Printing date 03/05/2020

Filiting date 03/03/2020			Reviewed 011 03/03/2020
1 Identification			
 Product identifier Trade name: 	<u>IVORY 100% Vin</u>	<u>yl Ester Knife Grade Adhesive</u>	
<u>Article number:</u> <u>Application of the substance / the</u>	IVORY Knife Gra	de Adhesive	
mixture	Vinyl Ester BPO F	Reactive Resin Adhesive	
Details of the supplier of the saf Manufacturer/Supplier:	ety data sheet InnoChem LLC 6300 Button Gwir Atlanta, GA 3034		Phone: 770-409-8789 Fax: 770-409-9096 e-mail info@innochemllc.com
 Information department: Emergency telephone number: 	Laboratory Refer to Manufac	turer / Supplier	
2 Hazard(s) identification			
<u>Classification of the substance of</u>	or mixture		
GHS02 Flame			
Flam. Liq. 3 H226 Flammable liqui	d and vapor.		
GHS08 Health hazard			
Carc. 2 H351 Suspected of ca	ausing cancer.		
Repr. 2 H361 Suspected of da STOT RE 2 H373 May cause dam			eated exposure.
GHS07		- <u></u>	
STOT SE 3 H335 May cause resp	iratory irritation.		
 Label elements GHS label elements 	The product is cl	assified and labeled according	to the Globally Harmonized
	System (GHS).		o the Globally Harmonized
<u>Hazard pictograms</u>			
	GHS02 GHS0	7 GHS08	
· <u>Signal word</u>	Warning		
· Hazard-determining components			
<u>of labeling:</u> · <u>Hazard statements</u>	H361 Suspected H335 May cause	liquid and vapor. of causing cancer. of damaging fertility or the unborn respiratory irritation. damage to the hearing organs th	
· Precautionary statements	P210	Keep away from heat/sparks/o smoking.	pen flames/hot surfaces No
	P260 P280	Do not breathe vapours. Wear protective gloves/protecti	ive clothing/eye protection/face
		protection.	(Contd. on page 2)

