

## SAFETY DATA SHEET

Docur	nent ID : SDSCLP-03	Issue Date	: 03 April 2015			
Revisi	on : 4	Supersedes date	: 26 March 2015			
1.	IDENTIFICATION OF THE SUBSTANCE AND OF	THE COMPANY				
1.1	Identification of product					
	Product Name	: Phenolic microspheres				
	Trade Name	: <b>PHENOSET</b> microspheres				
	Chemical name Manufacturer product ID		: Phenol formaldehyde polymer, cured : BJO-0930, BJO-0840, EPO-0360, SPO-0620			
1.2	<b>Use of product</b> Functional filler for composites					
1.3	Company Identification					
	MALAYAN ADHESIVES & CHEMICALS SDN. B No. 9, Jalan Utas 15/7, 40200 Shah Alam, Selangor Darul Ehsan, MALAYSIA		+603-5566 1188 :+603-5566 1122			
	Importer/Distributor:					
1.4	Emergency telephone					
	+603-5566 1188					
2.	HAZARDS IDENTIFICATION					
	Not classified as hazardous for use/supply					
	Dust may cause irritation, experienced as stinging with excessive blinking and tear production.					
	Material may contain trace amount (<0.2%) of free formaldehyde, which is listed by IARC, NTP and OSHA as a carcinogen. There should be minimal risk when adequate ventilation is used due to the very low formaldehyde concentration.					

	Ingredient	CAS no.	EC no.	Weight %	Risk phrases	Hazard Statements	
	Fully polymerized phenolic resin, inert	NA	NA	>99.8	None	None	
	Formaldehyde*	50-00-0	200-001-8	<0.2	R45, R68, R23/24/25, R34, R43	H350, H341, H331, H311, H301, H314, H317	
Note*: Material is not considered hazardous in the classification of product as its concentration is below concentration Phenoset microspheres is an 'article' fulfilling the exemption of substance registration require REACH article 7(1).							
4.	FIRST AID MEASURES						
	Skin contact: Remove contaminated clothing. Wash skin with soap and water. Obtain medical attention if irritatic persists. Wash clothing before reuse.						
	<i>Eye contact</i> : Immediately flush eyes with water and continue for several minutes. Obtain medical attention if discomfo persists.						
	Inhalation: If signs and symptoms develop, remove person to fresh air. If signs or symptoms persist, obtain medica attention.						
	<i>Ingestion</i> : Do not induce vomiting unless instructed to do so by medical personnel. Unless unconscious, give victi lots of water. Obtain medical attention.						
	<i>Notes to physician</i> : There is no specific antidote. Treatment or overexposure should be directed at the control of the symptom and the clinical condition of the patient						
5.	FIRE-FIGHTING MEASURES						
	Suitable Extinguishing media: Apply alcohol type or all-purpose type foams by manufacturers recommended techniques for large fires. Use carbon monoxide or dry chemical media for small fires. Do not direct a solid stream of water or foam into burning molten material; this may cause spattering and spread of fire.						
	<i>Extinguishing media to be avoided</i> : None						
	<i>Unusual fire and explosion hazards</i> : Avoid dispersion of dust in air to reduce potential of dust ignition / explosion.						
	Special protective equipment for fire fighters: Use self-contained breathing apparatus and protective coating.						
6.	ACCIDENTAL RELEASE MEASURES						
	Personal precautions: Wear suitable protective clothing.						
	<i>Methods for cleaning up</i> : Ventilate with fresh air. Collect as much of the spilled material as possible. Use wet sweeping or water avoid dusting. Collect and place in a closed container. Dispose as approved by your State Regulations.						

## 7. HANDLING AND STORAGE

## 7.1 Handling General precaution: For industrial and professional use only. Avoid dispersion of dust in air. Electrically bond and ground equipment. Avoid sparks and flame under dust conditions. Use with adequate ventilation. Ventilation: Special, local ventilation is recommended in areas where containers are opened and their containers are discharged or in any areas where dusting conditions may occur. Other precaution {Caution] May undergo spontaneous smouldering if stored or heated in bulk above 35°C under conditions allowing air ingress to the product. Store package material in a cool, well-ventilated area. Do not store in the sun. Do not dry in package – use special drying instructions as below. Microspheres will undergo oxidation at elevated temperatures. Due to the microspheres' excellent insulating characteristics, the internal temperature of the mass can increase to the point where spontaneous ignition and smouldering can occur. The temperature at which this occurs is a function of the geometry, amount of material being heated and available oxygen. Smouldering appears as a soft glow similar to burning charcoal. Drying instructions for the Phenoset microspheres: To reduce the moisture content of this product to less than 4%, dry a two-inch layer of the product at a maximum temperature of 75°C for 24 hours. To prevent oven or product contamination, the metal drying tray should be covered with a cloth that will allow the product moisture to evaporate. 7.2 Storage Keep container closed. 7.3 Specific use (s) For industrial and professional use only. **EXPOSURE CONTROLS / PERSONAL PROTECTION** 8. 8.1 Exposure limit values . No exposure limit has been established.

