

Examples of Sanyo Chemical Nonionic Surfactants The List of their HLB

HLB (Hydrophile-Lipophile Balance) is a numerical value which represents a balance between hydrophilic groups and lipophilic groups in molecules of surfactants from 0 to 20. The higher the HLB value, the more hydrophilic (water-soluble) the surfactant.

How to see the table

The second line shows the trade names of products, and each product number is in the corresponding cell in the following lines after line 4. For example, the cell at column 3/line 11 represents NAROACTY ID-40. The cell at column 6/line 11 represents SANNONIC SS-30.

	HLB	Synthetic Alcohol-based					Natural Alcohol-based			Fatty Acid Ester-based		Pluronic	
		NAROACTY		SANNONIC		SEDORAN		EMULMIN			IONET		NEWPOL
		Primary Alcohol	Primary Alcohol	Secondary Alcohol	Primary Alcohol	Secondary Alcohol	-C12-	-C16-	C16-C18	PEG Ester	Sorbitan		
Lipophilic	1.8 - 2.0										S-85	PE-61 PE-71	
	4.0 - 4.3										S-80	PE-62	
	4.7										S-60V		
	5.7		CL-20										
	6.0 - 6.2					SF-506							
	6.6												
	7.3									DS-300			
	8.0 - 8.2	ID-40			SS-30				40	DS-400		PE-34 PE-64 PE-74	
	8.3 - 8.6									MO-200 DO-400	S-20		
	8.9 - 9.0		CL-40										
10.0 - 10.2		CL-50									PE-75		
10.5 - 10.6				SS-50									
10.9													
11.7		CL-70	FN-80		FF-180				MO-400				
12.0				SS-70					MS-400				
12.3 - 12.4	ID-60				FF-200								
12.6		CL-85	FN-100										
12.9 - 13.0					FF-210								
13.1 - 13.2	ID-70	CL-95	DE-70	SS-90									
13.3 - 13.4		CL-100											
13.6													
13.8 - 14.0			FN-140		FF-220								
14.1 - 14.3		CL-120											
14.5				SS-120									
14.7 - 14.9		CL-140											
15.0 - 15.3		CL-160									PE-108 PE-128		
15.5 - 15.7									CC-200	MS-1000	PE-68 PE-78		
16.0		CL-200											
16.6 - 16.7										DS-4000	T-20C		
17.8		CL-400											