Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name • **TexTac II**

Product Description • White liquid.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s) • Adhesive

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 • Carcinogenicity 2 - H351

2.2 Label Elements

CLP

WARNING

Hazard statements • H351 - Suspected of causing cancer via Inhalation

Precautionary statements

Prevention • P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response • P301+P312 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell.
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.

P308+P313 - IF exposed or concerned: Get medical advice/attention.

Storage/Disposal • P405 - Store locked up.
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)

2.1 Classification of the substance or mixture

UN GHS • Carcinogenicity 2

2.2 Label elements

UN GHS

WARNING

Hazard statements • Suspected of causing cancer via Inhalation

Precautionary statements

Prevention • Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.

Response • IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell.
IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.

Storage/Disposal • Store locked up.
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 • Carcinogenicity 2

2.2 Label elements

OSHA HCS 2012

WARNING

Hazard statements • Suspected of causing cancer via Inhalation

Precautionary statements

Prevention • Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.

Response • IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell.
IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.

Storage/Disposal • Store locked up.
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

2.4 Other information

NFPA

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**	**Comments**
Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	**CAS:**68412-54-4	1% TO 5%		**UN GHS:** **EU CLP:** **OSHA HCS 2012:**	NDA
Acetic acid, vinyl ester	**CAS:**108-05-4 **EC Number:**203-545-4 **UN:**UN1301 **EINECS:**203-545-4	0.1% TO 0.5%	Ingestion/Oral-Rat LD50 • 2900 mg/kg Inhalation-Rat LC50 • 11400 mg/m³ 4 Hour(s) Skin-Rabbit LD50 • 2335 mg/kg	**UN GHS:** Flam. Liq. 2 **EU CLP:** EU CLP, Annex VI, Table 3.1: Flam. Liq. 2, H225; Carc. 2, H351; Acute Tox. 4, H332; STOT SE 3, H335 **OSHA HCS 2012:**	NDA

European Chemicals Agency – Candidate List of Substances of Very High Concern for Authorization

Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched, CAS #68412-54-4; (4-Nonylphenol, branched and linear, ethoxylated); listed 2013/06/20; 1-5%.

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 and 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.

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

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards	• Some of these materials may burn, but most do not ignite readily.
Hazardous Combustion Products	• Products of combustion include: carbon oxides (COx).

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 or walk through spilled material. 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 Considerations.

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

- Store away from extreme heat. Do not freeze. Keep container closed when not in use.

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**
Acetic acid, vinyl ester (108-05-4)	STELs	15 ppm STEL	15 ppm STEL [CMP-CPT]	20 ppm STEL; 70 mg/m3 STEL	10 ppm STEL; 35.2 mg/m3 STEL	15 ppm STEL; 53 mg/m3 STEL
	TWAs	10 ppm TWA	10 ppm TWA [CMP]	10 ppm TWA; 35 mg/m3 TWA	5 ppm TWA; 17.6 mg/m3 TWA	10 ppm TWA; 35 mg/m3 TWA

Exposure Limits/Guidelines (Con't.)						
	Result	**Canada British Columbia**	**Canada Manitoba**	**Canada New Brunswick**	**Canada Northwest Territories**	**Canada Nova Scotia**
Acetic acid, vinyl ester (108-05-4)	STELs	15 ppm STEL	15 ppm STEL	15 ppm STEL; 53 mg/m3 STEL	20 ppm STEL; 70 mg/m3 STEL	15 ppm STEL
	TWAs	10 ppm TWA	10 ppm TWA	10 ppm TWA; 35 mg/m3 TWA	10 ppm TWA; 35 mg/m3 TWA	10 ppm TWA

Exposure Limits/Guidelines (Con't.)						
	Result	**Canada Nunavut**	**Canada Ontario**	**Canada Quebec**	**Canada Saskatchewan**	**Canada Yukon**
Acetic acid, vinyl ester (108-05-4)	STELs	20 ppm STEL; 70 mg/m3 STEL	15 ppm STEL	15 ppm STEV; 53 mg/m3 STEV	15 ppm STEL	20 ppm STEL; 60 mg/m3 STEL
	TWAs	10 ppm TWA; 35 mg/m3 TWA	10 ppm TWA	10 ppm TWAEV; 35 mg/m3 TWAEV	10 ppm TWA	10 ppm TWA; 30 mg/m3 TWA

