

Safety Data Sheet

GenTite RRS

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

1.1 Product identifier

Product Name • **Water Based Bonding Adhesive (P)**

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

Relevant identified use(s) • Construction

1.3 Details of the supplier of the safety data sheet

Manufacturer • Firestone Building Products Company
250 West 96th Street
Indianapolis, IN 46260
United States

Telephone (General) • gentitemsd@bfdp.com
800-428-4442

1.4 Emergency telephone number

Manufacturer • (800) 424-9300 - CHEMTREC
Manufacturer • (703) 527-3887 - CHEMTREC - International

Section 2: Hazards Identification

EU/EEC

According to Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]
According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP • Carcinogenicity 2 - H351
DSD/DPD • Carcinogenic Substances - Category 3
R40

2.2 Label Elements

CLP

WARNING

Hazard statements • H351 - Suspected of causing cancer.

Precautionary statements

Prevention • P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P281 - Use personal protective equipment as required.

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

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

DSD/DPD



- Risk phrases** ● R40 - Limited evidence of a carcinogenic effect.
- Safety phrases** ● S36 - Wear suitable protective clothing.
● S37 - Wear suitable gloves.
● S53 - Avoid exposure - obtain special instructions before use.

2.3 Other Hazards

- CLP** ● According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.
- DSD/DPD** ● According to European Directive 1999/45/EC this material is considered dangerous.
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United States (US)

According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

- OSHA HCS 2012** ● Carcinogenicity 2 - H351
● Reproductive Toxicity 2 - H361

2.2 Label elements

OSHA HCS 2012

WARNING



- Hazard statements** ● Suspected of causing cancer. - H351
● Suspected of damaging fertility or the unborn child. - H361

Precautionary statements

- Prevention** ● Obtain special instructions before use. - P201
● Do not handle until all safety precautions have been read and understood. - P202
● Wear protective gloves/protective clothing/eye protection/face protection. - P280
- Response** ● IF exposed or concerned: Get medical advice/attention. - P308+P313
- Storage/Disposal** ● Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

2.3 Other hazards

- OSHA HCS 2012** ● Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.
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Canada

According to WHMIS

2.1 Classification of the substance or mixture

- WHMIS** ● Toxic - D1B
● Other Toxic Effects - D2A

2.2 Label elements

WHMIS

- Toxic - D1B
Other Toxic Effects - D2A

2.3 Other hazards**WHMIS**

- In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients**3.1 Substances**

- Material does not meet the criteria of a substance in accordance with Regulation (EC) No 1272/2008.

3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Acetic acid, vinyl ester	CAS:108-05-4 EC Number:203-545-4 EU Index:607-023-00-0	0.1% TO 1%	Ingestion/Oral-Rat LD50 • 2900 mg/kg Inhalation-Rabbit LC50 • 2500 ppm 4 Hour(s) Skin-Rabbit LD50 • 2335 mg/kg	EU DSD/DPD: Annex VI, Table 3.2: F R11 Carc. Cat. 3 R40 Xn R20 Xi R37 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Carc. 2, H351; Acute Tox. 4, H332; STOT SE 3: Resp. Irrit., H335 OSHA HCS 2012: Flam. Liq. 2; Repr 2; Carc. 2; Acute Tox. 4 (inhl)	NDA

Section 4 - First Aid Measures**4.1 Description of first aid measures****Inhalation**

- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Skin

- Wash skin with soap and water.

Eye

- Remove contact lenses if worn. Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Ingestion

- Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If signs/symptoms develop, get medical attention.

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**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.

Section 5 - Firefighting Measures

5.1 Extinguishing media

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

Unsuitable Extinguishing Media • No data available.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards • None

Hazardous Combustion Products • Thermal decomposition can lead to release of irritating gases and vapors.
Oxides of carbon.

5.3 Advice for firefighters

- Structural firefighters' protective clothing will only provide limited 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 walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Emergency Procedures • Keep unauthorized personnel away. Stay upwind.