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	e Adhesive		
		 3 If on skin (or hair): Take off immediately all contamic clothing. Rinse skin with water/shower. 8 If in eyes: Rinse cautiously with water for severa Remove contact lenses, if present and easy to do rinsing. Get medical advice/attention if you feel unwell. Store in a well-ventilated place. Keep container tigh Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container in accordance with 	al minu b. Conti ntly clos
Classification system:		regional/national/international regulations.	
NFPA ratings (scale 0 - 4)	3 Fire	alth = 0 = 3 activity = 0	
HMIS-ratings (scale 0 - 4)	HEALTH 0 Heal		
Other hazards	During processin fume. Conseque	g and product hardening the network generator is rently, take care for adequate air conditioning and for fu	
Results of PBT and vPvB asse	exhaustion on ree	quest.	
PBT:	Not applicable.		
<u>vPvB:</u>	Not applicable.		
Chemical characterization: I Description: Dangerous components:		bstances listed below with nonhazardous additions.	
Description: Dangerous components: CAS: 100-42-5 EINECS: 202-851-5 Index number: 601-026-00-0	Mixture of the sul styrene Flam. Liq. 3, H226 Carc. 2, H351; Rep	r. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304	25-50
Description: Dangerous components: CAS: 100-42-5 EINECS: 202-851-5 Index number: 601-026-00-0	Mixture of the su styrene Flam. Liq. 3, H226 Carc. 2, H351; Rep Acute Tox. 4, H332;	r. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304 ; STOT SE 3, H335	25-50
Description: Dangerous components: CAS: 100-42-5 EINECS: 202-851-5 Index number: 601-026-00-0	Mixture of the su styrene Flam. Liq. 3, H226 Carc. 2, H351; Rep Acute Tox. 4, H332;	r. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304	25-5(
Description: Dangerous components: CAS: 100-42-5 EINECS: 202-851-5 Index number: 601-026-00-0 Additional information:	Mixture of the su styrene Flam. Liq. 3, H226 Carc. 2, H351; Rep Acute Tox. 4, H332;	r. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304 ; STOT SE 3, H335	25-5(
Description: Dangerous components: CAS: 100-42-5 EINECS: 202-851-5 Index number: 601-026-00-0 Additional information: First-aid measures	Mixture of the sul styrene Flam. Liq. 3, H226 Carc. 2, H351; Rep Acute Tox. 4, H332; For the wording of	r. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304 ; STOT SE 3, H335	25-5(
Description: Dangerous components: CAS: 100-42-5 EINECS: 202-851-5 Index number: 601-026-00-0 Additional information:	Mixture of the sul styrene Flam. Liq. 3, H226 Carc. 2, H351; Repu Acute Tox. 4, H332; For the wording of Take affected pe	r. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304 ; STOT SE 3, H335 of the listed hazard phrases refer to section 16. rsons out into the fresh air.	25-50
Description: Dangerous components: CAS: 100-42-5 EINECS: 202-851-5 Index number: 601-026-00-0 Additional information: First-aid measures Description of first aid meas	Mixture of the sul styrene Flam. Liq. 3, H226 Carc. 2, H351; Repu Acute Tox. 4, H332; For the wording of Take affected pe Position and tran	r. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304 ; STOT SE 3, H335 of the listed hazard phrases refer to section 16. rsons out into the fresh air. sport stably on side.	25-50
Description: Dangerous components: CAS: 100-42-5 EINECS: 202-851-5 Index number: 601-026-00-0 Additional information: First-aid measures Description of first aid meas	Mixture of the sul styrene Flam. Liq. 3, H226 Carc. 2, H351; Repu Acute Tox. 4, H332; For the wording of Take affected pe Position and tran Immediately remu	r. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304 ; STOT SE 3, H335 of the listed hazard phrases refer to section 16. rsons out into the fresh air. sport stably on side. ove any clothing soiled by the product.	
Description: Dangerous components: CAS: 100-42-5 EINECS: 202-851-5 Index number: 601-026-00-0 Additional information: First-aid measures Description of first aid meas General information:	Mixture of the sul styrene Flam. Liq. 3, H226 Carc. 2, H351; Rep Acute Tox. 4, H332; For the wording of Take affected pe Position and tran Immediately rem Symptoms of poi observation for a	r. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304 ; STOT SE 3, H335 of the listed hazard phrases refer to section 16. rsons out into the fresh air. sport stably on side. ove any clothing soiled by the product. soning may even occur after several hours; therefore t least 48 hours after the accident.	medica
Description: Dangerous components: CAS: 100-42-5 EINECS: 202-851-5 Index number: 601-026-00-0 Additional information: First-aid measures Description of first aid meas	Mixture of the sul styrene Flam. Liq. 3, H226 Carc. 2, H351; Rep Acute Tox. 4, H332; For the wording of Take affected pe Position and tran Immediately rem Symptoms of poi observation for a Supply fresh air.	r. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304 ; STOT SE 3, H335 of the listed hazard phrases refer to section 16. rsons out into the fresh air. sport stably on side. ove any clothing soiled by the product. soning may even occur after several hours; therefore t least 48 hours after the accident. If required, provide artificial respiration. Keep patie	medica
Description: Dangerous components: CAS: 100-42-5 EINECS: 202-851-5 Index number: 601-026-00-0 Additional information: First-aid measures Description of first aid meas General information:	Mixture of the sul styrene Flam. Liq. 3, H226 Carc. 2, H351; Rep Acute Tox. 4, H332; For the wording of Take affected pe Position and tran Immediately rem Symptoms of poi observation for a Supply fresh air. Consult doctor if In case of uncons	r. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304 ; STOT SE 3, H335 of the listed hazard phrases refer to section 16. rsons out into the fresh air. sport stably on side. ove any clothing soiled by the product. soning may even occur after several hours; therefore t least 48 hours after the accident.	medica
Description: Dangerous components: CAS: 100-42-5 EINECS: 202-851-5 Index number: 601-026-00-0 Additional information: First-aid measures Description of first aid meas General information: After inhalation:	Mixture of the sul styrene Flam. Liq. 3, H226 Carc. 2, H351; Rep Acute Tox. 4, H332; For the wording of Take affected pe Position and tran Immediately rem Symptoms of poi observation for a Supply fresh air. Consult doctor if In case of uncons transportation.	r. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304 ; STOT SE 3, H335 of the listed hazard phrases refer to section 16. rsons out into the fresh air. sport stably on side. ove any clothing soiled by the product. soning may even occur after several hours; therefore t least 48 hours after the accident. If required, provide artificial respiration. Keep paties symptoms persist. sciousness place patient stably in side position for	medica
Description: Dangerous components: CAS: 100-42-5 EINECS: 202-851-5 Index number: 601-026-00-0 Additional information: First-aid measures Description of first aid meas General information:	Mixture of the sul styrene Flam. Liq. 3, H226 Carc. 2, H351; Repu Acute Tox. 4, H332; For the wording of Take affected pe Position and tran Immediately remu Symptoms of poi observation for a Supply fresh air. Consult doctor if In case of uncons transportation. If skin irritation co Immediately was	r. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304 ; STOT SE 3, H335 of the listed hazard phrases refer to section 16. rsons out into the fresh air. sport stably on side. ove any clothing soiled by the product. soning may even occur after several hours; therefore t least 48 hours after the accident. If required, provide artificial respiration. Keep paties symptoms persist. sciousness place patient stably in side position for ontinues, consult a doctor. h with water and soap and rinse thoroughly.	medica ent wa
Description: Dangerous components: CAS: 100-42-5 EINECS: 202-851-5 Index number: 601-026-00-0 Additional information: First-aid measures Description of first aid meas General information: After inhalation:	Mixture of the sul styrene Flam. Liq. 3, H226 Carc. 2, H351; Repu Acute Tox. 4, H332; For the wording of Take affected pe Position and tran Immediately remu Symptoms of poi observation for a Supply fresh air. Consult doctor if In case of uncons transportation. If skin irritation co Immediately was Rinse opened ey	r. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304 ; STOT SE 3, H335 of the listed hazard phrases refer to section 16. rsons out into the fresh air. sport stably on side. ove any clothing soiled by the product. soning may even occur after several hours; therefore t least 48 hours after the accident. If required, provide artificial respiration. Keep paties symptoms persist. sciousness place patient stably in side position for ontinues, consult a doctor.	medica ent wa
Description: Dangerous components: CAS: 100-42-5 EINECS: 202-851-5 Index number: 601-026-00-0 Additional information: First-aid measures Description of first aid meas General information: After inhalation: After skin contact:	Mixture of the sul styrene Flam. Liq. 3, H226 Carc. 2, H351; Repu Acute Tox. 4, H332; For the wording of Take affected pe Position and tran Immediately remu Symptoms of poi observation for a Supply fresh air. Consult doctor if In case of uncons transportation. If skin irritation co Immediately was Rinse opened ey consult a doctor.	r. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304 ; STOT SE 3, H335 of the listed hazard phrases refer to section 16. rsons out into the fresh air. sport stably on side. ove any clothing soiled by the product. soning may even occur after several hours; therefore t least 48 hours after the accident. If required, provide artificial respiration. Keep paties symptoms persist. sciousness place patient stably in side position for ontinues, consult a doctor. h with water and soap and rinse thoroughly.	medica ent wa

