



### MemBond PVC Membrane Contact Adhesive

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1	Product Identifier		
	Product name	MemBond PVC Membrane Contact Adhesive	
1.2	Relevant identified uses of the substance or mixture and uses advised against		
	Identified uses	Adhesive	
	Uses advised against	No specific uses advised against are identified	
1.3	Details of the supplier of the safety data sheet	Moy Materials Ltd. Columbia Mills, 14/15 Sir John Rogerson's Quay, Dublin 2, D02 E409 Ireland info@moy.group	
1.4	Emergency telephone numbers		
	Emergency telephone	+44 (0) 1827 69662 (NOT 24hrs – 8am – 5pm Mon-Fri)	
	National emergency telephone	National Poisons Information Service (UK) TEL: 0844 892 0111 (healthcare professionals only)	

### **SECTION 2: HAZARD IDENTIFICATION**

2.1	Classification of the substance or mixture			
	Classification (SI 2019 No. 720)			
	Physical hazards	Flam. Liq. 2 - H225		
	Health hazards	Eye Irrit. 2 - H319 Skin Sens. 1 - H317 STOT SE 3 - H336		
	Environmental hazards	Not Classified		
	Human health	Vapours/aerosol spray may irritate the respiratory system.		
	Physicochemical	The product is highly flammable. Vapours may form explosive mixtures with air.		
2.2	Label elements			
	Hazard pictograms			
	Signal word	Danger		
	Hazard statements	H225 Highly flammable liquid and vapour.		
		H319 Causes serious eye irritation.		
		H317 May cause an allergic skin reaction.		
		H336 May cause drowsiness or dizziness.		
	Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.		
		P260 Do not breathe vapour/ spray.		
		P280 Wear protective gloves/ protective clothing/ eye		
		protection/ face protection.		
		P281 Use personal protective equipment as required.		
		P284 [In case of inadequate ventilation] wear respiratory		
		protection.		
		P305+P351+P338 IF IN EYES: Rinse cautiously with water for		







		several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  P313 Get medical advice/ attention.  P501 Dispose of contents/ container in accordance with national
	Contains	butanone, ACETONE, Formaldehyde, oligomeric reaction products with phenol
2.3	Other hazards	products with phenor

### **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Mixtures				
butanone				30-60%
CAS number: 78-93-3	EC num	ber: 201-159-0		
Classification				
Flam. Liq. 2 - H225				
Eye Irrit. 2 - H319				
STOT SE 3 - H336				
ACETONE				10-30%
CAS number: 67-64-1	EC num	ber: 200-662-2		
Classification				
Flam. Liq. 2 - H225				
Eye Irrit. 2 - H319				
STOT SE 3 - H336				
Formaldehyde, oligon products with phenol CAS number: 9003-35		EC number: 500-005-2	2	5-10%
Classification				
Eye Irrit. 2 - H319 Skin Sens. 1 - H317				
Aquatic Chronic 3 - H4	112			
/ Addition of the state of the	T 1 2 2			
VINYL CHLORIDE /VIN TERPOLYMER CAS nur				1-5%
09-8				
Classification				
Eye Irrit. 2 - H319				
STOT SE 3 - H335				





VINYL ACETATE	50 1 200 545 4	<1%
CAS number: 108-05-4	EC number: 203-545-4	
Classification		
Flam. Liq. 2 - H225		
Acute Tox. 4 - H332		
Carc. 2 - H351		
STOT SE 3 - H335  VINYL CHLORIDE		<1%
VINYL CHLORIDE	EC number: 200-831-0	<1%
<b>VINYL CHLORIDE</b> CAS number: 75-01-4	EC number: 200-831-0	<1%
VINYL CHLORIDE CAS number: 75-01-4 Classification	EC number: 200-831-0	<1%
VINYL CHLORIDE CAS number: 75-01-4 Classification Flam. Gas 1A - H220	EC number: 200-831-0	<1%
	EC number: 200-831-0	<1%

