SAFETY DATA SHEET



according to Workplace Safety and Health Regulations Singapore

Easy-Mix PE-PP 45 Structural Acrylic Adhesive Resin

Section 1. Identification

Product identifier	:	Easy-Mix PE-PP 45 Structural Acrylic Adhesive Resin
Product code	:	106601

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

Adhesives-Construction Products

Supplier's details	: WEICON GmbH & Co. KG Königsberger Str. 255 48157 Münster Germany Phone: +49 251 93220 Fax: +49(0)251 / 9322 - 244 Internet: www.weicon.de
e-mail address of person responsible for this SDS	: msds@weicon.de
Emergency telephone number	: EMERGENCY CONTACT – UK, UAE, South Africa (24h): Tel: ++44 1865 407333 (English) TRANSPORT EMERGENCY CONTACT - UK, UAE, South Africa (24h): Tel: ++44 1865 407333 (English)

Section 2. Hazards identification

Classification of the substance or mixture			TIZATION - Category 1 REPRODUCTION - Categ	ory 1B
GHS label elements, inclu	iding pre	cautionar	<u>y statements</u>	
Hazard pictograms	:		$\mathbf{\wedge}$	

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Signal word	:	Danger
Hazard statements	:	H317 - May cause an allergic skin reaction. H360 - May damage fertility or the unborn child.
Precautionary statements		
Prevention	:	 P201 - Obtain special instructions before use. P280 - Wear protective gloves: > 8 hours (breakthrough time): nitrile rubber. Wear protective clothing. Wear eye or face protection. P261 - Avoid breathing vapor.
Response	:	 P308 + P313 - IF exposed or concerned: Get medical advice or attention. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.
Storage	:	P405 - Store locked up.
Disposal	:	P501 - Dispose of waste according to applicable legislation.
Other hazards which do not result in classification	:	None known.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Ingredient name	%	CAS number
tetrahydrofurfuryl methacrylate	≥50 - ≤75	2455-24-5
2-ethylhexyl methacrylate	≥10 - ≤25	688-84-6
1-[2-[(2-Methyl-1-oxo-2-propen-1-yl)oxy]ethyl] butanedioate	<10	20882-04-6
succinic anhydride	<1	108-30-5
2-hydroxyethyl methacrylate	≤0.3	868-77-9

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Chemical formula : Not applicable.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower
Lyc contact	eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Most important symptoms/ef	ects, acute and delayed
Potential acute health effect	
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sympton	oms
Eye contact	: No specific data.
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

Section 4. First aid measures

Skin contact	: Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	· No action shall be taken involving any personal risk or without suitable training. If it

Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it
	is suspected that fumes are still present, the rescuer should wear an appropriate
	mask or self-contained breathing apparatus. It may be dangerous to the person
	providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing
	thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides
Special protective actions for fire-fighters	 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	 Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures		
For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

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Section 6. Accidental release measures

Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for co	ontainment and cleaning up

Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop
	up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

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Precautions for safe handling	1	
Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Do not store below the following temperature: 0°C (32°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters	
Occupational exposure lin	<u>nits</u>
None.	
Appropriate engineering controls	: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
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.
Individual protection measure	ures
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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Section 8. Exposure controls/personal protection

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Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. > 8 hours (breakthrough time): nitrile rubber Recommended : 1 - 4 hours (breakthrough time): nitrile rubber ; 4 - 8 hours (breakthrough time): Viton®/butyl rubber
Body protection	 Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended : organic vapor (Type AX) and particulate filter

Section 9. Physical and chemical properties

Appearance

Appearance		
Physical state	:	Liquid.
Color	:	Off-white.
Odor	:	Strong. Aldehyde-like.
Odor threshold	:	Not available.
рН	:	Not applicable.
Melting point/freezing point	:	Not applicable.
Boiling point, initial boiling point, and boiling range	:	>110°C (>230°F)
Flash point	:	Closed cup: >93.3°C (>199.9°F)
Evaporation rate	:	Not available.
Flammability	:	Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge. Flammable in the presence of the following materials or conditions: heat.
Lower and upper explosion	:	Not available.

Lower and upper explosion : Not available. limit/flammability limit

Vapor pressure

	Vapor Pressure at 20°C			Vapor pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
2-hydroxyethyl methacrylate	0.06	0.008	OECD 104			
2-ethylhexyl methacrylate	0.05	0.0067	OECD 104			
2-[(2-methyl-1-oxoallyl)oxy]ethyl acetoacetate	0	0				
succinic anhydride	0	0				
elative vapor density	: Not ava	ailable.	•			·
elative density	: Not ap	plicable.				
ensity	: 0.96 to	1 g/cm ³ [20	°C (68°F)]			

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Section 9. Physical and chemical properties

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Solubility(ies)

Not available.

