

UNICELL- BSH Series

- Benzenesulfonylhydrazide
- Specially designed foaming agents for white cellular rubbers

Description

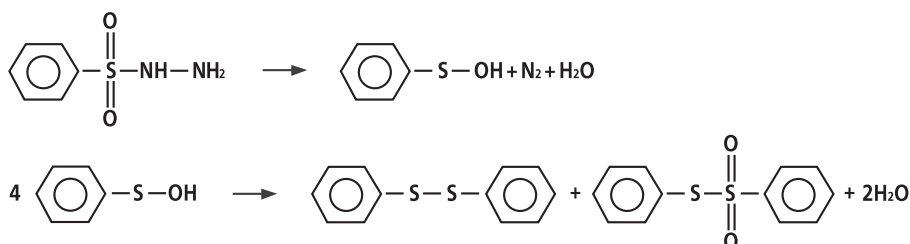
UNICELL-BSH series, the trade name of Benzenesulfonylhydrazide, can produce non-discoloring and non-objectionable odor cellular foams. UNICELL-BSH series is designed for opened or closed cellular rubbers which have regular and fine cell structure. They have excellent performance without activators at conventional curing temperature conditions. UNICELL-BSH series is especially recommended for materials that shrink when exposed to light or heat.

Properties of UNICELL-BSH series

Item	Specification		
Grade Name	BSH	BSH paste	BSHNE
Chemical Name	Benzenesulfonylhydrazide		
Appearance	Fine White Powder		
Decomposition Temperature (°C)	143~147	143~147	142~146
Gas Volume (ml/g, at 25°C)	100~110	80~90	98~108
Average Particle Size (μm)	3.0~4.0	3.0~4.0	3.0~4.0
Moisture Content (%)	0.5 max.	0.5 max.	0.5 max.
Chemical Formula	$\phi - \text{SO}_2 - \text{NH} - \text{NH}_2$		
Specific Gravity	1.48		
Molecular Weight	172.2		
Solubility (g sample/100ml solvent, at 20°C)	Water : 0.49 Toluence : 0.35 Alcohol : 5.10 DMSO : fairly soluble		
CAS No.	80 - 17 - 1		

Decomposition of UNICELL-BSH series

One possible decomposition mechanism of UNICELL-BSH is ;



When heated, UNICELL-BSH decomposes into N₂ gas and H₂O with benzene sulfonic acid as an unstable intermediate. The unstable benzene sulfonic acid turns into dibenzyl disulfide and phenyl benzene thiosulfonate immediately. The sulfur containing residues can function as curing agents in rubber composition.