

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

1.1 Product identifier	
Product Name	Brush-on Adhesive
Product Description	White liquid.
1.2 Relevant identified u	ses of the substance or mixture and uses advised against
Relevant identified use(s)	Adhesive
1.3 Details of the supplie	er 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 telephor	ne 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 453/2010]

2.1 Classification of the substance or mixture

CLP •	Not classified
2.2 Label Elements CLP	
Precautionary statements	
Prevention •	P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Response •	 P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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)

2.1 Classification of th	e substance or mixture
UN GHS •	Not classified
2.2 Label elements	
UN GHS	
Precautionary statements	
Prevention •	Wear protective gloves/protective clothing/eye protection/face protection.
Response •	IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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 CFF	R 1910.1200 HCS
2.1 Classification of th	e substance or mixture
OSHA HCS 2012 •	Not classified
2.2 Label elements	
OSHA HCS 2012	
Precautionary statements	
Prevention •	Wear protective gloves/protective clothing/eye protection/face protection.
Response •	IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage/Disposal •	Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
2.3 Other hazards	
	No data available
Canada According to: WHMIS 2.1 Classification of th	e substance or mixture
	Not classified
2.2 Label elements	
WHMIS	Not classified
-	
7 X ()thor hazarde	
2.3 Other hazards WHMIS	No data available

2.4 Other information

NFPA



Key to abbreviations

= See Section 16 for full text of CLP/GHS H and P phrases.

Section 3 - Composition/Information on Ingredients

3.1 Substances

3.2 Mixtures

			Composi	ition	
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 UN:UN1301 EINECS:203- 545-4	< 0.1%	Ingestion/Oral-Rat LD50 • 2900 mg/kg Inhalation-Rat LC50 • <u>11400 mg/m³ 4 Hour(s)</u> Skin-Rabbit LD50 • 2335 mg/kg	WHMIS: 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

Key to abbreviations

= See Section 16 for full text of CLP/GHS H and P phrases.

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.
Еуе	• 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 impor	rtant 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	No data available.
Antidotes	No data available.

Section 5 - Firefighting Measures

5.1 Extinguishing me	edia
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 a	arising from the substance or mixture
Unusual Fire and Explosion Hazards	 Some of these materials may burn, but none ignite readily.
Hazardous Combustion Products	 Products of combustion include: carbon oxides (COx).
5.3 Advice for firefig	hters
	• 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

- Do not touch or walk through spilled material. Ventilate enclosed areas.
- 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

Personal Precautions

Emergency Procedures

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

6.3 Methods and material for containment and cleaning up

Containment/Clean-up	 Use appropriate Personal Protective Equipment (PPE)
Measures	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

• Use good safety and industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Handling

• 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 • No data available.