### **SECTION 4: FIRST AID MEASURES**

	Description of first aid measures		
4.1	General information	Get medical attention if any discomfort continues.	
	Inhalation	Remove affected person from source of contamination. Move	
		affected person to fresh air and keep warm and at rest in a	
		position comfortable for breathing.	
	Ingestion	Rinse mouth thoroughly with water. Get medical attention.	
	Skin contact	Remove contaminated clothing immediately and wash skin with	
		soap and water.	
	Eye contact	Rinse immediately with plenty of water. Remove any contact	
		lenses and open eyelids wide apart. Continue to rinse for at least	
		15 minutes. Get medical attention immediately.	
4.2	Most important symptoms and effects, both acute and delayed		
	General information	The severity of the symptoms described will vary dependent on	
		the concentration and the length of exposure.	
	Inhalation	Vapours may cause headache, fatigue, dizziness and nausea.	
	Ingestion	May cause discomfort if swallowed. May cause stomach pain or	
		vomiting.	
	Skin contact	Prolonged skin contact may cause redness and irritation.	
	Eye contact	May cause temporary eye irritation.	
4.3	Indication of any immediate medical attention and speci	al treatment needed	
	Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.	

### **SECTION 5: FIREFIGHTING MEASURES**

5.1	Extinguishing media		
	Suitable extinguishing media	Use fire-extinguishing media suitable for the surrounding fire.	
		Extinguish with alcohol-resistant foam, carbon dioxide or dry	







		powder.
	Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
5.2	Special hazards arising from the substance or mix	<u>ture</u>
	Specific hazards	The product is flammable. Heating may generate flammable vapours. Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m <sup>3</sup> . The product is highly flammable.
	Hazardous combustion products	Does not decompose when used and stored as recommended.
5.3	Advice for firefighters	
	Protective actions during firefighting	Control run-off water by containing and keeping it out of sewers and watercourses. Avoid breathing fire gases or vapours. Keep up-wind to avoid fumes.
	Special protective equipment for firefighters	Wear chemical protective suit.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

6.1	Personal precautions, protective equipment and emergency procedures			
	Personal precautions	Wear protective clothing as described in Section 8 of this safety		
		data sheet.		
6.2	Environmental precautions			
	Environmental precautions	Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. Do not discharge into drains or watercourses or onto the ground.		
6.3	Methods and material for containment and cleaning up			
	Methods for cleaning up	Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb in vermiculite, dry sand or earth and place into containers.		
6.4	Reference to other sections			
	Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.		

### **SECTION 7: HANDLING AND STORAGE**

7.1	Precautions for safe handling	
	Usage precautions	Keep away from heat, sparks and open flame. Static electricity and formation of sparks must be prevented. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.
7.2	Conditions for safe storage, including any incompatibilities	<u>s</u>
	Storage precautions	Keep away from heat, sparks and open flame. Keep container





### MemBond PVC Membrane Contact Adhesive

		tightly closed. Keep only in the original container.	
	Storage class	Flammable liquid storage.	
7.3	Specific end use(s)		
	Specific end use(s)	The identified uses for this product are detailed in S	Section 1.2.