6.2 Environmental precautions

- Avoid run off to waterways and sewers.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures • Stop leak if you can do it without risk.
SMALL SPILLS: Take up with sand or other non-combustible absorbent material and place into containers for later disposal.
LARGE SPILLS: Dike far ahead of liquid spill for later disposal.

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 only with adequate ventilation. Wear appropriate personal protective equipment. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Storage • Keep container closed when not in use. Store between 40°F and 100°F. (5° and 38°C)

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	Australia	Belgium	Canada Alberta	Canada British Columbia
Acetic acid, vinyl ester (108-05-4)	STELs	15 ppm STEL	20 ppm STEL; 70 mg/m ³ STEL	10 ppm STEL; 35.2 mg/m ³ STEL	15 ppm STEL; 53 mg/m ³ STEL	15 ppm STEL
	TWAs	10 ppm TWA	10 ppm TWA; 35 mg/m ³ TWA	5 ppm TWA; 17.6 mg/m ³ TWA	10 ppm TWA; 35 mg/m ³ TWA	10 ppm TWA
Exposure Limits/Guidelines (Con't.)						
	Result	Canada Manitoba	Canada New Brunswick	Canada Northwest Territories	Canada Nova Scotia	Canada Nunavut
Acetic acid, vinyl ester (108-05-4)	STELs	15 ppm STEL	15 ppm STEL; 53 mg/m ³ STEL	20 ppm STEL; 70 mg/m ³ STEL	15 ppm STEL	20 ppm STEL; 70 mg/m ³ STEL
	TWAs	10 ppm TWA	10 ppm TWA; 35 mg/m ³ TWA	10 ppm TWA; 35 mg/m ³ TWA	10 ppm TWA	10 ppm TWA; 35 mg/m ³ TWA
Exposure Limits/Guidelines (Con't.)						
	Result	Canada Ontario	Canada Quebec	Canada Saskatchewan	Canada Yukon	China
Acetic acid, vinyl ester (108-05-4)	STELs	15 ppm STEL	15 ppm STEV; 53 mg/m ³ STEV	Not established	20 ppm STEL; 60 mg/m ³ STEL	15 mg/m ³ STEL
	TWAs	10 ppm TWA	10 ppm TWAEV; 35 mg/m ³ TWAEV	10 ppm TWA	10 ppm TWA; 30 mg/m ³ TWA	10 mg/m ³ TWA
Exposure Limits/Guidelines (Con't.)						
	Result	Cyprus	Denmark	Germany TRGS	NIOSH	
Acetic acid, vinyl ester (108-05-4)	TWAs	17.6 mg/m ³ TWA; 5 ppm TWA	5 ppm TWA; 18 mg/m ³ TWA	5 ppm TWA AGW (exposure factor 2); 18 mg/m ³ TWA AGW (exposure factor 2)	Not established	
	STELs	35.2 mg/m ³ STEL; 10 ppm STEL	Not established	Not established	Not established	
	Ceilings	Not established	Not established	Not established	4 ppm Ceiling (15 min); 15 mg/m ³ Ceiling (15 min)	

Exposure Control Notations

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))

8.2 Exposure controls

Engineering Measures/Controls

- This material is designed to be used outdoors, in roofing applications. 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.

Personal Protective Equipment

Respiratory

- In case of insufficient ventilation, wear suitable respiratory equipment. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear safety goggles.

Skin/Body

- Use impermeable gloves and protective clothing as necessary to prevent skin contact.

Environmental Exposure Controls

- In case of spills, keep product clear of sewers, waterways or land areas. Dispose of waste product in accordance with national and local laws and regulations.

Key to abbreviations

NIOSH = National Institute of Occupational Safety and Health

STEL = Short Term Exposure Limits are based on 15-minute exposures

STEV = Short Term Exposure Value

TWAEV = Time-Weighted Average Exposure Value

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties**9.1 Information on Physical and Chemical Properties**

Material Description			
Physical Form	Liquid	Appearance/Description	Pink liquid with a mild odor.
Color	Pink	Odor	Mild
Odor Threshold	Data lacking		
General Properties			
Boiling Point	212 F(100 C)	Melting Point	Not relevant
Decomposition Temperature	Data lacking	pH	7 to 9
Specific Gravity/Relative Density	1 to 1.2 Water=1	Water Solubility	Dispersible
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	18 mbar @ 20 C(68 F)	Vapor Density	Data lacking
Evaporation Rate	0.36 n-Butyl Acetate = 1	VOC (Wt.)	< 1 %
Flammability			
Flash Point	Data lacking	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Not relevant.		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

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

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Incompatible materials.