			Exposure Limits	s/Guidelines		
	Result	ACGIH	Argentina	Australia	Belgium	Canada Alberta
Acetic acid, vinyl ester	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
(108-05-4)	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
		Ex	posure Limits/Gu	idelines (Con't.)		
	Result	Canada British Columbia	Canada Manitoba	Canada New Brunswick	Canada Northwest Territories	Canada Nova Scotia
Acetic acid, vinyl	STELs	15 ppm STEL	15 ppm STEL	15 ppm STEL; 53 mg/m3 STEL	20 ppm STEL; 70 mg/m3 STEL	15 ppm STEL
ester (108-05-4)	TWAs	10 ppm TWA	10 ppm TWA	10 ppm TWA; 35 mg/m3 TWA	10 ppm TWA; 35 mg/m3 TWA	10 ppm TWA
		Ex	posure Limits/Gu	idelines (Con't.)		•
	Result	Canada Nunavut	Canada Ontario	Canada Quebec	Canada Saskatchewan	Canada Yukon
Acetic acid, vinyl	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
ester (108-05-4)	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
	<u> </u>	Ex	posure Limits/Gu	idelines (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] (restrictive limit); 10 ppm STEL [VLCT] (restrictive limit)	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)
		Ex	posure Limits/Gu	idelines (Con't.)		
	Result	Indonesia	Ireland	Italy	Korea	Mexico
Acetic acid, vinyl ester	STELs	Not established	10 ppm STEL; 35 mg/m3 STEL	10 ppm STEL Breve termine; 35.2 mg/m3 STEL Breve termine	15 ppm STEL (Serial No. 255)	20 ppm STEL [LMPE-CT]; 60 mg/m3 STEL [LMPE-CT]
(108-05-4)	TWAs	10 ppm TWA; 35 mg/m3 TWA	5 ppm TWA; 18 mg/m3 TWA	5 ppm TWA; 17.6 mg/m3 TWA	10 ppm TWA (Serial No. 255)	10 ppm TWA LMPE- PPT; 30 mg/m3 TWA LMPE-PPT
		Ex	posure Limits/Gu	idelines (Con't.)		
	Result	Netherlands	New Zealand	NIOSH	Norway	Poland
	TWAs	18 mg/m3 TWA	10 ppm TWA; 35 mg/m3 TWA	Not established	5 ppm TWA; 17.6 mg/m3 TWA	10 mg/m3 TWA [NDS]
Acetic acid, vinyl ester	STELs	36 mg/m3 STEL	20 ppm STEL; 70 mg/m3 STEL	Not established	Not established	30 mg/m3 STEL [NDSCh]
(108-05-4)	Ceilings	Not established	Not established	4 ppm Ceiling (15 min); 15 mg/m3 Ceiling (15 min)	Not established	Not established
		Ex	posure Limits/Gu	idelines (Con't.)		
	Result	Portugal	Russia	Singapore	South Africa	Spain
Acetic acid, vinyl ester (108-05-4)	STELs	10 ppm STEL [VLE- CD] (indicative limit value); 35.2 mg/m3 STEL [VLE-CD] (indicative limit	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]

		value)				
TWAs		5 ppm TWA [VLE- MP] (indicative limit value); 17.6 mg/m3 TWA [VLE-MP] (indicative limit value)	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)
	Exposure Limits/Guidelines (Con't.)					
	Result	Sweden	Switzerland	Taiwan	Vene	zuela
	MAKs	Not established	10 ppm TWA [MAK]; 35 mg/m3 TWA [MAK]	Not established	Not established	
Acetic acid, vinyl ester (108-05-4)	STELs	10 ppm STV; 35 mg/m3 STV	10 ppm STEL [KZW]; 35 mg/m3 STEL [KZW]	Not established	15 ppm STEL [VTRE-	LB
	TWAs	5 ppm LLV; 18 mg/m3 LLV	Not established	10 ppm TWA; 35 mg/m3 TWA	10 ppm TWA [VTRE-	L-8/40

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) 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: (Present)

ACGIH

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

*** D**

- Respiratory
- Eye/Face
- Hands
- Skin/Body
- Зкіп/Бойу

General Industrial Hygiene Considerations

- Not required.
- Wear protective eyewear (goggles, face shield, or safety glasses).
- Wear protective gloves rubber or neoprene.
- Wear protective clothing apron or other impervious body coverings.
- Handle in accordance with good industrial hygiene and safety practice.

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	Isopropyl alcohol.	
Taste	Not relevant	Odor Threshold	Not relevant	
General Properties	-	-		
Boiling Point	100 C(212 F)	Melting Point	No data available	
Decomposition Temperature	Not relevant	рН	No data available	
Specific Gravity/Relative Density	Not relevant	Density	8.5 lbs/gal	
Water Solubility	Miscible	Viscosity	No data available	
Explosive Properties	None.	Oxidizing Properties:	None.	
Volatility	-	-		
Vapor Pressure	No data available	Vapor Density	No data available	
Evaporation Rate	No data available	VOC (Wt.)	0.1 %	
Volatiles (Wt.)	75 %			
Flammability	-	-		
Flash Point > 220 F(> 121.1111 C)		UEL	No data available	
LEL	No data available	Autoignition	Not relevant	
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%)	108-05-4	Acute Toxicity: Ingestion/Oral-Rat LD50 • 2900 mg/kg; Inhalation-Rat LC50 • 11400 mg/m ³ 4 Hour(s); Skin-Rabbit LD50 • 2335 mg/kg	