Exposure Limits/Guidelines (Con't.)						
	Result	**China**	**Denmark**	**Finland**	**France**	**Germany TRGS**
Acetic acid, vinyl ester (108-05-4)	STELs	15 mg/m3 STEL	Not established	10 ppm STEL; 35 mg/m3 STEL	35.2 mg/m3 STEL [VLCT]; 10 ppm STEL [VLCT]	Not established
	TWAs	10 mg/m3 TWA	5 ppm TWA; 18 mg/m3 TWA	5 ppm TWA; 18 mg/m3 TWA	5 ppm TWA [VME]; 17.6 mg/m3 TWA [VME]	5 ppm TWA AGW (exposure factor 2); 18 mg/m3 TWA AGW (exposure factor 2)

Exposure Limits/Guidelines (Con't.)						
	Result	**Indonesia**	**Ireland**	**Korea**	**Mexico**	**Netherlands**
Acetic acid, vinyl ester (108-05-4)	STELs	Not established	20 ppm STEL; 60 mg/m3 STEL	15 ppm STEL (Serial No. 242)	20 ppm STEL [LMPE-CT]; 60 mg/m3 STEL [LMPE-CT]	36 mg/m3 STEL
	TWAs	10 ppm TWA; 35 mg/m3 TWA	10 ppm TWA; 30 mg/m3 TWA	10 ppm TWA (Serial No. 242)	10 ppm TWA LMPE-PPT; 30 mg/m3 TWA LMPE-PPT	18 mg/m3 TWA

Exposure Limits/Guidelines (Con't.)						
	Result	**New Zealand**	**NIOSH**	**Norway**	**Poland**	**Portugal**
Acetic acid, vinyl ester (108-05-4)	TWAs	10 ppm TWA; 35 mg/m3 TWA	Not established	5 ppm TWA; 17.6 mg/m3 TWA	10 mg/m3 TWA [NDS]	10 ppm TWA [VLE-MP]
	STELs	20 ppm STEL; 70 mg/m3 STEL	Not established	Not established	30 mg/m3 STEL [NDSCh]	15 ppm STEL [VLE-CD
	Ceilings	Not established	4 ppm Ceiling (15 min); 15 mg/m3	Not established	Not established	Not established

			Ceiling (15 min)			

Exposure Limits/Guidelines (Con't.)						
	Result	**Russia**	**Singapore**	**South Africa**	**Spain**	**Sweden**
Acetic acid, vinyl ester (108-05-4)	STELs	30 mg/m3 STEL (vapor)	15 ppm STEL; 53 mg/m3 STEL	20 ppm STEL; 60 mg/m3 STEL	10 ppm STEL [VLA-EC]; 35.2 mg/m3 STEL [VLA-EC]	10 ppm STV; 35 mg/m3 STV
	TWAs	10 mg/m3 TWA (vapor)	10 ppm PEL; 35 mg/m3 PEL	10 ppm TWA; 30 mg/m3 TWA	5 ppm TWA [VLA-ED] (indicative limit value); 17.6 mg/m3 TWA [VLA-ED] (indicative limit value)	5 ppm LLV; 18 mg/m3 LLV

Exposure Limits/Guidelines (Con't.)				
	Result	**Switzerland**	**Taiwan**	**Venezuela**
Acetic acid, vinyl ester (108-05-4)	MAKs	10 ppm TWA [MAK]; 35 mg/m3 TWA [MAK]	Not established	Not established
	STELs	10 ppm STEL [KZW] (15 min); 35 mg/m3 STEL [KZW] (15 min)	Not established	15 ppm STEL [LEB
	TWAs	Not established	10 ppm TWA; 35 mg/m3 TWA	10 ppm TWA [CAP