10.5 Incompatible materials

- Keep away from strong oxidizing agents, strong Lewis or mineral acids.

10.6 Hazardous decomposition products

- Oxides of carbon. Thermal decomposition can lead to release of irritating gases and vapors.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components	
Acetic acid, vinyl ester (0.1% TO 1%)	108-05-4
<p>Acute Toxicity: Ingestion/Oral-Rat LD50 • 2900 mg/kg; Inhalation-Rat LC50 • 11400 mg/m³ 4 Hour(s); Skin-Rabbit LD50 • 2335 mg/kg;</p> <p>Irritation: Eye-Human • 22 ppm;</p> <p>Reproductive: Inhalation-Rat TCLo • 1000 ppm 6 Hour(s)(6-15D preg); <i>Reproductive Effects:Maternal Effects:Other effects; Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system;</i></p> <p>Tumorigen / Carcinogen: Inhalation-Rat TCLo • 600 ppm 6 Hour(s) 5 Day(s)-Intermittent; <i>Tumorigenic:Equivocal tumorigenic agent by RTECS criteria; Sense Organs and Special Senses:Olfaction:Tumors</i></p>	

GHS Properties	Classification
Acute toxicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Aspiration Hazard	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Carcinogenicity	EU/CLP • Carcinogenicity 2 OSHA HCS 2012 • Carcinogenicity 2
Germ Cell Mutagenicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Skin corrosion/Irritation	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Skin sensitization	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
STOT-RE	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
STOT-SE	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Toxicity for Reproduction	EU/CLP • Classification criteria not met OSHA HCS 2012 • Toxic to Reproduction 2
Respiratory sensitization	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Serious eye damage/Irritation	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met

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

Potential Health Effects

Inhalation

- Acute (Immediate)** • May cause irritation.
- Chronic (Delayed)** • No data available

Skin

- Acute (Immediate)** ● May cause irritation.
- Chronic (Delayed)** ● No data available

Eye

- Acute (Immediate)** ● May cause irritation.
- Chronic (Delayed)** ● No data available

Ingestion

- Acute (Immediate)** ● Not expected under normal conditions of use. May cause gastrointestinal tract irritation if swallowed.
- Chronic (Delayed)** ● No data available

Mutagenic Effects

- In vitro tests with vinyl acetate have shown mutagenic effects.

Carcinogenic Effects

- Repeated and prolonged exposure may cause cancer.

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

- Reproductive Effects** ● Suspected of damaging fertility or the unborn child.

Key to abbreviations

LC = Lethal Concentration
 LD = Lethal Dose
 TC = Toxic Concentration

Section 12 - Ecological Information

12.1 Toxicity

- Material data lacking.

12.2 Persistence and degradability

- Material data lacking.

12.3 Bioaccumulative potential

- Material data lacking.

12.4 Mobility in Soil

- Material data lacking.

12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

- No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

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

Packaging waste

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

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	Not Regulated	NDA	NDA	NDA
TDG	NDA	Not Regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not Regulated	NDA	NDA	NDA
ADN	NDA	Not Regulated	NDA	NDA	NDA
ADR/RID	NDA	Not Regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not Regulated	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 • Data lacking.

