

- Azodicarbonamide (Azobisformamide)
- General purpose foaming agents

Description

Decomposition of UNICELL-D series

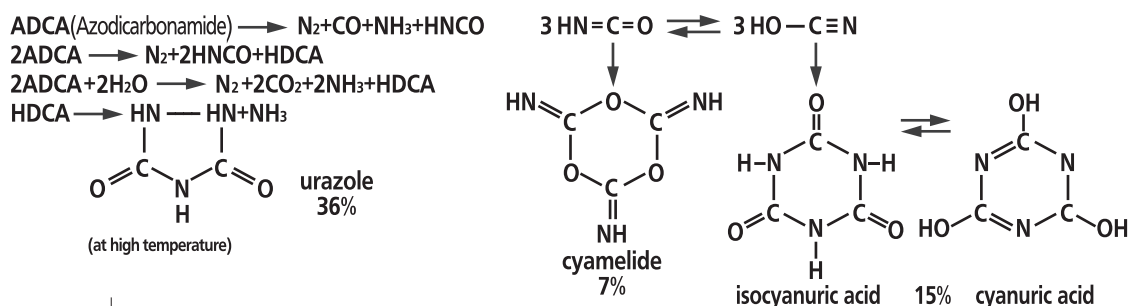
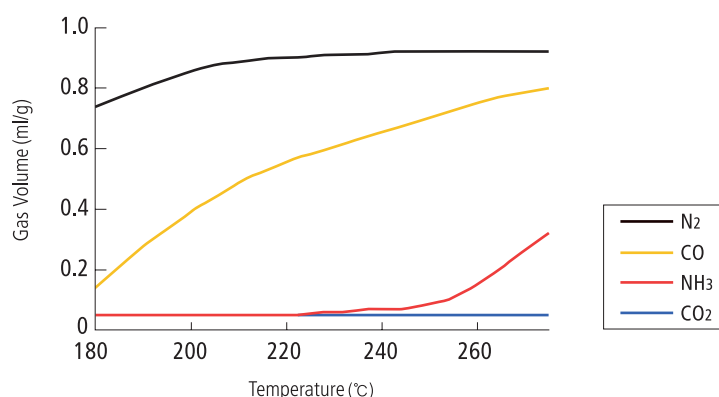


Table 1. The volume ratio of evolved gases depending on temperature and the ratio of gases & residue after decomposition.



Properties of UNICELL-D series

Table 2. The physical Properties of UNICELL-D series

Item	Specification														
Grade Name	D200	D200L	D200M	D300	D300L	D300M	D330	D400	D600	D800	D900	D1100	D1300	D1500	D2500
Chemical Name	Azodicarbonamide (Azobisformamide)														
Appearance	Fine Yellow Powder														
Decomposition Temperature (°C)	202~208														
Gas Volume (ml/gr)	225~250														
Average Particle Size (μm)	1.8~2.1	1.8~2.1	2.3~2.7	2.6~2.9	2.6~2.9	2.6~3.0	2.7~3.0	3.6~3.9	5.7~6.1	7.6~8.0	8.0~8.3	9.6~10.0	12.6~13.0	14.0~17.0	24.0~26.0
Moisture Content (%)	0.3 max.														
Chemical Formula	H ₂ N – CO – N = N – CO – NH ₂														
Molecular Weight	116.08														
Specific Gravity (g/cm ³ at 25°C)	1.65														
Specific Heat	0.26														
Decomposition heat (kcal/mole)	10														
Solubility (g sample/ 100ml solvent)	in Water								0.020						
	DMSO								4.300						
	MEK								0.015						
	Acetone								0.016						
	DMF								5.000						
	Toluene								0.012						
	Benzene								0.014						
CAS No.	123 – 77 – 3														

Particle size of UNICELL-D series

Particle size is a significant factor in determining the rate of decomposition of UNICELL-D series. As the particle diameter decreases, the surface area is increase. Thus the heat transfer to the UNICELL-D series is more effective and faster, and this influences on decomposition rate of UNICELL-D series. The particle size is selected to provide the proper balance between the curing speed and the decomposition speed of UNICELL-D series.

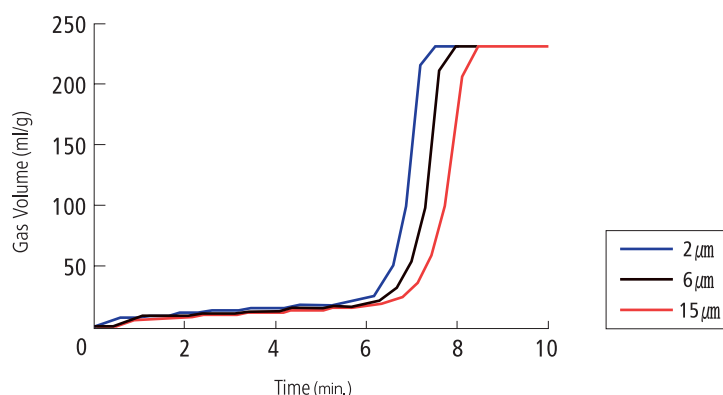


Fig 2. The decomposition behavior of UNICELL-D series at the constant temperature of 200 °C