Exposure Control Notations

Japan

•Acetic acid, vinyl ester (108-05-4): **Carcinogens:** (Group 2B - Possibly Carcinogenic to Humans)

Mexico

•Acetic acid, vinyl ester (108-05-4): **Carcinogens:** (A3 - Confirmed animal carcinogen)

Switzerland

•Acetic acid, vinyl ester (108-05-4): **Carcinogens:** (Category C3 carcinogen)

Norway

•Acetic acid, vinyl ester (108-05-4): **Carcinogens:** (Carcinogen)

Portugal

•Acetic acid, vinyl ester (108-05-4): **Carcinogens:** (A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans)

Singapore

•Acetic acid, vinyl ester (108-05-4): **Odour Threshold - High:** (1.7 mg/m3) | **Odour Threshold - Low:** (0.4 mg/m3)

Indonesia

•Acetic acid, vinyl ester (108-05-4): **Carcinogens:** (A3 - confirmed animal carcinogen)

South Africa

•Acetic acid, vinyl ester (108-05-4): **Carcinogens:** (Animal Carcinogen)

Argentina

•Acetic acid, vinyl ester (108-05-4): **Carcinogens:** (A3 - Confirmed animal carcinogen with unknown relevance to humans)

Canada Quebec

•Acetic acid, vinyl ester (108-05-4): **Carcinogens:** (C3 carcinogen - effect detected in animals)

Venezuela

•Acetic acid, vinyl ester (108-05-4): **Ceilings:** (A3 - Animal Carcinogen)

ACGIH

•Acetic acid, vinyl ester (108-05-4): **Carcinogens:** (A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans)

Germany TRGS

•Acetic acid, vinyl ester (108-05-4): **Carcinogens:** (Category 3)

Germany DFG

•Acetic acid, vinyl ester (108-05-4): **Carcinogens:** (Category 3A (could be carcinogenic for man))

Exposure Limits Supplemental

ACGIH

•Acetic acid, vinyl ester (108-05-4): **TLV Basis - Critical Effects:** (CNS impairment; eye, skin and upper respiratory tract irritation)

8.2 Exposure controls

Engineering Measures/Controls

- Local exhaust is recommended but not required. Provide adequate ventilation as necessary.

Personal Protective Equipment

Pictograms

- 

Respiratory	• In case of insufficient ventilation, wear suitable respiratory equipment.
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 Controls	• No data available

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Viscous liquid.
Color	White	Odor	Slight acrylic odor.
Odor Threshold	No data available	Physical and Chemical Properties	Not relevant
General Properties			
Boiling Point	100 C(212 F)	Melting Point/Freezing Point	0 C(32 F)
Decomposition Temperature		pH	4.5 to 5.5
Specific Gravity/Relative Density	= 1.02 Water=1	Water Solubility	Dispersible
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	< 1 n-Butyl Acetate = 1	Volatiles (Wt.)	41 %
Flammability			
Flash Point	> 200 F(> 93.3333 C)	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

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Avoid freezing. Excess heat.

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		
Acetic acid, vinyl ester (0.1% TO 0.5%)	108-05-4	**Acute Toxicity:** Ingestion/Oral-Rat LD50 • 2900 mg/kg; Inhalation-Rat LC50 • 11400 mg/m³ 4 Hour(s); Skin-Rabbit LD50 • 2335 mg/kg; **Irritation:** Eye-Human • 22 ppm

GHS Properties	Classification
Carcinogenicity	**EU/CLP**•Carcinogenicity 2 **OSHA HCS 2012**•Carcinogenicity 2 **UN GHS**•Carcinogenicity 2

Potential Health Effects

Inhalation

Acute (Immediate) • May cause mild irritation.

Chronic (Delayed) • Repeated and prolonged exposure may cause irritation.

Skin

Acute (Immediate) • May cause mild irritation.

Chronic (Delayed) • Repeated and prolonged exposure may cause irritation.

Eye

Acute (Immediate) • May cause irritation.

Chronic (Delayed) • Repeated and prolonged exposure may cause irritation.