Section 15 - Regulatory Information

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

SARA Hazard Classifications • Chronic

State Right To Know				
Component	CAS	MA	NJ	PA
Acetic acid, vinyl ester	108-05-4	Yes	Yes	Yes

Inventory						
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS
Acetic acid, vinyl ester	108-05-4	Yes	No	Yes	Yes	No

Inventory (Con't.)				
Component	CAS	Japan ENCS	Korea KECL	TSCA
Acetic acid, vinyl ester	108-05-4	Yes	Yes	Yes

Australia

Labor

Australia - Work Health and Safety Regulations - Hazardous Substances Requiring Health Monitoring

• Acetic acid, vinyl ester 108-05-4 Not Listed

Australia - High Volume Industrial Chemicals List

• Acetic acid, vinyl ester 108-05-4

Australia - List of Designated Hazardous Substances - Classification

• Acetic acid, vinyl ester 108-05-4 F R11

Environment**Australia - National Pollutant Inventory (NPI) Substance List**

• Acetic acid, vinyl ester	108-05-4	Not Listed
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Australia - Ozone Protection Act - Scheduled Substances

• Acetic acid, vinyl ester	108-05-4	Not Listed
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Australia - Priority Existing Chemical Program

• Acetic acid, vinyl ester	108-05-4	Not Listed
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Belgium**Labor****Belgium - Substances and Preparations - Carcinogens and Mutagens**

• Acetic acid, vinyl ester	108-05-4	Not Listed
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Bulgaria**Environment****Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - 24 Hour**

• Acetic acid, vinyl ester	108-05-4	0.15 mg/m3 MAHCL
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Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - 30 Minute

• Acetic acid, vinyl ester	108-05-4	0.15 mg/m3 MAHCL
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Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - Annual

• Acetic acid, vinyl ester	108-05-4	Not Listed
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Canada**Labor****Canada - WHMIS - Classifications of Substances**

• Acetic acid, vinyl ester	108-05-4	B2, D1B, D2A, F
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Canada - WHMIS - Ingredient Disclosure List

• Acetic acid, vinyl ester	108-05-4	1 %
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Environment**Canada - 2004 NPRI (National Pollutant Release Inventory)**

• Acetic acid, vinyl ester	108-05-4	Part 1, Group 1 Substance; Part 5 Substance
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Canada - 2005 NPRI (National Pollutant Release Inventory)

• Acetic acid, vinyl ester	108-05-4	Part 1, Group 1 Substance; Part 5 Substance
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Canada - CEPA - Greenhouse Gases Subject to Mandatory Reporting

• Acetic acid, vinyl ester	108-05-4	Not Listed
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Canada - CEPA - Priority Substances List

• Acetic acid, vinyl ester	108-05-4	Not Listed
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Canada - DWQ (Drinking Water Quality) - IMACs

• Acetic acid, vinyl ester	108-05-4	Not Listed
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Other**Canada - Accelerated Reduction/Elimination of Toxics (ARET)**

• Acetic acid, vinyl ester	108-05-4	Not Listed
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Canada New Brunswick**Environment****Canada - New Brunswick - Ozone Depleting Substances - Schedule A**

• Acetic acid, vinyl ester	108-05-4	Not Listed
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Canada - New Brunswick - Ozone Depleting Substances - Schedule B

• Acetic acid, vinyl ester	108-05-4	Not Listed
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China**Other****China - Annex I & II - Controlled Chemicals Lists**

• Acetic acid, vinyl ester	108-05-4	Not Listed
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Denmark**Environment****Denmark - List of Undesirable Substances - Product Groups/Function**

• Acetic acid, vinyl ester	108-05-4	Not Listed
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Europe**Other****EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification**

• Acetic acid, vinyl ester	108-05-4	F; R11
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EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

• Acetic acid, vinyl ester	108-05-4	Not Listed
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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
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EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

• Acetic acid, vinyl ester	108-05-4	D
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EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

• Acetic acid, vinyl ester	108-05-4	S:(2)-16-23-29-33
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Germany**Labor****Germany - Immission Control - Qualifying Quantities for Major Accident Prevention**

• Acetic acid, vinyl ester	108-05-4	Not Listed
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Germany - Immission Control - Qualifying Quantities for Safety Reporting

• Acetic acid, vinyl ester	108-05-4	Not Listed
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Germany - TRGS 505 - Specific Lead Regulations

• Acetic acid, vinyl ester	108-05-4	Not Listed
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Germany - TRGS 511 - Specific Ammonium Nitrate Regulations

