

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-	C12-C14	-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									DL-200				
	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						DO-600				
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					DO-1000				
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							140					
14.5				SS-120										
14.7 - 14.9		CL-140						CC-150			T-60V			
15.0 - 15.3		CL-160							180		PE-108 PE-128			
15.5 - 15.7								CC-200	200	MS-1000	PE-68 PE-78			
16.0		CL-200							240					
16.6 - 16.7										DS-4000	T-20C			
17.8		CL-400												
Hydrophilic							NL-70							
							FL-80 HL-80							
							FL-100 HL-100							
							LS-80 NL-80	L-90-S						
							LS-90 NL-90							
							NL-100		CCE-130	MO-600				
							NL-110							