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Trade name: IVORY Knife Grade Adhesive

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	(Contd. of page 2) 90% range. Distribution in organism occurs rapidly, the maximum blood concentration can be analyzed after one hour after incorporation. Styrene exposition affects skin, mucous membranes, and central nervous system (CNS). Acute damages / risks to health: In case of styrene poisoning mainly damages to and interactions with central nervous system (CNS) arise. In concentration ranges above 200 ml/m3 symptoms such as fatigue, nausea, imbalance and prolonged response times are observed. Chronical health risks: Effects at central and peripheral nervous system and respiratory tract are evident in literature. Main health risks are: - prolonged response times - reduced cognitive performance, partial amnesia - retardation of nervous impulse transition speed - disturbances of pulmonary function
 Most important symptoms and 	
effects, both acute and delayed	Breathing difficulty Headache Dizziness Coughing Nausea
· Danger	Danger of impaired breathing.
 Indication of any immediate medical attention and special 	
treatment needed	If swallowed, gastric irrigation with added, activated carbon.
5 Fire-fighting measures Extinguishing media Suitable extinguishing agents: 	CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
 For safety reasons unsuitable 	
extinguishing agents:	Water with full jet
· Special hazards arising from the	
substance or mixture	Formation of toxic gases is possible during heating or in case of fire. In case of fire, the following can be released: Carbon monoxide (CO) Nitrogen oxides (NOx) In certain fire conditions, traces of other toxic gases cannot be excluded.
· Advice for firefighters	
Protective equipment:	Wear self-contained respiratory protective device. Do not inhale explosion gases or combustion gases. Wear fully protective suit. Mount respiratory protective device.
 Additional information 	Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Collect contaminated fire fighting water separately. It must not enter the sewage system.
6 Accidental release measures	
 Personal precautions, protective 	
equipment and emergency	
procedures	Ensure adequate ventilation
	Keep away from ignition sources Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

