

Time/Space Consumption

Table info: The training time, inference time, and GPU memory consumption of random batches of 32 molecules (16 molecules for GemNet) from the original MD17 dataset. The format is training time in ms, inference time in ms, and inference GPU memory consumption in MB.

	2-F-DisGNN	DimeNet	DimeNet_dense	3-E-DisGNN	GemNet	TorchMD	GNN-LF
Aspirin	232/56/3644	727/133/5790	378/101/3886	OOM/OOM/OOM	2823/612/15980	188/32/2065	65/10/2791
Benzene	125/26/2134	669/94/1831	370/98/1876	383/90/6124	2242/393/3761	478/33/918	29/8/95
Ethanol	114/18/1852	672/95/784	373/104/1568	192/41/3438	2256/344/1565	417/32/532	59/8/54
Malonaldehyde	88/16/1852	657/88/784	369/96/1568	194/41/3438	2237/355/1565	753/32/532	57/7/68
Naphthalene	185/42/3140	614/112/4470	388/105/3032	OOM/312/17248	2613/498/11661	265/32/1694	61/9/175
Salicylic Acid	147/33/2640	619/92/3489	381/109/2384	OOM/197/12488	2577/430/8182	239/34/1418	59/9/176
Toluene	134/30/2640	595/113/3148	372/99/2358	OOM/164/10528	2495/423/7153	896/45/1322	62/8/176
Uracil	108/22/2134	595/107/1782	376/104/1876	383/90/6124	2165/354/3735	118/32/907	66/8/99
Average	142/30/2505	643/104/2760	376/102/2319	-	2426/426/670	419/34/1174	57/ 9/140