

**Table: DGMS standard for a permissible limit of ground vibration.
(Technical Circular Number 7 of 1997)**

Type of structure	PPV in mm/s at the foundation level of structure at the Dominant excitation frequency, Hz		
	< 8 Hz	8-25 Hz	> 25 Hz
(A) Buildings/structures do not belong to the owner			
1. Domestic houses/structures (Kuchcha, brick and cement)	5	10	15
2. Industrial buildings	10	20	25
3. Objects of historical importance and sensitive structures	2	5	10
(B) Buildings belonging to mine owner with a limited span of life			
1. Domestic houses/structures	10	15	25
2. Industrial buildings	15	25	50

Table: US Bureau of Mines standard of damage due to air overpressure

Over-pressure (dB)	Over-pressure (KPa)	Air Blast Effects
177	14.00	All windows break
170	6.00	Most windows break
150	0.63	Some windows break
140	0.20	Some plate glass windows may break and rattle
136	0.13	USBM interim limit for allowable air blast
126	0.05	Complaints likely

Table: Perceptible limits of continuous vibration levels

Approximate vibration levels (mm/s)	Degree of perception
0.10	Not felt
0.15	Threshold of perception
0.35	Barely noticeable
1.0	Noticeable
2.0	Easily noticeable
6.0	Strongly noticeable
14	Very strongly noticeable

Table: Physical properties of Emulsion matrix

Sr. No.	Properties	Performance
1.	Color	Blackish
2.	Nature	Greasy
3.	Density (g/cm ³)	1.37
4.	Viscosity (cps)	92800
5.	Water resistant	Excellent

Table: Explosive properties of gassed emulsion

Sr. No.	Explosive parameter	Range
1.	Density; g/cm ³	1.05-1.15
2.	Sensitivity	Passed
3.	VOD; m/s (Unconfined)	4000±500