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Environmental precautions:	Do not allow product to reach sewage system or any water course	(Contd. of page
	Inform respective authorities in case of seepage into water course system.	
	Do not allow to enter sewers/ surface or ground water.	
Methods and material for		
containment and cleaning up:	Dispose of the collected material according to regulations. Absorb with liquid-binding material (sand, diatomite, acid binders, binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.	universal
Reference to other sections	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.	
Protective Action Criteria for Ch		
PAC-1:		
100-42-5 styrene		20 ppm
67762-90-7 Siloxane und Silicone	, di-Me, Reaktionsprodukt mit Silica	120 mg/m ³
PAC-2:		·
100-42-5 styrene		130 ppm
67762-90-7 Siloxane und Silicone	, di-Me, Reaktionsprodukt mit Silica	1,300 mg/m ³
PAC-3:		
100-42-5 styrene		1100* ppm
		rioo ppin
67762-90-7 Siloxane und Silicone Handling and storage	, di-Me, Reaktionsprodukt mit Silica Keep receptacles tightly sealed.	7,900 mg/m ²
67762-90-7 Siloxane und Silicone Handling and storage <u>Handling:</u> Precautions for safe handling	, di-Me, Reaktionsprodukt mit Silica Keep receptacles tightly sealed. Store in cool, dry place in tightly closed receptacles. Keep away from heat and direct sunlight. Ensure good interior ventilation, especially at floor level. (Fumes a than air). Use only in well ventilated areas. Ensure good ventilation/exhaustion at the workplace.	7,900 mg/m ³
67762-90-7 Siloxane und Silicone Handling and storage	Keep receptacles tightly sealed. Store in cool, dry place in tightly closed receptacles. Keep away from heat and direct sunlight. Ensure good interior ventilation, especially at floor level. (Fumes a than air). Use only in well ventilated areas. Ensure good ventilation/exhaustion at the workplace. Keep ignition sources away - Do not smoke.	7,900 mg/m
67762-90-7 Siloxane und Silicone Handling and storage Handling: Precautions for safe handling Information about protection against explosions and fires:	Keep receptacles tightly sealed. Store in cool, dry place in tightly closed receptacles. Keep away from heat and direct sunlight. Ensure good interior ventilation, especially at floor level. (Fumes a than air). Use only in well ventilated areas. Ensure good ventilation/exhaustion at the workplace. Keep ignition sources away - Do not smoke. Protect against electrostatic charges.	7,900 mg/m
67762-90-7 Siloxane und Silicone Handling and storage Handling: Precautions for safe handling Information about protection	Keep receptacles tightly sealed. Store in cool, dry place in tightly closed receptacles. Keep away from heat and direct sunlight. Ensure good interior ventilation, especially at floor level. (Fumes a than air). Use only in well ventilated areas. Ensure good ventilation/exhaustion at the workplace. Keep ignition sources away - Do not smoke. Protect against electrostatic charges.	7,900 mg/m
67762-90-7 Siloxane und Silicone Handling and storage Handling: Precautions for safe handling Information about protection against explosions and fires: Conditions for safe storage, include	Keep receptacles tightly sealed. Store in cool, dry place in tightly closed receptacles. Keep away from heat and direct sunlight. Ensure good interior ventilation, especially at floor level. (Fumes a than air). Use only in well ventilated areas. Ensure good ventilation/exhaustion at the workplace. Keep ignition sources away - Do not smoke. Protect against electrostatic charges.	7,900 mg/m
67762-90-7 Siloxane und Silicone Handling and storage Handling: Precautions for safe handling Information about protection against explosions and fires: Conditions for safe storage, incles: Storage: Requirements to be met by	Keep receptacles tightly sealed. Store in cool, dry place in tightly closed receptacles. Keep away from heat and direct sunlight. Ensure good interior ventilation, especially at floor level. (Fumes a than air). Use only in well ventilated areas. Ensure good ventilation/exhaustion at the workplace. Keep ignition sources away - Do not smoke. Protect against electrostatic charges. uding any incompatibilities Store only in the original receptacle. Prevent any seepage into the ground. Store away from oxidizing agents.	7,900 mg/m
67762-90-7 Siloxane und Silicone Handling and storage Handling: Precautions for safe handling Information about protection against explosions and fires: Conditions for safe storage, incl Storage: Requirements to be met by storerooms and receptacles: Information about storage in one	Keep receptacles tightly sealed. Store in cool, dry place in tightly closed receptacles. Keep away from heat and direct sunlight. Ensure good interior ventilation, especially at floor level. (Fumes a than air). Use only in well ventilated areas. Ensure good ventilation/exhaustion at the workplace. Keep ignition sources away - Do not smoke. Protect against electrostatic charges. uding any incompatibilities Store only in the original receptacle. Prevent any seepage into the ground. Store away from oxidizing agents. Store away from foodstuffs. Store receptacle in a well ventilated area.	7,900 mg/m
67762-90-7 Siloxane und Silicone Handling and storage Handling: Precautions for safe handling Information about protection against explosions and fires: Conditions for safe storage, incl Storage: Requirements to be met by storerooms and receptacles: Information about storage in one common storage facility: Further information about storage	Keep receptacles tightly sealed. Store in cool, dry place in tightly closed receptacles. Keep away from heat and direct sunlight. Ensure good interior ventilation, especially at floor level. (Fumes a than air). Use only in well ventilated areas. Ensure good ventilation/exhaustion at the workplace. Keep ignition sources away - Do not smoke. Protect against electrostatic charges. uding any incompatibilities Store only in the original receptacle. Prevent any seepage into the ground. Store away from oxidizing agents. Store away from foodstuffs.	7,900 mg/m