GHS Properties	Classification
Acute toxicity	EU/CLP• OSHA HCS 2012• UN GHS•
Aspiration Hazard	EU/CLP• OSHA HCS 2012• UN GHS•
Carcinogenicity	EU/CLP• OSHA HCS 2012• UN GHS•
Germ Cell Mutagenicity	EU/CLP• OSHA HCS 2012• UN GHS•
Skin corrosion/Irritation	EU/CLP• OSHA HCS 2012• UN GHS•
Skin sensitization	EU/CLP• OSHA HCS 2012• UN GHS•
STOT-RE	EU/CLP• OSHA HCS 2012• UN GHS•
STOT-SE	EU/CLP• OSHA HCS 2012• UN GHS•
Toxicity for Reproduction	EU/CLP• OSHA HCS 2012• UN GHS•
Respiratory sensitization	EU/CLP• OSHA HCS 2012• UN GHS•
Serious eye damage/Irritation	EU/CLP• OSHA HCS 2012• UN GHS•

Potential Health Effects

Inhalation	
Acute (Immediate)	May cause mild irritation.
Chronic (Delayed)	 Repeated and prolonged exposure may cause irritation.
Skin	
Acute (Immediate)	May cause irritation.
Chronic (Delayed)	 Repeated and prolonged exposure may cause irritation.
Еуе	
Acute (Immediate)	May cause irritation.
Chronic (Delayed)	 Repeated and prolonged exposure may be harmful.
Ingestion	

Acute (Immediate)

• May cause gastrointestinal disturbances including diarrhea, nausea, and vomiting.

Chronic (Delayed)

• No specific information available.

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

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

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

14.8 Other information

- None specified.
- Not relevant.
- **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

					State	Right To	Know			
Component		CAS		MA			NJ			PA
Acetic acid, vinyl ester	108	3-05-4	Yes			Yes			Yes	
						nventory	1			
Component	Ι	CAS	S Australia AICS Can		1	a DSL China		EU EINECS	Japan ENCS	
Acetic acid, vinyl ester	108	3-05-4	Yes		Yes		Yes		Yes	Yes
					Inve	ntory (Co	on't.)		-	
Component		CAS	S	Korea Kl	ECL	New	Zealand	Phili	ppines PICCS	TSCA
Acetic acid, vinyl ester		108-05-4	1	Yes		Yes		Yes		Yes