### **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

1	Control parameters				
	Occupational exposure limits				
	butanone				
	Long-term exposure limit (8-hour TWA): WEL 200 ppm 600 mg/m <sup>3</sup>				
	Short-term exposure limit (15-minute): WEL 300 ppm 899 mg/m³				
	Sk, BMGV				
	ACETONE				
	Long-term exposure limit (8-hour TWA): WEL 500 ppm 1210 mg/m³				
	Short-term exposure limit (15-minute): WEL 1500 ppm 3620 mg/m <sup>3</sup>				
	VINYL ACETATE				
	Long-term exposure limit (8-hour T	WA): WEL 5 ppm 17.6 mg/m <sup>3</sup>			
	Short-term exposure limit (15-minu	ite): WEL 10 ppm 35.2 mg/m <sup>3</sup>			
	VINYL CHLORIDE				
	Long-term exposure limit (8-hour T	WA): WEL 3 ppm			
	Short-term exposure limit (15-minu	ite): WEL			
	WEL = Workplace Exposure Limit.				
	Sk = Can be absorbed through the s	kin.			
	BMGV = Biological monitoring guida	ance value			
	Ingredient comments	WEL = Workplace Exposure Limits			
		<u>butanone (CAS: 78-93-3)</u>			
	Ingredient comments	WEL = Workplace Exposure Limits			
	Biological limit values	Short Term Value: 300ppm Long Term Value: 200ppm			
	biological liftit values	Short Term value. Sooppin Long Term value. Zooppin			
	DNEL	Consumer - Oral; Long term systemic effects: 31 mg/kg bw/day			
		Consumer - Dermal; Long term systemic effects: 412 mg/kg bw/day			
		Workers - Dermal; Long term systemic effects: 1161 mg/kg bw/day			
		Consumer - Inhalation; Long term systemic effects: 106 mg/m <sup>3</sup>			
		Workers - Inhalation; Long term systemic effects: 600 mg/m <sup>3</sup>			
	PNEC	- Fresh water; 55.8 mg/l			
		- Sediment (Freshwater); 284.7 mg/kg			
		- Intermittent release; 55.8 mg/l			
		- Sediment (Marinewater); 284.7			
		- marine water; 55.8 mg/l			
		- STP; 709 mg/l			
		-			
		- Soil: 22.5 mg/kg			
		- Soil; 22.5 mg/kg			







		ACETONE (CAS: 67-64-1)		
	Ingredient comments	WEL = Workplace Exposure Limits		
8.2	Exposure controls			
	Protective equipment			
	Appropriate engineering controls	Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients. Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.		
	Eye/face protection	The following protection should be worn: Chemical splash goggles.		
	Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Nitrile rubber. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended.		
	Other skin and body protection	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Wear apron or protective clothing in case of contact.		
	Hygiene measures	Use engineering controls to reduce air contamination to permissible exposure level.  Provide eyewash station. Wash contaminated clothing before reuse. Wash hands after handling. Eating, smoking and water fountains prohibited in immediate work area.		
	Respiratory protection	In confined or poorly-ventilated spaces, a supplied-air respirator must be worn. Wear a respirator fitted with the following cartridge: ABEK2-P3.		
	Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.		

### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

9.1	Information on basic physical and chemical properties		
	Appearance	Liquid.	
	Colour	Amber	
	Odour	Characteristic.	
	Odour threshold	Not available.	
	рН	Not available.	
	Melting point	Not available.	
	Initial boiling point and range	55-57°C Estimated value.	
	Flash point	-18°C Estimated value.	
	Evaporation rate	Not determined.	
	Evaporation factor	Not available.	
	Flammability (solid, gas)	Not available.	
	Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.8% v/v Upper	
		flammable/explosive limit: 13% v/v	
	Other flammability	Not available.	







	Vapour pressure	Not available.
	Vapour density	Not available.
	Relative density	0.83 @ 20°C
	Bulk density	Not available.
	Solubility(ies)	Insoluble in water.
	Partition coefficient	Not available.
	Auto-ignition temperature	515°C
	Decomposition Temperature	Not available.
	Viscosity	Kinematic viscosity > 20.5 mm <sup>2</sup> /s.
	Explosive properties	Not available.
	Explosive under the influence of a flame	Not considered to be explosive.
	Oxidising properties	Not available.
	Comments	Information given is applicable to the product as supplied.
9.2	Other information	
	Other information	No information required.
	Refractive index	Not available.
	Particle size	Not available.
	Molecular weight	Not available.
	Volatility	Not available.
	Saturation concentration	Not available.
	Critical temperature	Not available.

### **SECTION 10: STABILITY AND REACTIVITY**

10.1	Reactivity	
	Reactivity	There are no known reactivity hazards associated with this product.
10.2	Chemical stability	
	Stability	No particular stability concerns. Stable at normal ambient
		temperatures and when used as recommended.
10.3	Possibility of hazardous reactions	
	Possibility of hazardous reactions	Not applicable. Not relevant.
10.4	Conditions to avaid	
10.4	Conditions to avoid	
	Conditions to avoid	Avoid heat, flames and other sources of ignition.
10.5	Incompatible materials	
	Materials to avoid	Strong oxidising agents. Strong acids. Strong alkalis.
10.6	Hazardous decomposition products	
	Hazardous decomposition products	Does not decompose when used and stored as recommended.
		Thermal decomposition or combustion may liberate carbon oxides
		and other toxic gases or vapours. Oxides of carbon. Oxides of
		nitrogen.