· Additional information about design of technical systems: No further data; see item 7.

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	(Contd. of page 4)		
· Control parameters			
Components with limit values that require monitoring at the workplace:			
100-42-5 styrene			
 PEL Long-term value: 100 ppm Ceiling limit value: 200; 600* ppm *5-min peak in any 3 hrs REL Short-term value: 425 mg/m³, 100 ppm Long-term value: 215 mg/m³, 50 ppm 			
TLV Short-term value: (170) mg/r Long-term value: (85) NIC-8 BEI, NIC-A3, NIC-OTO	n ³ , (40) ppm		
Ingredients with biological limit val	ues:		
100-42-5 styrene			
BEI 400 mg/g creatinine Medium: urine Time: end of shift	s phenylglyoxylic acid (nonspecific) antitative)		
Additional information:	The lists that were valid during the creation were used as basis.		
 Exposure controls Personal protective equipment: General protective and hygienic 	De net est drink, energie er eniff utile werking		
<u>measures:</u>	Do not eat, drink, smoke or sniff while working. Use skin protection cream for skin protection. Clean skin thoroughly immediately after handling the product. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin.		
<u>Breathing equipment:</u>	Short term filter device: Filter A/P2 In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.		
 Protection of hands: 	After use of gloves apply skin-cleaning agents and skin cosmetics. Preventive skin protection by use of skin-protecting agents is recommended. The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times' data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory anylyses of the company KCL GmbH in compliance with EN374.		
	This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In case of product dilution or in case of mixture with different substances or chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: http://www.kcl.de).		
	(Contd. on page 6)		

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	(Contd. of page 5)	
	Protective gloves	
 Material of gloves 	The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation Fluorocarbon rubber (Viton) The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove	
<u>Penetration time of glove materia</u>	 material can not be calculated in advance and has therefore to be checked prior to the application. Value for the permeation: Level ≤ 6, 480min The exact break trough time has to be found out by the manufacturer of the 	
· For the permanent contact gloves		
<u>made of the following materials a</u> suitable:	r <u>e</u> Fluorocarbon rubber (Viton) Vitoject (KCL, Art_No. 890)	
 As protection from splashes glove made of the following materials a 	es a la companya de l Recompanya de la companya de la compa	
<u>suitable:</u>	Fluorocarbon rubber (Viton) Vitoject (KCL, Art_No. 890) Nitrile rubber, NBR Camatril (KCL, Art_No. 730, 731, 732, 733) Butyl rubber, BR Butoject (KCL, Art_No. 897, 898)	
Not suitable are gloves made of the following materials:	Natural rubber, NR Leather gloves	
· Eye protection:	Strong gloves	
	Tightly sealed goggles	
<u>Body protection:</u>	Protective work clothing	
9 Physical and chemical properti	es	
 Information on basic physical a General Information 	and chemical properties	
• <u>Appearance:</u> <u>Form:</u> <u>Color:</u> • <u>Odor:</u>	Fluid Amber colored Characteristic	
<u>Change in condition</u> <u>Melting point/Melting range:</u> <u>Boiling point/Boiling range:</u>	Undetermined. 145 °C (293 °F)	
· <u>Flash point:</u>	31 °C (87.8 °F)	
· Ignition temperature:	480 °C (896 °F)	
· <u>Auto igniting:</u>	Product is not selfigniting.	

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	(Contd. of page 6)
· <u>Danger of explosion:</u>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
<u>Explosion limits:</u>	
<u>Lower:</u> <u>Upper:</u>	1.2 Vol % 8.9 Vol %
 <u>Vapor pressure at 20 °C (68 °F):</u> 	6 hPa (4.5 mm Hg)
 Density at 20 °C (68 °F): 	1.1 g/cm ³ (9.18 lbs/gal)
Specific gravity at 20 °C (68 °F):	1.1 g/cm ³ (9.18 lbs/gal)
<u>Solubility in / Miscibility with</u> <u>Water:</u>	Not miscible or difficult to mix.
• <u>Viscosity:</u> <u>Dynamic:</u> <u>Kinematic:</u>	Not determined. Not determined.
<u>Solvent content:</u> <u>Organic solvents:</u>	33.3 %
Solids content: • Other information	66.8 % No further relevant information available.
10 Stability and reactivity	
· <u>Reactivity</u>	No further relevant information available.

<u>Chemical stability</u>
 <u>Thermal decomposition /</u>
 <u>conditions to be avoided:</u>

No decomposition if used and stored according to specifications.

 Reacts with strong oxidizing agents.

 Reacts with strong alkali.

 Reacts with strong acids.

 Reacts with peroxides and other radical forming substances.

 • Conditions to avoid

 • Incompatible materials:

Exothermic polymerization.

Hazardous decomposition products:

Hydrogen chloride (HCl) Nitrogen oxides (NOx) Carbon monoxide and carbon dioxide Possible in traces.

11 Toxicological information

- Information on toxicological effects
- <u>Acute toxicity:</u>

	 LD/LC50 value 	es that are	relevant for	classification:
--	-----------------------------------	-------------	--------------	-----------------

ATE (Acute Toxicity Estimate)

Oral	LD50	>6,015 mg/kg (rat)
	LD50	>5,229 mg/kg (rat)
Inhalative	LC50/4 h	35.5 mg/l (rat)

100-42-5 styrene

Т				
ſ	Oral	LD50	>2,000 mg/kg (rat)	
	Dermal	LD50	>2,000 mg/kg (rat) (OECD-Prüfrichtlinie 402)	

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	(Contd. of page 7)
Inhalative LC50/4h	9.5 mg/m3 (mouse)
LC50/4 h	11.8 mg/l (rat)
NOAEC	4.34 mg/l (rat)
 Primary irritant effect 	
• on the skin:	Irritant to skin and mucous membranes.
• <u>on the eye:</u>	Irritating effect.
 <u>Sensitization:</u> <u>Experience with hum</u> 	Sensitization possible through skin contact. <u>nans:</u> After incorporation and inhalation styrene predominantly will be metabolized in the organism to mandelic and phenylglyoxylic acid and matabolites will pass through urine excretion.
 Additional toxicologic 	•
information:	The product shows the following dangers according to internally approved calculation methods for preparations:
	Harmful
	Irritant
 Carcinogenic catego 	<u>rries</u>
IARC (International A	Agency for Research on Cancer)
100-42-5 styrene	2B
• NTP (National Toxico	ology Program)
100-42-5 styrene	R
· OSHA-Ca (Occupation	onal Safety & Health Administration)
None of the ingredie	nts is listed.