Ingestion

Acute (Immediate) • No data available

Chronic (Delayed) • No data available

Mutagenic Effects • No known significant effects or critical hazards.

Carcinogenic Effects		
	CAS	**IARC**
Acetic acid, vinyl ester	108-05-4	Group 2B-Possible Carcinogen

Reproductive Effects • No known significant effects or critical hazards.

Section 12 - Ecological Information

12.1 Toxicity

- No data available

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 73/78 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
- No data available

State Right To Know				
Component	**CAS**	**MA**	**NJ**	**PA**
Acetic acid, vinyl ester	108-05-4	Yes	Yes	Yes
Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	No	No	No

Inventory						
Component	**CAS**	**Australia AICS**	**Canada DSL**	**China**	**EU EINECS**	**Japan ENCS**
Acetic acid, vinyl ester	108-05-4	Yes	Yes	Yes	Yes	Yes
Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Yes	Yes	Yes	No	Yes

Inventory (Con't.)

Component	CAS	Korea KECL	New Zealand	Philippines PICCS	TSCA
Acetic acid, vinyl ester	108-05-4	Yes	Yes	Yes	Yes
Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Yes	Yes	Yes	Yes

Australia

Labor

Australia - High Volume Industrial Chemicals List

•Acetic acid, vinyl ester	108-05-4	
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

Australia - List of Designated Hazardous Substances - Classification

•Acetic acid, vinyl ester	108-05-4	F R11
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

Belgium

Labor

Belgium - Substances and Preparations - Suspected Carcinogens and Mutagens

•Acetic acid, vinyl ester	108-05-4	
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

Canada

Labor

Canada - WHMIS - Classifications of Substances

•Acetic acid, vinyl ester	108-05-4	B2, D1B, D2A, F
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Uncontrolled product according to WHMIS classification criteria

Canada - WHMIS - Ingredient Disclosure List

•Acetic acid, vinyl ester	108-05-4	1 %
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

Environment

Canada - Environmental Emergencies

•Acetic acid, vinyl ester	108-05-4	
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

China

Other

China - Dangerous Goods List

•Acetic acid, vinyl ester	108-05-4	
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

Europe

Other

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

•Acetic acid, vinyl ester	108-05-4	F; R11
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

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

•Acetic acid, vinyl ester	108-05-4	F R:11 S:(2)-16-23-29-33
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

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

•Acetic acid, vinyl ester	108-05-4	D
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

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

•Acetic acid, vinyl ester	108-05-4	S:(2)-16-23-29-33
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

EU - Endocrine Disrupters (COM (2001)262) - Candidate List of Substances

•Acetic acid, vinyl ester	108-05-4	Group III Chemical
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Group III Chemical

EU - Export and Import Restrictions (689/2008) - Chemicals Qualifying for PIC Notification

•Acetic acid, vinyl ester	108-05-4	Not Listed
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Banned as a pesticide;

		Severe restriction as an industrial chemical

EU - Export and Import Restrictions (689/2008) - Chemicals Subject to Export Notification Procedure

•Acetic acid, vinyl ester	108-05-4	Not Listed
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Severe restriction as an industrial chemical for professional use; Banned as a pesticide in the group of plant protection products; Banned as other pesticide including biocides

EU - No-Longer Polymers List (67/548/EEC)

•Acetic acid, vinyl ester	108-05-4	Not Listed
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	NLP No. 500-209-1 (>1<2.5 mol ethoxylated units)

Germany

Environment

Germany - TA Luft - Types and Classes

•Acetic acid, vinyl ester	108-05-4	organic Substance: 5.2.5, Class I
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

Germany - TA Luft - Emission Limits for Organic Substances

•Acetic acid, vinyl ester	108-05-4	0.10 kg/h Mass flow (Class I); 20 mg/m3 Mass concentration (Class I)
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

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

•Acetic acid, vinyl ester	108-05-4	ID Number 203, hazard class 2 - hazard to waters
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

India

Environment

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

•Acetic acid, vinyl ester	108-05-4	
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

