76-5): **Sensitizers:** (sensitizer)

Venezuela

•p-Methoxyphenol (150-76-5): **Sensitizers:** (Sensitizer)

Exposure Limits Supplemental

ACGIH

•p-Methoxyphenol (150-76-5): **TLV Basis - Critical Effects:** (eye irritation; skin damage)

8.2 Exposure controls

Engineering Measures/Controls • Local exhaust is recommended but not required. Provide adequate ventilation as necessary.

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 protective eyewear (goggles, face shield, or safety glasses).

Hands

- Wear protective gloves - rubber or neoprene.

Skin/Body

- Wear protective clothing - apron or other impervious body coverings.

General Industrial Hygiene Considerations

- Handle in accordance with good industrial hygiene and safety practice.

Environmental Exposure

- No data available

Controls

Section 9 - Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Color	Red
Odor	Mild	Odor Threshold	No data available
Physical and Chemical Properties	UV reactive.		
General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	pH	No data available
Specific Gravity/Relative Density	No data available	Water Solubility	Insoluble
Viscosity	No data available	Explosive Properties	Not relevant
Oxidizing Properties:	Not relevant		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	No data available	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	Not relevant		
Environmental			
Half-Life	No data available	Octanol/Water Partition coefficient	No data available
Coefficient of water/oil distribution	No data available	Bioaccumulation Factor	No data available
Bioconcentration Factor	No data available	Biochemical Oxygen Demand BOD/BOD5	No data available
Chemical Oxygen Demand	No data available	Persistence	No data available
Degradation	No data available		

9.2 Other Information

- Polymerizes to solid/semisolid form upon exposure to UV radiation.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- UV reactive.

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Avoid freezing. Excess heat. Strong light.

10.5 Incompatible materials

- No data available

10.6 Hazardous decomposition products

- No decomposition is expected under normal storage and use conditions. Hazardous decomposition products formed under fire conditions - carbon oxides (COx).

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components		
Acrylic acid, tridecyl ester (1% TO 2%)	3076-04-8	Acute Toxicity: Ingestion/Oral-Rat LD50 • 44700 µL/kg; Skin-Rabbit LD50 • 6300 µL/kg; Irritation: Skin-Rabbit • 10 mg 24 Hour(s)-Open • Severe irritation
p-Methoxyphenol (< 0.1%)	150-76-5	Acute Toxicity: Ingestion/Oral-Rat LD50 • 1600 mg/kg; Irritation: Skin-Rabbit • 6 g 12 Day(s)-Intermittent • Mild irritation; Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 18375 mg/kg 7 Week(s)-Intermittent; <i>Kidney, Ureter, and Bladder</i> ; Other changes in urine composition; Endocrine: Differential effect of sex or castration on observed toxicity; Nutritional and Gross Metabolic: Gross Metabolite Changes: Weight loss or decreased weight gain
Acrylic acid, 2-hydroxyethyl ester (0.5% TO 1%)	818-61-1	Irritation: Eye-Rabbit • 1 mg • Severe irritation; Skin-Rabbit • 500 mg-Open • Moderate irritation

GHS Properties	Classification
Skin corrosion/Irritation	EU/CLP•Skin Irritation 2 UN GHS 6•Skin Irritation 2 OSHA HCS 2012•Skin Irritation 2 WHMIS 2015•Skin Irritation 2
Serious eye damage/Irritation	EU/CLP•Eye Irritation 2 UN GHS 6•Eye Irritation 2 OSHA HCS 2012•Eye Irritation 2 WHMIS 2015•Eye Irritation 2
Skin sensitization	EU/CLP•Skin Sensitizer 1 UN GHS 6•Skin Sensitizer 1 OSHA HCS 2012•Skin Sensitizer 1 WHMIS 2015•Skin Sensitizer 1

Route(s) of entry/exposure • Skin, Eye

Potential Health Effects

Inhalation

Acute (Immediate)

- May cause irritation.

Chronic (Delayed)

- Repeated and prolonged exposure may cause irritation.

Skin

Acute (Immediate)

- Causes skin irritation. May cause an allergic skin reaction.