SARA Hazard Classifications • No data available

Australia

Labor Australia - High Volume Industrial Chemicals List •Acetic acid, vinyl ester Australia - List of Designated Hazardous Substances - Classification •Acetic acid, vinyl ester	108-05-4 108-05-4	F R11
Belgium		
Labor Belgium - Substances and Preparations - Suspected Carcinogens and Mutagens •Acetic acid, vinyl ester	108-05-4	
Canada		
Labor Canada - WHMIS - Classifications of Substances •Acetic acid, vinyl ester Canada - WHMIS - Ingredient Disclosure List •Acetic acid, vinyl ester	108-05-4 108-05-4	B2, D1B, D2A, F 1 %
Environment Canada - Environmental Emergencies •Acetic acid, vinyl ester	108-05-4	
China		
Other China - Dangerous Goods List •Acetic acid, vinyl ester	108-05-4	
Europe		
Other EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification		
•Acetic acid, vinyl ester EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling	108-05-4	F; R11 Carc.Cat.3; Xn; R20 Xi; R37
•Acetic acid, vinyl ester	108-05-4	F Xn R:11-20-37-40 S:9-16- 33-36/37
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases •Acetic acid, vinyl ester EU - Endocrine Disrupters (COM (2001)262) - Candidate List of Substances	108-05-4	S:9-16-33-36/37
•Acetic acid, vinyl ester	108-05-4	Group III Chemical
Germany		
Environment Germany - TA Luft - Types and Classes		
•Acetic acid, vinyl ester	108-05-4	organic Substance: 5.2.5, Class I
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)
Germany - Water Classification (VwVwS) - Annex 2 - Water Hazaro •Acetic acid, vinyl ester	d Classes 108-05-4	ID Number 203, hazard class 2 - hazard to waters
India		
Environment India - Hazardous Chemical Rules - List of Hazardous and Toxic C •Acetic acid, vinyl ester	Chemicals 108-05-4	
Japan		
Japan - ISHL Dangerous Substances Acetic acid, vinyl ester 	108-05-4	Flammable substance (listed under Substances whose flash points are >=-30 °C and <0 °C)
Japan - ISHL Designated Carcinogens	108-05-4	- 1.0/
 Acetic acid, vinyl ester Japan - ISHL Notifiable Substances 	108-05-4	>1 %
•Acetic acid, vinyl ester	108-05-4	>0.1 % weight [Table 9, 180]
Environment Japan - Pollutant Release Transfer Register (PRTR) - Class 1 Sub •Acetic acid, vinyl ester	stances 108-05-4	134 >=1 %
Other		
Japan - Chemical Substance Control Law (CSCL) - Examined Exis •Acetic acid, vinyl ester Japan - Fire Service Law - Hazardous Materials	ting Chemical Substances 108-05-4	Readily biodegradable
•Acetic acid, vinyl ester	108-05-4	Group 4 - Flammable liquids II (listed under 1st Class petroleums - insoluble)
Mexico		
Environment Mexico - Pollutant Release and Transfer Register - Reporting Emis •Acetic acid, vinyl ester	ssions - Threshold Quantities 108-05-4	500 kg/yr TQ
Singapore		
Environment Singapore - Petroleum and Flammable Materials - Hazard Classes •Acetic acid, vinyl ester Singapore - Petroleum and Flammable Materials - Regulated Proc •Acetic acid, vinyl ester	108-05-4	3 SCDVAC1301L2
Taiwan	100-00-4	SOD VACISULE2
Environment Taiwan - Toxic Chemical Substances Control Act - Classification a •Acetic acid, vinyl ester	and Control Levels 108-05-4	Class 4 Cutoff: 1 wt%
Thailand		
Other Thailand - Hazardous Substances		
•Acetic acid, vinyl ester	108-05-4	Type 2 Hazardous Substance (Department of Industrial Works)
Thailand - Hazardous Substances - Duties and Civil Liabilities •Acetic acid, vinyl ester	108-05-4	
United States		
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 Reportab		5000 lb final RQ; 2270 kg
•Acetic acid, vinyl ester	108-05-4	final RQ
	Brush-on Adhesive Safety D	ata Sheet Page 11 of 12

U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs •Acetic acid, vinyl ester U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs •Acetic acid, vinyl ester U.S CERCLA/SARA - Section 313 - Emission Reporting	108-05-4 108-05-4	5000 lb EPCRA RQ 1000 lb TPQ
•Acetic acid, vinyl ester	108-05-4	0.1 % de minimis concentration
 U.S RCRA (Resource Conservation & Recovery Act) - Constituents for Detection •Acetic acid, vinyl ester U.S RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constit •Acetic acid, vinyl ester U.S RCRA (Resource Conservation & Recovery Act) - TSD Facilities Ground Wat •Acetic acid, vinyl ester 	108-05-4 uents 108-05-4	
United States - Pennsylvania		
Labor U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List		

•Acetic acid, vinyl ester

15.2 Chemical Safety Assessment

• No Chemical Safety Assessment has been carried out.

108-05-4

Section 16 - Other Information

Relevant Phrases (code & full text)

	 H225 - Highly flammable liquid and vapor P280 - Wear protective gloves/protective clothing/eye protection/face protection. P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. H332 - Harmful if inhaled H335 - May cause respiratory irritation H351 - Suspected of causing cancer. P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
Classification method for mixtures	Calculation method.
Last Revision Date	• 18 August 2004
Preparation Date	• 24 April 2015
Other Information	• Approved by: Troy Bergstedt, Director of Chemical Research, (218) 628-2217 ext.142.
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