Japan

Labor

Japan - ISHL Dangerous Substances

•Acetic acid, vinyl ester	108-05-4	Flammable substance
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

Japan - ISHL Designated Carcinogens

•Acetic acid, vinyl ester	108-05-4	>1 %
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

Japan - ISHL Notifiable Substances

•Acetic acid, vinyl ester	108-05-4	>0.1 % weight [Table 9, 180]
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

Environment

Japan - Pollutant Release Transfer Register (PRTR) - Class 1 Substances

•Acetic acid, vinyl ester	108-05-4	134 >=1 %
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

Other

Japan - Chemical Substance Control Law (CSCL) - Examined Existing Chemical Substances

•Acetic acid, vinyl ester	108-05-4	Readily biodegradable
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

Japan - Fire Service Law - Hazardous Materials

•Acetic acid, vinyl ester	108-05-4	Group 4 - Flammable liquids II (listed under 1st Class petroleums - insoluble)
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

Singapore

Environment

Singapore - Petroleum and Flammable Materials - Hazard Classes

•Acetic acid, vinyl ester	108-05-4	Hazard Class = 3
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

Singapore - Petroleum and Flammable Materials - Regulated Products

•Acetic acid, vinyl ester	108-05-4	SCDVAC1301L2
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

Taiwan

Environment

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

•Acetic acid, vinyl ester	108-05-4	Class 4 Cutoff: 1 wt%
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

Thailand

Other

Thailand - Hazardous Substances

•Acetic acid, vinyl ester	108-05-4	Type 2 Hazardous Substance
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

Thailand - Hazardous Substances - Duties and Civil Liabilities

•Acetic acid, vinyl ester	108-05-4	
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

United Kingdom

Environment

United Kingdom - Pollution Inventory - Schedule 1 - Thresholds for Releases to Air

•Acetic acid, vinyl ester	108-05-4	10 kg
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

United States

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

•Acetic acid, vinyl ester	108-05-4	
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

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

•Acetic acid, vinyl ester	108-05-4	5000 lb final RQ; 2270 kg final RQ
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

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

•Acetic acid, vinyl ester	108-05-4	5000 lb EPCRA RQ
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

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

•Acetic acid, vinyl ester	108-05-4	1000 lb TPQ
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

•Acetic acid, vinyl ester	108-05-4	0.1 % de minimis concentration
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Constituents for Detection Monitoring

•Acetic acid, vinyl ester	108-05-4	
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

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

•Acetic acid, vinyl ester	108-05-4	
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - TSD Facilities Ground Water Monitoring

•Acetic acid, vinyl ester	108-05-4	
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

United States - Pennsylvania

Labor

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

•Acetic acid, vinyl ester	108-05-4	
•Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-, branched	68412-54-4	Not Listed

15.2 Chemical Safety Assessment

- No data available

Section 16 - Other Information

Relevant Phrases (code & full text)

- H225 - Highly flammable liquid and vapor
  H332 - Harmful if inhaled
  H335 - May cause respiratory irritation
  H351 - Suspected of causing cancer via Inhalation
  P201 - Obtain special instructions before use.
  P202 - Do not handle until all safety precautions have been read and understood.
  P280 - Wear protective gloves/protective clothing/eye protection/face protection.
  P301+P312 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell.
  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.
  P308+P313 - IF exposed or concerned: Get medical advice/attention.
  P405 - Store locked up.
  P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Classification method for mixtures

- Calculation method.

Revision Date

- 31 January 2020

Last Revision Date

- 04 August 2015

Other Information

- Approved by: Troy Bergstedt, Director of Chemical Research, (218) 628-2217 ext.142.

Disclaimer/Statement of Liability

- The information contained herein is based on data available to us and is believed to be correct. Since this information may have been obtained in part from independent laboratories or other sources not under direct supervision, no representation is made that the information is accurate, reliable, complete, or representative and Buyer may rely thereon only at the Buyer's risk. We make no guarantee that the health and safety precautions we have suggested will be adequate for all individuals and / or situations involving its handling and uses. No warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Vendor assumes no responsibility for injury to vendee or third person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet.