

HODGE BEAD MATERIAL DATA SHEET Solid Glass Beads											
Chemical Name & Synonyms					Soda-lime Silicate -Glass						
Chemical Family					Silicate glass without free silica						
Formula					SiO ₂	71-73%		Na ₂ O	13 -15%		
					MgO	3-5%		CaO	8-10%		
					Al ₂ O ₃	0.5-2%		K ₂ O	0.2-0.6%		
Physical Properties											
Boiling Point					N/A		Vapour Pressure			N/A	
Percent Volatile by Volume					Nil		Vapour Density			N/A	
Evaporation Rate					N/A		Odour			Nil	
Refractive Index					1.52		Oil Absorption (ASTM)			17	
Solubility in Water					Not Soluble		Mohs			6	
Absolute Specific Gravity (H ₂ O=1)					2.46		Knoop Load 100:515kg/mm ²				
Apparent Specific Gravity					1.6kg/dm ³		Hardness DPH load 50kg:540kg/mm ²				
Specific Heat Average					0.18kcal/mh°C		Dielectric Strength 4,500 kV/cm				
Dielectric Constant					7.2 (1MC at 20°C)		Expansion Coefficient 8.5 x 10 ⁻⁶				
Standard Sizes											
Grade	Microns	Mesh	Inches	Sphere Count	Grade	Microns	Mesh	Inches	Sphere Count		
A	590-840	20-36	.0234-.0331	65 %	AD	105-210	70-140	.0041-.0083	80 %		
B	420-590	30-40	.0165-.0234	70 %	AF	74-149	100-200	.0029-0059	90 %		
C	250-420	40-60	.0098-.0165	70 %	AG	53-105	140-270	.0021.0041	90 %		
AB	177-297	50-80	.0070-.0117	80 %	AH	44-88	170-325	.0017-.0035	95 %		
AC	149-250	60-100	.0059-.0098	80 %	AQ	30-62	270-500	.0012-.0024	95 %		
Hazardous Ingredients											
Paints, Preservations & Solvents					Alloys and Metallic Coating						
Pigments					Nil		Base Metal			Nil	
Catalysts					Nil		Alloys			Nil	
Vehicle					Nil		Metallic Coating			Nil	
Solvents					Nil		Filler Metal or Core Flux			Nil	
Additives					Nil		Others			Nil	
Others					Nil						
Hazardous Mixtures of Other Liquids, Solids or Gases									Nil		

Hodge Clemco Ltd
Orgreave Drive
Sheffield
S13 9NR
Tel: 0114 254 8811
Fax: 0114 254 0250
Email: sales@hodgeclemco.co.uk

Fire & Explosion Hazard Data	
Flash Point	Nil
Extinguishing Media	N/A
Flammable Limits	N/A
Special Fire fighting Procedures	None
Unusual Fire & Explosion Hazards	None
Health Hazard Data	
Threshold Limit Value 10 milligrams per cubic metre of total dust per eight hour period 5 milligrams per cubic metre of a respirable fraction per eight hour period	
Effects of Over Exposure Air borne material may cause respiratory and eye irritation if recommended exposure limits are exceeded No hazard by ingestion, absorption, or contact with the skin	
Emergency & First Aid Procedures For respiratory problems, remove to fresh air For eye irritation, wash with copious amounts of clean water	
Reactivity Data	
Stability	Nothing to avoid
Instability	Nothing to avoid
Incompatibility	Avoid Hydrofluoric Acid
Hazardous Decomposition Products	None
Polymerisation Hazard	Nothing to avoid
Special Protection Information	
Ventilation	Local Exhaust Recommended
Respiratory Protection	Dusk Mask Recommended
Eye Protection	Goggles Recommended
Hands	Gloves recommended
Packaging Polythene -lined paper bags containing sachet of desiccant as necessary	
Transportation No special precautions required	
Storage Store in a dry environment under cover Avoid extreme temperature changes	
Spillage or Leakage Procedures Spillage may result in slippery conditions. Beads should be cleared up immediately without creating dust	
Waste Disposal Since glass beads are inert they may be disposed of in a commercial land -fill site	

Hodge Clemco Ltd
Orgreave Drive
Sheffield
S13 9NR
Tel: 0114 254 8811
Fax: 0114 254 0250
Email: sales@hodgeclemco.co.uk