Solubility in water Miscible with water		Not available. No.
Partition coefficient: n- octanol/water	:	Not applicable.
Auto-ignition temperature	:	
Ingredient name		°C

Ingredient name		°C	°F	Method
2-ethylhexyl methacrylate		250	482	EU A.15
Decomposition temperature	: Not availat	ble.	1	
Viscosity	: Dynamic: 7	17000 to 36000 mP	a∙s (17000 to 3600	00 cP)
Flow time (ISO 2431)	: Not availab	ole.		
Particle characteristics				
Median particle size	: Not applica	able.		

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SADT	: Not available.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity							
Product/ingredient name	Result	Species	Dose	Exposure			
succinic anhydride	LD50 Oral	Rat	1510 mg/kg	-			
2-hydroxyethyl methacrylate	LD50 Oral	Rat	5050 mg/kg	-			

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
succinic anhydride	Eyes - Severe irritant	Rabbit	-	750 ug	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Section 11. Toxicological information

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name			Category	Route of exposure	Target organs
1-[2-[(2-Methyl-1-oxo-2-propen-1-yl)oxy]ethyl] butanedioate		Category 3	-	Respiratory tract irritation	
Specific target organ toxic	ity (repea	<u>ted exposure)</u>			
Not available.					
Aspiration hazard					
Not available.					
nformation on the likely outes of exposure	: Not a	vailable.			
Potential acute health effec	<u>ts</u>				
Eye contact	: No kr	nown significant eff	fects or critical haz	ards.	
Inhalation	: No kr	No known significant effects or critical hazards.			
Skin contact	: May	May cause an allergic skin reaction.			
Ingestion	: No known significant effects or critical hazards.				
Symptoms related to the ph	ysical, ch	emical and toxico	ological character	<u>ristics</u>	
Eye contact	: No sp	pecific data.			
Inhalation	reduc incre	rse symptoms may ced fetal weight ase in fetal deaths tal malformations	/ include the follow	ing:	
Skin contact	irritat redne reduc incre		/ include the follow	ing:	
Ingestion	reduc increa	rse symptoms may ced fetal weight ase in fetal deaths tal malformations	<i>i</i> include the follow	ing:	
Delayed and immediate effe	ects and a	so chronic effect	s from short and	long term exposi	ure
<u>Short term exposure</u> Potential immediate effects	: Not a	vailable.			
Potential delayed effects	: Not a	vailable.			

<u>Long term exposure</u>	
Potential immediate	: Not available.
effects	

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

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Section 11. Toxicological information

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General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: May damage the unborn child.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
succinic anhydride 2-hydroxyethyl methacrylate				N/A N/A	N/A N/A

Acute toxicity estimates

	ATE value
Not available.	

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
tetrahydrofurfuryl methacrylate	Acute LC50 34700 µg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
2-hydroxyethyl methacrylate	Acute LC50 227000 µg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours

Persistence/degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
2-ethylhexyl methacrylate	4.95	37	low
succinic anhydride	2.44	-	low
2-hydroxyethyl methacrylate	0.42	-	low

Mobility in soil

Soil/water partition
coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	ΙΑΤΑ	ADR/RID
UN number	Not available.	Not available.	Not available.	Not available.
UN proper shipping name	Not available.	Not available.	Not available.	Not available.
Transport hazard class(es)	Not available.	Not available.	Not available.	Not available.
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

Additional information

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to IMO instruments

Section 15. Regulatory information

Singapore - hazardous chemicals under government control

None.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Section 15. Regulatory information

Inventory list	
Australia	: Not determined.
Canada	: Not determined.
China	: Not determined.
Eurasian Economic Union	: Russian Federation inventory: Not determined.
Japan	: Japan inventory (CSCL): Not determined. Japan inventory (ISHL): Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: Not determined.
Thailand	: All components are listed or exempted.
Turkey	: Not determined.
United States	: Not determined.
Viet Nam	: Not determined.

Section 16. Other information

History	
Date of printing	: 5/14/2023
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Version	: 1.04
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group UN = United Nations

Procedure used to derive the classification

Classification	Justification
SKIN SENSITIZATION - Category 1	Calculation method
TOXIC TO REPRODUCTION - Category 1B	Calculation method

References

: Not available.

✓ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.