12 Ecological information

*

· <u>Toxicity</u>					
Aquatic toxicity:					
100-42-5 s	tyrene				
EC50/96h	0.15-3.2 mg/l (Pseudokirchneriella subcapitata)				
EC50	500 mg/l (BES) (ISO Vorschrift 8192-1986 E)				
	5.5 mg/l (Photobac. phosphoreum)				
IC50/72h	4.9 mg/l (green alge)				
	1.4 mg/l (selenastrum capricornutum)				
IC5/8d	>200 mg/l (Scenedesmus quadricauda)				
EC10/16h	72 mg/l (pseudomonas putida)				
EC50/16h	>72 mg/l (pseudomonas putida)				
EC50/8d	>200 mg/l (Scenedesmus quadricauda)				
EC50/72u	>1-<10 mg/l (green alge)				
EC20/0.5h	140 mg/l (BES) (OECD 209)				
NOEC/21d	1.01 mg/l (daphnia magna)				
EC10	0.28 mg/l (Pseudokirchneriella subcapitata) (EPA OTS 797.1050)				
EC50/48h	0.56 mg/l (green alge)				
	3.3-7.4 mg/l (daphnia magna)				
EC50/72h	0.46-4.3 mg/l (Pseudokirchneriella subcapitata)				
LC50/96h	>1-<10 mg/l (piscis)				
	19.03-33.53 mg/l (lem)				
	3.24-4.99 mg/l (pimephales promelas)				
	6.75-14.5 mg/l (Pimephales promelas)				
	58.75-95.32 mg/l (poecilia reticulata)				
LC50/72h	4.9 mg/l (green alge)				
	(Contd on page 9)				

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 Persistence and degradability Behavior in environmental system 	(Contd. of page 8) No further relevant information available.	
Bioaccumulative potential Mobility in soil Additional ecological informatio	No further relevant information available. No further relevant information available.	
 General notes: Results of PBT and vPvB assess 	Water hazard class 2 (Self-assessment): hazardous for water sment	
· <u>PBT:</u> · <u>vPvB:</u> · <u>Other adverse effects</u>	Not applicable. Not applicable. No further relevant information available.	
13 Disposal considerations		
 <u>Waste treatment methods</u> <u>Recommendation:</u> 	Must not be disposed of together with household garbage. Do not allow product to reach sewage system.	
<u>Uncleaned packagings:</u> <u>Recommendation:</u>	Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.	
• <u>Recommended cleansing agent:</u>	Alcohol	
14 Transport information		
· <u>UN-Number</u> · <u>DOT, ADR, IMDG, IATA</u>	UN1866	
· UN proper shipping name		
• <u>DOT</u>	Resin solution	
· <u>ADR</u>	1866 RESIN SOLUTION	
· <u>IMDG, IATA</u>	RESIN SOLUTION	
 Transport hazard class(es) 		
· <u>DOT, IMDG, IATA</u>		
· <u>Class</u> · <u>Label</u>	3 Flammable liquids 3	
· <u>ADR</u>		
· <u>Class</u> · <u>Label</u>	3 (F1) Flammable liquids 3	
· <u>Packing group</u> · <u>DOT, ADR, IMDG, IATA</u>	III	
Environmental hazards: Marine pollutant:	No	
• Special precautions for user	Warning: Flammable liquids	
 <u>Danger code (Kemler):</u> <u>EMS Number:</u> 	- F-E, <u>S-E</u>	
	(Contd. on page 10) US	

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		(Contd. of page 9)		
· Stowage Category	A			
· Transport in bulk according to Annex II of				
MARPOL73/78 and the IBC Code	Not applicable.			
· Transport/Additional information:				
 <u>ADR</u> <u>Excepted quantities (EQ)</u> 	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml			
 <u>IMDG</u> <u>Limited quantities (LQ)</u> <u>Excepted quantities (EQ)</u> 	5L Code: See SP340			
· UN "Model Regulation":	UN 1866 RESIN SOLUTION, 3, III			

15 Regulatory information

• <u>Safety, health and environmental regulations/legislation specific for the substance or mixture</u> • <u>Sara</u>

· Sectior 355 (extremely hazardous substances):

None of the ingredient is listed.