### **SECTION 11: TOXICOLOGICAL INFORMATION**

11.1	Information on toxicological effects	
	Toxicological information on ingredients.	





### MemBond PVC Membrane Contact Adhesive

	butanone
Acute toxicity - inhalation	
ATE inhalation (LC <sub>50</sub> vapours mg/l)	20.0
ATE inhalation (vapours mg/l)	20.0
	<u>ACETONE</u>
Other health effects	There is no evidence that the product can cause cancer.
Acute toxicity - oral	
Acute toxicity oral (LD <sub>50</sub> mg/kg)	5,800.0
Species	Rat
ATE oral (mg/kg)	5,800.0
Acute toxicity - dermal	
Acute toxicity dermal (LD <sub>50</sub> mg/kg)	7,426.0
Species	Rat
ATE dermal (mg/kg)	7,426.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC <sub>50</sub> vapours mg/l)	50,100.0
Species	Rat
ATE inhalation (vapours mg/l)	50,100.0
Skin corrosion/irritation	
Extreme pH	Slightly irritating.
Serious eye damage/irritation	
Serious eye damage/irritation	Moderately irritating
Respiratory sensitisation	
Respiratory sensitisation	Not sensitising.
	VINYL ACETATE
Acute toxicity - inhalation	
Acute toxicity inhalation (LC <sub>50</sub> gases ppmV)	4,490.0
Species	Rat
ATE inhalation (LC <sub>50</sub> vapours mg/l)	4,490.0
Species	Rat
Carcinogenicity	
IARC carcinogenicity	IARC Group 2B Possibly carcinogenic to humans.

### **SECTION 12: ECOLOGICAL INFORMATION**

12.1	<u>Toxicity</u>		
	<b>Ecological information on ingredients.</b>		
		<u>butanone</u>	
	Acute aquatic toxicity		
	Acute toxicity - fish	LC <sub>50</sub> , EC <sub>50</sub> , IC <sub>50</sub> , : 100 mg/l, Fish	
	Acute toxicity - aquatic plants	LC <sub>50</sub> , EC <sub>50</sub> , IC <sub>50</sub> , : 100 mg/l, Algae	





		ACETONE	
	Toxicity	Not considered toxic to fish.	
	Acute aquatic toxicity		
	Acute toxicity - fish	LC50, 96 hours: 5540 mg/l, Freshwater fish	
		, 96 hours: 11000 mg/l, Marinewater fish	
		LC <sub>50</sub> , 96 hours: 11000 mg/l, Fish	
	Acute toxicity - aquatic invertebrates	EC <sub>50</sub> , 48 hours: 8800 mg/l, Daphnia magna	
		EC <sub>50</sub> , 48 hours: 8800 mg/l, Daphnia magna	
		G. 7. 1	
	Acute toxicity - aquatic plants	IC <sub>50</sub> , 72 hours: 430 mg/l, Algae	
	, , , , , , , , , , , , , , , , , , , ,	30, 31 31 31	
	Acute toxicity - microorganisms	, 30 minutes: 1000 mg/l, Activated sludge	
12.2	Persistence and degradability		
	<b>Ecological information on ingredients.</b>		
		ACETONE	
		ACLIONE	
	Persistence and degradability	The product is expected to be biodegradable.	
40.0	<u> </u>		
12.3	Bioaccumulative potential		
	Partition coefficient	Not available.	
	Ecological information on ingredients		
		<u>ACETONE</u>	
	Bioaccumulative potential	The product does not contain any substances expected to be	
		bioaccumulating.	
		BCF: 3,	
	Partition coefficient	Pow: < -0.24	
12.4	Mobility in soil		
	Mobility	The product contains volatile organic compounds (VOCs)	
		which will evaporate easily from all surfaces.	
	Ecological information on ingredients		
		<u>butanone</u>	
	8.0 1 1111	T	•11
	Mobility	The product contains volatile organic compounds (VOCs) which	WIII
		evaporate easily from all surfaces.	
		<u>ACETONE</u>	
	Mobility	The product is miscible with water and may spread in water sys	stems.
	Adsorption/desorption coefficient	Water - log Koc: 1.5 @ 20°C	
	Henry's law constant	2929-3070 Pa m3/mol @ 25°C	

