






From the seismic motion records observed on the surface or in the ground, the degree of liquefaction of the ground where the seismic motion was observed can be evaluated.

The degree of liquefaction is simply divided into 5 levels here.

Definition of DDL [damage degree due to liquefaction]

DDL		0 : It is unlikely that liquefaction has occurred. (EPWP* $<$ 0.1)
		1 : Slight liquefaction may occur. (0.1 $<$ EPWP $<$ 0.3)
		2 : Moderate liquefaction may occur. (0.3 $<$ EPWP $<$ 0.6)
		3 : Liquefaction damage may occur. (0.6 $<$ EPWP $<$ 0.9)
		4 : High possibility of liquefaction damage. (0.9 $<$ EPWP)

*EPWP: Excess Pore Water Pressure Ratio

For details, please refer to the following reference papers.

A Kamura, G Kurihara, T Mori, M Kazama, Y Kwon, J Kim, JT Han, Exploring the possibility of assessing the damage degree of liquefaction based only on seismic records by artificial neural networks, Soils and Foundations, 2021. <https://doi.org/10.1016/j.sandf.2021.01.014>