Chronic (Delayed)

- Repeated and prolonged exposure may cause sensitization.

Eye

Acute (Immediate)

- Causes serious eye irritation.

Chronic (Delayed)

- Repeated and prolonged exposure may be harmful.

Ingestion

Acute (Immediate)

- May cause irritation.

Chronic (Delayed)

- No specific information available.

Section 12 - Ecological Information

12.1 Toxicity

Components		
Phosphine oxide, phenylbis (2,4,6-trimethyl benzoyl) (1% TO 3%)	162881-26-7	Aquatic Toxicity-Fish: 96 Hour(s) LC50 <i>Brachydanio rerio</i> 0.09 mg/kg Aquatic Toxicity-Crustacea: 48 Hour(s) EC50 <i>Daphnia magna</i> 1.175 mg/kg
p-Methoxyphenol (< 0.1%)	150-76-5	Aquatic Toxicity-Fish: 96 Hour(s) LC50 <i>Pimephales promelas (Fathead Minnow)</i> 84.3 mg/L Comments: Use of Joint Toxic Response to Define the Primary Mode of Toxic Action for Diverse Industrial Organic Chemicals
Acrylic acid, 2-hydroxyethyl ester (0.5% TO 1%)	818-61-1	Aquatic Toxicity-Fish: 4 Day(s) LC50 <i>Pimephales promelas (Fathead Minnow)</i> 4.8 mg/L

12.2 Persistence and degradability

- No data available

12.3 Bioaccumulative potential

- No data available

12.4 Mobility in Soil

- No data available

12.5 Results of PBT and vPvB assessment

- No data available

12.6 Other adverse effects

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

- Dispose of content in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of container in accordance with local, regional, national, and/or international regulations.

13.2 Other Information

- Dispose of wastes in an approved waste disposal facility.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	NDA	NDA	NDA	NDA
IMO/IMDG	NDA	NDA	NDA	NDA	NDA
IATA/ICAO	NDA	NDA	NDA	NDA	NDA

14.6 Special precautions for user

- None specified.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

- Not relevant.

14.8 Other information

- DOT • Not regulated.
- IMO/IMDG • Not regulated.
- IATA/ICAO • Not regulated.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Acute

State Right To Know				
Component	CAS	MA	NJ	PA
Acrylic acid, 2-hydroxyethyl ester	818-61-1	Yes	Yes	Yes
Acrylic acid,	3076-04-8	No	No	No

tridecyl ester				
n-Lauryl acrylate esters	2156-97-0	No	No	No
Phosphine oxide, phenylbis (2,4,6-trimethyl benzoyl)	162881-26-7	No	No	No
p-Methoxyphenol	150-76-5	Yes	Yes	Yes

Inventory						
Component	CAS	Australia AICS	Canada DSL	Canada NDSL	China	EU EINECS
Acrylic acid, 2-hydroxyethyl ester	818-61-1	Yes	Yes	No	Yes	Yes
Acrylic acid, tridecyl ester	3076-04-8	Yes	No	Yes	Yes	Yes
n-Lauryl acrylate esters	2156-97-0	Yes	Yes	No	Yes	Yes
Phosphine oxide, phenylbis (2,4,6-trimethyl benzoyl)	162881-26-7	Yes	Yes	No	Yes	No
p-Methoxyphenol	150-76-5	Yes	Yes	No	Yes	Yes

Inventory (Con't.)						
Component	CAS	EU ELNICS	Japan ENCS	Korea KECL	New Zealand	Philippines PICCS
Acrylic acid, 2-hydroxyethyl ester	818-61-1	No	Yes	Yes	Yes	Yes
Acrylic acid, tridecyl ester	3076-04-8	No	Yes	Yes	Yes	No
n-Lauryl acrylate esters	2156-97-0	No	Yes	Yes	Yes	Yes
Phosphine oxide, phenylbis (2,4,6-trimethyl benzoyl)	162881-26-7	Yes	Yes	No	Yes	Yes
p-Methoxyphenol	150-76-5	No	Yes	Yes	Yes	Yes

