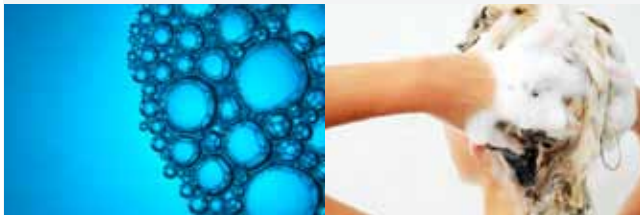


Manufacture of detergent and other soap products

Most manufacturers of detergent and soap products are medium size companies mixing various chemicals according to their own recipes. The chemicals used are from the big world-wide chemical concerns.

The product range of such small manufacturers will typically include products like hair shampoo, body shampoo, toilet cleaner, and liquid hand soap. The ingredients list of for instance liquid hand soap will often be; Water, Sodium Laureth Sulphate, Sodium Chloride, Ocamide Dea, Glycerin, Cocamidopropyl Betaine, Coco-glucoside, Glycol Disterate, Glycerol Oleate, PEG-7 Glycerol Cocoate, Citric Acid, Perfume, Isopropyl Myristate, Glycerol Stereate, Tetrasodium Iminodisuccinate, Methylchloroisothiazolinone, Benzoic Acid. Further the product is pH neutral (pH = approx. 6).



With such an ingredient list most pump sellers will have to realize that their chemical knowledge is not sufficient to determine which of the above products can be pumped by a ROTAN® pump! In order to add to the confusion a written inquiry will often include a trade name, e.g. "Radiacid" - when searching the net it turns out that this is a fatty acid.

Therefore it has to be concluded that an inquiry for a pump to be used within the soap product industry (just like the remaining chemical industry) MUST include all product characteristics necessary to calculate the pump correctly. Viscosity, temperature, melting point (some ingredients are solid when exposed to outside temperature), pH-value, suction and pressure side pressure, possible steam pressure etc. have to be considered. Will the liquid become solid if left inside the pump? Does the liquid contain solid particles?

A large part of such products can be pumped by a stainless steel pump with carbon or tungsten carbide bearings (dependent on pressure and customer requirement as regards life time). Some customers only use magnetically coupled pumps in order to minimize maintenance.

To manufacture detergent from scratch requires a large plant including among others spray drying facilities. Smaller factories will not be able to exploit the investment in such a spray plant and therefore they buy the "raw" detergent from e.g. Henkel (where a big number ROTAN® pumps are in operation) and then they add perfume, colorants and chemicals according to their own recipes and finally pack in their own packaging.

To the right you will find some of the products that are sold to manufacturers of detergent and other soap products.