• Acetic acid, vinyl ester	108-05-4	Not Listed
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Environment**Germany - TA Luft - Types and Classes**

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|----------------------------|----------|-----------------------------------|
| • Acetic acid, vinyl ester | 108-05-4 | organic Substance: 5.2.5, Class I |
|----------------------------|----------|-----------------------------------|

Germany - TA Luft - Emission Limits for Carcinogenic Substances

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|----------------------------|----------|------------|
| • Acetic acid, vinyl ester | 108-05-4 | Not Listed |
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Germany - TA Luft - Emission Limits for Fibers

- | | | |
|----------------------------|----------|------------|
| • Acetic acid, vinyl ester | 108-05-4 | Not Listed |
|----------------------------|----------|------------|

Germany - TA Luft - Emission Limits for Inorganic Dusts

- | | | |
|----------------------------|----------|------------|
| • Acetic acid, vinyl ester | 108-05-4 | Not Listed |
|----------------------------|----------|------------|

Germany - TA Luft - Emission Limits for Inorganic Gases

- | | | |
|----------------------------|----------|------------|
| • Acetic acid, vinyl ester | 108-05-4 | 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/m ³ Mass concentration (Class I) |
|----------------------------|----------|---|

Germany - Water Classification (VwVwS) - Annex 1

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|----------------------------|----------|------------|
| • Acetic acid, vinyl ester | 108-05-4 | Not Listed |
|----------------------------|----------|------------|

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

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|----------------------------|----------|--|
| • Acetic acid, vinyl ester | 108-05-4 | ID Number 203, hazard class 2 - hazard to waters |
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Germany - Water Classification (VwVwS) - Annex 3

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|----------------------------|----------|------------|
| • Acetic acid, vinyl ester | 108-05-4 | Not Listed |
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Mexico**Other****Mexico - Hazard Classifications**

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|----------------------------|----------|------------------------------------|
| • Acetic acid, vinyl ester | 108-05-4 | Hazard Class = 3 PG = II
UN1301 |
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Mexico - Regulated Substances

- | | | |
|----------------------------|----------|--------|
| • Acetic acid, vinyl ester | 108-05-4 | UN1301 |
|----------------------------|----------|--------|

United States**Labor****U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

- | | | |
|----------------------------|----------|------------|
| • Acetic acid, vinyl ester | 108-05-4 | Not Listed |
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U.S. - OSHA - Specifically Regulated Chemicals

- | | | |
|----------------------------|----------|------------|
| • Acetic acid, vinyl ester | 108-05-4 | Not Listed |
|----------------------------|----------|------------|

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

- | | | |
|----------------------------|----------|--|
| • Acetic acid, vinyl ester | 108-05-4 | |
|----------------------------|----------|--|

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

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Acetic acid, vinyl ester 108-05-4 Not Listed

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

• Acetic acid, vinyl ester 108-05-4 5000 lb EPCRA RQ

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

• Acetic acid, vinyl ester 108-05-4 1000 lb TPQ

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

• Acetic acid, vinyl ester 108-05-4 0.1 % de minimis concentration

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Acetic acid, vinyl ester 108-05-4 Not Listed

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

• Acetic acid, vinyl ester 108-05-4

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

• Acetic acid, vinyl ester 108-05-4

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

• Acetic acid, vinyl ester 108-05-4

United States - California

Environment

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

• Acetic acid, vinyl ester 108-05-4 Not Listed

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

• Acetic acid, vinyl ester 108-05-4 Not Listed

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

• Acetic acid, vinyl ester 108-05-4 Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• Acetic acid, vinyl ester 108-05-4 Not Listed

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

• Acetic acid, vinyl ester 108-05-4 Not Listed

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

• Acetic acid, vinyl ester 108-05-4 Not Listed

United States - Pennsylvania

Labor

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

• Acetic acid, vinyl ester 108-05-4

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• Acetic acid, vinyl ester

108-05-4

Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Last Revision Date

- 22/September/2014

Preparation Date

- 22/September/2014

Disclaimer/Statement of Liability

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Key to abbreviations

NDA = No Data Available