

HIGH HLB_ NON-IONIC EMULSIFIERS AND SOLUBILIZERS

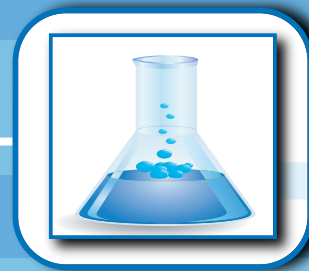
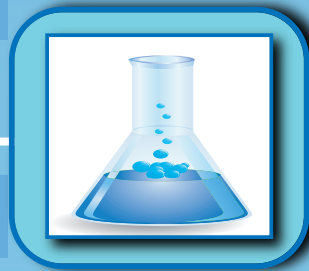
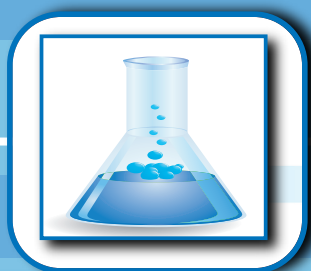
PROTASORB™ Polyethylene Sorbitan Esters

PRODUCT NAME	INCI NAME	HLB VALUE
PROTASORB L-20	POLYSORBATE-20	16.7
PROTASORB L-20 NF	POLYSORBATE-20	16.7
PROTASORB S-20	POLYSORBATE-60	14.9
PROTASORB S-20 NF	POLYSORBATE-60	14.9
PROTASORB O-20	POLYSORBATE-80	15.0
PROTASORB O-20 NF	POLYSORBATE-80	15.0
PROTASORB TO-20	POLYSORBATE-85	11.0

LOW HLB_ NON-IONIC EMULSIFIERS

PROTACHEM™ Sorbitan Esters

PRODUCT NAME	INCI NAME	HLB VALUE
PROTACHEM SML	SORBITAN LAURATE	8.6
PROTACHEM SMO	SORBITAN OLEATE	4.3
PROTACHEM SMS	SORBITAN STEARATE	4.7
PROTACHEM SOC	SORBITAN SESQUIOLEATE	3.7
PROTACHEM SOC V	SORBITAN SESQUIOLEATE	3.7
PROTACHEM STO	SORBITAN TRIOLEATE	1.8
PROTACHEM STS	SORBITAN TRISTEARATE	1.8



HLB

The Hydrophilic Lipophilic Balance of a surfactant is a measure of the degree to which it is hydrophilic (water loving) or lipophilic (oil loving)