Inventory (Con't.)		
Component	CAS	TSCA
Acrylic acid, 2-hydroxyethyl ester	818-61-1	Yes
Acrylic acid, tridecyl ester	3076-04-8	Yes
n-Lauryl acrylate esters	2156-97-0	Yes
Phosphine oxide, phenylbis (2,4,6-trimethyl benzoyl)	162881-26-7	Yes
p-Methoxyphenol	150-76-5	Yes

Germany

Environment

Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes

•p-Methoxyphenol	150-76-5	ID Number 129, hazard class 1 - low hazard to waters
•Acrylic acid, 2-hydroxyethyl ester	818-61-1	ID Number 1724, hazard class 2 - hazard to waters
•Phosphine oxide, phenylbis (2,4,6-trimethyl benzoyl)	162881-26-7	Not Listed
•n-Lauryl acrylate esters	2156-97-0	Not Listed
•Acrylic acid, tridecyl ester	3076-04-8	Not Listed

Germany - Water Classification (VwVwS) - Annex 3

•p-Methoxyphenol	150-76-5	Not Listed
•Acrylic acid, 2-hydroxyethyl ester	818-61-1	Not Listed
•Phosphine oxide, phenylbis (2,4,6-trimethyl benzoyl)	162881-26-7	ID Number 2126, hazard class 1 - low hazard to waters
•n-Lauryl acrylate esters	2156-97-0	ID Number 5967, hazard class 2 - hazard to waters
•Acrylic acid, tridecyl ester	3076-04-8	Not Listed

Japan

Environment

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

•p-Methoxyphenol	150-76-5	(3)-567 (ENCS inventory number, considered an existing substance based on the Industrial Safety and Health Law)
•Acrylic acid, 2-hydroxyethyl ester	818-61-1	(2)-995, (2)-958 (ENCS inventory number, considered an existing substance based on the Industrial Safety and Health Law); 10-3607 (main component, listed under Mixture of .alpha.-[2-(acryloyloxy)ethyl]-.omega.-hydroxypoly[oxy(1-oxohexane-1,6-diyl)] and 2-hydroxyethyl acrylate)
•Phosphine oxide, phenylbis (2,4,6-trimethyl benzoyl)	162881-26-7	Not Listed
•n-Lauryl acrylate esters	2156-97-0	(5)-57, (2)-990 (ENCS inventory number, considered an existing substance based on the Industrial Safety and Health Law)
•Acrylic acid, tridecyl ester	3076-04-8	(2)-990 (ENCS inventory number, considered an existing substance based on the Industrial Safety and Health Law)

Korea

Labor

Korea - ISHA - Name, Toxicity and Protective Measures of New Chemical Substances

•p-Methoxyphenol	150-76-5	Not Listed
•Acrylic acid, 2-hydroxyethyl ester	818-61-1	Not Listed
•Phosphine oxide, phenylbis (2,4,6-trimethyl benzoyl)	162881-26-7	(0485)
•n-Lauryl acrylate esters	2156-97-0	Not Listed
•Acrylic acid, tridecyl ester	3076-04-8	Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

15.3 Other Information

- California Proposition 65 – WARNING: This product can expose you to a chemical known to the State of California to cause birth defects or other reproductive harm:
Toluene CAS #108-88-3 <0.012%

Section 16 - Other Information

Relevant Phrases (code & full text)

- H315 - Causes skin irritation
- H317 - May cause an allergic skin reaction
- H319 - Causes serious eye irritation
- P261 - Avoid breathing dust, fume, gas, mist, vapors and/or spray.
- P264 - Wash thoroughly after handling.
- P272 - Contaminated work clothing should not be allowed out of the workplace.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P321 - Specific treatment, see supplemental first aid information.
- P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.
P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
EUH208 - Contains sensitizing substance. May produce an allergic reaction.

- Classification method for mixtures** • Calculation method.
- Last Revision Date** • 17 April 2020
- Preparation Date** • 18 February 2021
- Other Information** • Approved by: Troy Bergstedt, Director of Chemical Research, (218) 628-2217 ext.142.
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