## 8.2 Exposure controls

- 8.2.1 Occupational exposure controls
  - Respiratory protection:
    - Hand protection : General working gloves are acceptable.
    - Eve protection :
- Safety glasses

Dust respirator, if dusting occurs

- Other protective equipment: Eye bath and safety shower. Adequate ventilation.
- 8.2.2 Environmental exposure controls None established.

9.	PHYSICAL AND CHEMICAL PROPERTIES			
	Appearance:	Red brown, fine powder		
	Odour:	Odourless		
	Molecular weight:	>10,000, Fully cured C-stage		
	Relative density:	0.20 – 0.80		
	Self-ignition temperature:	500°C (ASTM D1929)		
	Boiling point:	Does not boil		
	Melting point:	Does not melt		
	Solubility:	Not soluble in water		
10.	STABILITY AND REACTIVITY			
	General:	Stable		
	Conditions to avoid:	None known		
	Materials to avoid:	Strong acids and base, halogens, acyl halides		
	Hazardous decomposition products:	Carbon monoxide, carbon dioxide, formaldehyde and phenol derivatives upon decomposition.		
	Hazardous polymerisation:	Will not occur.		
11.	TOXICOLOGICAL INFORMATION			
12.	Upper respiratory tract irritation – signs/symptoms may include sneezing, cough, and nasal discharge. <i>Effects from ingestion:</i> Gastrointestinal irritation. <i>Effects from skin contact:</i> Mechanical skin irritation. May result in itching. <i>Effects from eye contact:</i> Mechanical eye irritation. Signs and symptoms may include pain, redness and tears. <i>Significant data with possible relevance to human health</i> Formaldehyde has been shown to cause cancer in laboratory animals and mutations in a variety of in-vitro test systems. The relevance of these findings for human is unknown. Formaldehyde is listed as a carcinogen by IARC, NTP and OSHA.			
12.	ECOLOGICAL INFORMATION	None known		
	Ecotoxicity:	None known. Does not dissolve in water.		
	Mobility:			
	Persistence and degradability:	Not determined.		
	Bioaccumulative potential:	Unknown.		
13.	DISPOSAL CONSIDERATIONS			
	Dispose off in accordance with appropriate National and local regulations.			

14	TRANSPOR				
14.					
	UN Number,		Not restricted for transportation.		
	IMDG/ICAO:		Not restricted for transportation.		
	MONT-BLAN	NC:	Not restricted for transportation.		
15.	REGULATO	RY INFORMATION			
	Label Elements [Regulations (EC) No. 1272/2008]				
	None – Not classified as hazardous				
	Inventory Listed In:				
	China IECSC, EU EINECS, US TSCA, Canada DSL, Japan ENCS, Korea KECL, Taiwan NECI,				
	Philippine PICCS, Australia AICS, New Zealand NZIoC				
16.	OTHER INF	OTHER INFORMATION			
	Text of R phrases referred to under headings 3				
	R45 R68	May cause cancer Possible risk of irrever	rsible effects		
	R23/24/25	Toxic by inhalation, in	contact and if swallowed		
	R34 R43	R34Causes burnsR43May cause sensitization by skin contact			
	H317	May cause an allergic	skin reaction		
	Text of H phrases referred to under headings 3				
	H350May cause cancerH341Suspected of causing genetic defectsH331Toxic if inhaledH311Toxic in contact with skinH301Toxic if swallowedH314Causes severe skin burns and eye damage				
	<ul> <li>H317 May cause an allergic skin reaction</li> <li>Product category:</li> <li>Phenoset microspheres is an 'article' fulfilling the exemption of substance registration requirements under</li> </ul>				
	REACH article 7(1).				
	CAUTION! N allowing air i Store in cool Do not store	May undergo spontaneoungress to the product.	us smouldering if stored or heated in bulk above 35C under conditions		
	FOR INDUSTRIAL USE ONLY				
	<b>Recommended usage and restrictions:</b> Please consult the product and/or applications information bulletins for this product.				
	<b>Disclaimer</b> The information contains herein is correct to the best of our knowledge. We disclaim any liability as to the recommendations or completeness of the information. The final evaluation on the fitness of use lies on the user' digression. All material has hidden hazards and should be used with extreme care. Even though various hazards had been listed herein, we do not warranty that those are the only existing hazards.				
	Revision Date: 03 April 2015 Revision Summary: Section 3 – classification of formaldehyde. Section 16 – Text of R- and H-phrases				