DESMI Partner - Orders for ROTAN® Pumps

Project	Service	Viscosity	S.G.	Temp.	Pump Model	Flowrate	Pressure
	Sulfonator	500	0,7	20-70C	CD101ERM-3U332	25 m3/h	7.03 kg/cm2
	Sulfonator	500	0,7	20-70C	CD41EFRM-3U332	3.4 m3/h	7.03 kg/cm2
	Organic Feed	10	0,85	20-70C	CD41EFRM-3U332	3.4 m3/h	7.03 kg/cm2
	Neutralized Sulfonic Acid Paste	380-9500			CD66ERM-3U332	24 gpm	150 psi
2752	Sulfonator	500			CD126ERM-3U332	230 gpm	100psi
2752	Sulfonic Acid	500			CD66ERM-3U332	23.4 gpm	100 psi
2752	Organic Feed	5	0,86		CD41EFRM-3U332	23 gpm	100 psi
2752	Sulfonator	500			CD101ERM-3U332	25 gpm	7.03 psi
2752	Sulfonic Acid	300-500	0,8	200 F	CD41EFRM-3U332	10.2 gpm	100 psi
2752	Organic Feed		0,85	100 F	CD26ERFM-3U332	5.4 gpm	100 psi
2752	Neut Paste	3500	0,8	75C	CD66ERMMW-3U332S	75LPM	1500 Kpa
2752	Neutralizer Paste	1300-5000			CD101ERMMW-3U3322	100 gpm	200 psi
2765	organic feed	10 cps	0,85	20-70 C	CD41EFRM-3U332	7 gpm	150 psi
2765	Sulfonic Acid	500 cps	0,7	20-70 C	CD41EFRM-3U332	13 gpm	150 psi
2765	Neutralized Paste	2,500 cSt			CD41EFRM-3U332	13.1 gpm	150 psi
2765	Sulfonic Acid	500 cps	0,7	20-70 C	CD101EMR-3U332	125 gpm	100 psi
2759	Sulfonic Acid	500 cSt			CD126ERM-3U332	200 gpm	100 psi
2759	Sulfonic Acid	500 cSt			CD51EMR-3U332	28 gpm	150 psi
2759	Organic Feed	10 cps	0,85	20-70 C	CD41EFMR-3U332	18 gpm	100 psi
2759	Detergent Paste	20000 cSt			CD66EMR-3U332	10 gpm	150 psi
2759	45% NAOH	50 cps	1,45	25 C	CD26ERFM-3U332	3.5 gpm	150 psi
2759	HN3/TEA	50			CD26ERFM-3U332	5.2 gpm	150 psi
2757	Sulfonic Acide	500 cps	0,7	20-70 C	CD101EMR-3U332	119 gpm	100 psi
2757	Sulfonic Acide	500 cps	0,7	20-70 C	CD41EFMR-3U332	15 gpm	100 psi
2757	Neutralizer Paste	400-10000 cSt			CD126EMMPW-3U3322	119 gpm	150 psi
	Molten Sulphur	1 cSt	1,78	300 F	HD81EDK-1U33B	105 gpm	25 psi
	Molten Sulphur	1 0 cSt	1,78	270 F	HD81EDK-1U33B	105 gpm	25 psi
6036	Molten Sulphur	1 0 cSt	1,78	270 F	HD81EDK-1U33B	105 gpm	25 psi
2756	Sulfonic Acid	500 cps	0,7	60C	CD51EMR-3U332 AA	10.3 gpm	150 psi
2756	Sulfonic Acid	500 cps	0,7	60C	CD101EMR-3U332 AA	85 gpm	100 psi
2756	Sulfonic Acid	500 cps	0,7	60 C	CD41EFMR-3U332 AA	7.7 gpm	100 psi
2756	Organic Feed	5-25 cps	0,85	100 F	CD33EFMR-3U332 AA	7 gpm	100 psi
7041	Sulphonic Acid	300-800 cps	0,7	110 F	CD41EMFR-3U332 AA	9 gpm	100 psi
7041	Neutralizer Paste	10000 cps			CD151EMMWR-3U3322 AD+AA	175 gpm	100 psi
7041	Sulfonic Acid	300 cps			CD151EMR-3U332 AA	160 gpm	100 psi
6028	Molten Sulfur	10 cps	1,78	270 F	HD81EDK-1U33B	100 gpm	25 psi
2744	Sulphonic Acid	800 cSt		100 F	CD81EFMR-3U332 AA	73.7 gpm	150 psi
2744	Sulphonic Acid	800 cps		122 F	CD26RMR-3U332 AA	6.8 gpm	150 psi
2744	Organic Feed	20 cps		85 F	CD26EMR-3U332 AA	4.1 gpm	150 psi
2744	Neutralizer Paste	300-20,000 cst			CD101EMR-3U332 AA	83.5 gpm	80 psi
2744	Sulphonic Acid	800 cps		122 F	CD26EMR-3U332 AA	6.8 gpm	150 psi
6031	Molten Sulfur	10 cps	1,78	270 F	HD81EDK-1U33B	100 gpm	25 psi
2776	Sulfonic Acid	100-500 cps	0,7	20-70 C	CD101EM-3U332 AA	110 gpm	101 psi
2776	Neutralizer Paste	4762	1,05	40-70 C	CD126EMMW-3U3322	110 gpm	145
	Methyl Ester Sulfonic Acid	118 cSt		160 F	CD152EMFDKR-3U332 KE	361 gpm	75 psi
2781	Organic Acid 20% Meth..5 Hydro Peroxide	30-100cps	0.88-0.94	212F	CD81EMMWFR-3U3322S drain	34-45	80-150 psi
4151	Neutralizer Slurry	4000-10K cps	0.95-1.05	130-180 F	CD201EMMWDR-3U3322 dr	400 gpm	80-150 psi
4151	Neutralizer Discharge Paste	20-4000 cps	0.95-1.05	130-160F	CD81EMMWFR-3U3322S drain	32-75 gpm	180 PSI
6097	Sulfur Unloading Pump	12 cSt	1,78	270 F	MD101ERDK-1U33/06C	113 gpm	25 psi
2784	Organic Acid 20wt% meth .5 wt% hydro peroxid	20-100 cps	0.88-0.94	122-212F	CD66EMMWFR-3U3322 dr	20-25 gpm	80-150 psi
2787	Organic Acid	300-800 cps	0,98	40C	CD51EFMR-3U332 Eexd	84.8-115 lpm	10.3 bar
2787	Organic Acid	300-800 cps	0,98	40C	CD51EFMR-3U332 Eexd	84.8-115 lpm	10.3 bar
2787	Organic Feed	10 - 25 cps	0,85	85C	CD41EFMR-3U332 Eexd	46.7-82.8lpm	5.17-7 bar
2787	Organic Feed	10 - 25 cps	0,85	85C	CD41EFMR-3U332 Eexd	46.7-82.8lpm	5.17-7 bar
2787	70% AES Paste	1300-2500cps	0.95-1.05	50C	CD81EFMR-3U332 Eexd	67.3-115 lpm	7.4-10 bar
2787	Neutralizer Slurry	300-2500 cps	0.95-1.05	50C	CD152EFMR-3U332 Eex nA	1074-1113 lpm	7.55 bar
2787	Neutralizer Slurry	300-2500 cps	0.95-1.05	50C	CD152EFMR-3U332 Eex nA	1074-1113 lpm	7.55 bar
2787	Neutralized Paste	300-2500 cps	0.95-1.05	50C	CD81EFMR-3U332 Eexd	90-220 lpm	7-9 bar
2787	Neutralized Paste	300-2500 cps	0.95-1.05	50C	CD81EFMR-3U332 Eexd	90-220 lpm	7-9 bar
2787	Sulfonic Acid	300-800	0.75-0.95	40C	CD151EFMR-3U332 Eex nA	1058 lpm	5.17 bar
2787	Sulfonic Acid	300-800	0.75-0.95	40C	CD151EFMR-3U332 Eex nA	1058 lpm	5.17 bar
2790	Sulfonic Acid	13.5-80 cps	0,84	60-140F	CD66EFMR-3U332 ATEX	26-40 gpm	60-80 psi
2790	Sulfonic Acid	13.5-80 cps	0,84	60-140F	CD101EFMR-3U332 ATEX	121-156	60-80 psi