· Sectior 313 (Specific toxic chemical listings):

100-42-5 styrene

<u>TSCA (Toxic Substances Control Act):</u>

All ingredients are listed. • California Prop.65



WARNING This product can expose you to a chemical, Styrene, which is known to the state of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Proposition 65					
<u>Chemicals known to cause cancer:</u>					
100-42-5 styrene					
Chemicals known to cause reprodu	ctive toxicity for females:				
None of the ingredients is listed.	None of the ingredients is listed.				
Chemicals known to cause reprodu	ictive toxicity for males:				
None of the ingredients is listed.					
Chemicals known to cause develop	omental toxicity:				
None of the ingredients is listed.					
· Cancerogenity categories					
EPA (Environmental Protection Age	EPA (Environmental Protection Agency)				
None of the ingredients is listed.					
· TLV (Threshold Limit Value establis	shed by ACGIH)				
100-42-5 styrene	A4				
• MAK (German Maximum Workplac	e Concentration)				
100-42-5 styrene	5				
NIOSH-Ca (National Institute for Occupational Safety and Health)					
None of the ingredients is listed.					
· GHS label elements	The product is classified and labeled according to the Globally Harmonized System (GHS).				

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Trade name: IVORY Knife Grade Adhesive

· Hazard pictograms

(Contd. of page 10)

	GHS02 GHS07 G	HS08
· <u>Signal word</u>	Warning	
· Hazard-determining components		
of labeling: • Hazard statements	H335 May cause r	
Precautionary statements	P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.
	P260 P280 P303+P361+P353	Do not breathe vapours. Wear protective gloves/protective clothing/eye protection/face protection. If on skin (or hair): Take off immediately all contaminated
		clothing. Rinse skin with water/shower. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P314 P403+P233 P403+P235 P405	Get medical advice/attention if you feel unwell. Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
	P501	Dispose of contents/container in accordance with local/ regional/national/international regulations.
· National regulations:		
-		tions concerning young persons must be observed. ictions concerning pregnant and lactating women must be
· Water hazard class:	Water hazard clas	s 2 (Self-assessment): hazardous for water.
· <u>VOC USA</u> · <u>Chemical safety assessment:</u>	365.8 g/l / 3.05 lb/g A Chemical Safety	gal Assessment has not been carried out.
	,	
16 Other information		
This information is based on our pa product features and shall not esta		lowever, this shall not constitute a guarantee for any specific contractual relationship.
 <u>Department issuing SDS:</u> <u>Date of preparation / last revision</u> <u>Abbreviations and acronyms:</u> 	fer (Regulations Conce ICAO: International Civ ADR: Accord européer Agreement concerning IMDG: International Ma DOT: US Department of IATA: International Air ACGIH: American Con EINECS: European Lis CAS: Chemical Abstrac NFPA: National Fire Pr	Transport Association ference of Governmental Industrial Hygienists entory of Existing Commercial Chemical Substances t of Notified Chemical Substances cts Service (division of the American Chemical Society) otection Association (USA) erials Identification System (USA)
		(Contd. on page 12) US

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		(Contd. of page 11)
	LD50: Lethal dose, 50 percent	· · · · · · · · · · · · · · · · · · ·
	PBT: Persistent, Bioaccumulative and Toxic	
	vPvB: very Persistent and very Bioaccumulative	
	NIOSH: National Institute for Occupational Safety	
	OSHA: Occupational Safety & Health	
	TLV: Threshold Limit Value	
	PEL: Permissible Exposure Limit	
	REL: Recommended Exposure Limit	
	BEI: Biological Exposure Limit	
	Flam. Lig. 3: Flammable liquids – Category 3	
	Acute Tox. 4: Acute toxicity – Category 4	
	Carc. 2: Carcinogenicity – Category 2	
	Repr. 2: Reproductive toxicity – Category 2	
	STOT SE 3: Specific target organ toxicity (single exposure) – Category 3	
	STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2	
	Asp. Tox. 1: Aspiration hazard – Category 1	
 International Product Registration 		
Status	AUS (Australian Inventory of Chemical Substances, AICS)	
	CDN (Canadian Domestic Substances List, DSL)	

CDN (Canadian Domestic Substances List, DSL) ROK (Korean Existing Chemical Inventory, ECI)