Page | 9 12.12.2024 | Version: 2.0





12.5	Results of PBT and vPvB assessment	
	Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.
	<b>Ecological information on ingredients</b>	
		<u>butanone</u>
	Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.
		ACETONE
	Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.
12.6	Other adverse effects	
	Other adverse effects	None known.
	<b>Ecological information on ingredients</b>	
		butanone
	Other adverse effects	Not applicable.
		ACETONE
	Other adverse effects	Not applicable.

### **SECTION 13: DISPOSAL CONSIDERATIONS**

13.1	Waste treatment methods		
	General information	Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.	
	<b>Disposal methods</b> Dispose of waste to licensed waste disposal site in accordance with t requirements of the local Waste Disposal Authority		

### **SECTION 14: TRANSPORT INFORMATION**

14.1	<u>UN number</u>	
	UN No. (ADR/RID)	1133
	UN No. (IMDG)	1133
	UN No. (ICAO)	1133
14.2	UN proper shipping name	
	Proper shipping name (ADR/RID)	ADHESIVES
	Proper shipping name (IMDG)	ADHESIVES
	Proper shipping name (ICAO)	ADHESIVES
	Proper shipping name (ADN)	ADHESIVES
14.3	Transport hazard class(es)	

Page | 10 12.12.2024 | Version: 2.0







	ADR/RID class	3
	ADR/RID label	3
	IMDG class	3
	ICAO class/division	3
	Transport labels	
	3	
14.4	Packing group	
	ADR/RID packing group	II
	IMDG packing group	II
	ICAO packing group	II
14.5	Environmental hazards	
	Environmentally hazardous substance/marine pollutant	No
14.6	Special precautions for user	
	EmS	F-E, S-D
	Hazard Identification Number (ADR/RID)	33
	Tunnel restriction code	(D/E)
14.7	Transport in bulk according to Annex II of MARPOL and the	ne IBC Code

### **SECTION 15: REGULATORY INFORMATION**

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture			
	National regulations	Health and Safety at Work etc. Act 1974 (as amended).		
		The Control of Substances Hazardous to Health Regulations 2002 (SI 2002		
		No. 2677) (as amended).		
		The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).		
		Control of Substances Hazardous to Health Regulations 2002 (as amended).		
	EU legislation	Commission Directive 91/322/EEC of 29 May 1991 on establishing indicative limit values by implementing Council Directive 80/1107/EEC on the protection of workers from the risks related to exposure to chemical, physical and biological agents at work.		
15.2	Chemical safety assessment	No chemical safety assessment has been carried out.		

### **SECTION 16: OTHER INFORMATION**

Issued by	Compliance	
Revision date	07/06/2022	
Revision	21	
Supersedes date	08/11/2021	
Hazard statements in full	H220 Extremely flammable gas.	
	H225 Highly flammable liquid and vapour.	





	H317 May cause an allergic skin reaction.	
	H319 Causes serious eye irritation.	
	H332 Harmful if inhaled.	
	H335 May cause respiratory irritation.	
	H336 May cause drowsiness or dizziness.	
	H350 May cause cancer.	
	H351 Suspected of causing cancer.	
	H412 Harmful to aquatic life with long lasting effects.	
Store Between	Store Between 5°C-25°C	
st update date (Manufacturer)	07/06/2022 (Rev 21)	

Last update date (Manufacturer)	07/06/2022 (Rev 21)
Moy Materials Ltd version prepared by	Martin Bidewell (28/02/2023 v1)

The data contained in this document is correct on date of issue and complete to the best of our knowledge as it applies to this product. However, it does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship. The information given does not represent an assurance and it is the user's responsibility to ensure that the information is suitable and complete for the respective use.

12.12.2024 | Version: 2.0

Page | 12