# Detergents Ingredients Database

## Part A. List of ingredients.

| | | Acute toxicity | | | Chronic toxicity | | | Degradation | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DID-no | Ingredient name | LC50/ EC50 | SF(acute) | TF(acute) | NOEC (*) | SF (chronic) (*) | TF (chronic) | DF | Aerobic | Anaerobic |
| | **Anionic surfactants** | | | | | | | | | |
| 1 | Linear alkyl benzene sulphonates 11,5 - 11,8 (LAS) | 4,1 | 1000 | 0,0041 | 0,69 | 10 | 0,069 | 0,05 | R | N |
| 2 | LAS (C10-13 alkyl) triethanolamine salt | 4,2 | 1000 | 0,0042 | 3,4 | 100 | 0,034 | 0,05 | R | O |
| 3 | C 14/17 Alkyl sulphonate | 6,7 | 5000 | 0,00134 | 0,44 | 10 | 0,044 | 0,05 | R | N |
| 4 | C 8/10 Alkyl sulphate | 132 | 5000 | 0,0264 | | | 0,0264 | 0,05 | R | Y |
| 5 | C 12/14 Alkyl sulphate (AS) | 2,8 | 1000 | 0,0028 | 2 | 100 | 0,02 | 0,05 | R | Y |
| 6 | C 12/18 Alkyl sulphate (AS) (#) | | | 0,0149 | | | 0,027 | 0,05 | R | Y |
| 7 | C 16/18 Fatty alcohol sulphate (FAS) | 27 | 1000 | 0,027 | 1,7 | 50 | 0,034 | 0,05 | R | Y |
| 8 | C 12/15 A 1-3 EO sulphate | 4,6 | 1000 | 0,0046 | 0,1 | 10 | 0,01 | 0,05 | R | Y |
| 9 | C 16/18 A 3-4 EO sulphate | 0,57 | 10000 | 0,000057 | | | 0,000057 | 0,05 | R | Y |
| 10 | Dialkyl sulpho succinate | 15,7 | 1000 | 0,0157 | | | 0,0157 | 0,5 | I | N |
| 11 | C 12/14 Sulpho- fatty acid methylester | 9 | 10000 | 0,0009 | 0,23 | 50 | 0,0046 | 0,05 | R | N |
| 12 | C 16/18 Sulpho- fatty acid methylester | 0,51 | 5000 | 0,000102 | 0,2 | 50 | 0,004 | 0,05 | R | N |
| 13 | C 14/16 alfa Olefin sulphonate | 3,3 | 10000 | 0,00033 | | | 0,00033 | 0,05 | R | N |
| 14 | C 14/18 alfa Olefin sulphonate | 0,5 | 5000 | 0,0001 | | | 0,0001 | 0,05 | R | N |
| 15 | Soap C>12-22 | 22 | 1000 | 0,022 | 10 | 100 | 0,1 | 0,05 | R | Y |
| 16 | Lauroyl Sarcosinate | 56 | 10000 | 0,0056 | | | 0,0056 | 0,05 | R | Y |
| 17 | C9/11 2-10 EO Carboxymethylated, sodium salt or acid | 100 | 10000 | 0,01 | | | 0,01 | 0,05 | R | O |
| 18 | C12/18 2-10 EO Carboxymethylated, sodium salt or ac | 8,8 | 1000 | 0,0088 | 5 | 100 | 0,05 | 0,05 | R | O |
| 19 | C 12/18 Alkyl phosphate esters | 38 | 1000 | 0,038 | | | 0,038 | 0,05 | R | N |
| | **Non-ionic surfactants** | | | | | | | | | |
| 20 | C8 A 1-5 EO | 7,8 | 1000 | 0,0078 | | | 0,0078 | 0,05 | R | Y |
| 21 | C 9/11 A, >3-6 EO predominantly linear | 5,6 | 1000 | 0,0056 | | | 0,0056 | 0,05 | R | Y |
| 22 | C 9/11 A, >6-10 EO predominantly linear | 5 | 1000 | 0,005 | | | 0,005 | 0,05 | R | Y |
| 23 | C 9/11 A, 5-11 EO multibranched | 1 | 1000 | 0,001 | | | 0,001 | 0,05 | R | O |
| 24 | C10 A, 5-11 EO multibr.(Trimer-propen-oxo-alcohol) | 10 | 1000 | 0,01 | | | 0,01 | 0,05 | R | Y |
| 25 | C 12/15 A, 2-6 EO predominantly linear | 0,43 | 1000 | 0,00043 | 0,18 | 50 | 0,0036 | 0,05 | R | Y |
| 26 | C12/14 5-8 EO 1 t-BuO (endcapped) | 0,23 | 1000 | 0,00023 | 0,18 | 100 | 0,0018 | 0,05 | R | O |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 27 | C 12/15 A, 3-12 EO multibranched | 1 | 1000 | 0,001 | 3,2 | 100 | 0,032 | 0,05 | R | O |
| 28 | C 12/15 (mean value C<14) A, >6-9 EO | 0,63 | 1000 | 0,00063 | 0,24 | 10 | 0,024 | 0,05 | R | Y |
| 29 | C 12/15 (mean value C>14) A, >6-9 EO | 0,4 | 1000 | 0,0004 | 0,17 | 10 | 0,017 | 0,05 | R | Y |
| 30 | C 12/15 A, >9-12 EO | 1,1 | 1000 | 0,0011 | | | 0,017 | 0,05 | R | Y |
| 31 | C 12/15 A >12-20 EO | 0,7 | 1000 | 0,0007 | | | 0,0007 | 0,05 | R | O |
| 32 | C 12/15 A >20-30 EO | 13 | 1000 | 0,013 | 10 | 100 | 0,1 | 0,05 | R | O |
| 33 | C 12/15 A, >30 EO | 130 | 1000 | 0,13 | | | 0,13 | 0,5 | I | O |
| 34 | C 12/18 A, 0-3 EO | 0,3 | 1000 | 0,0003 | | | 0,0003 | 0,05 | R | Y |
| 35 | C 12/18 A, 5-10 EO | 1 | 1000 | 0,001 | 0,35 | 100 | 0,0035 | 0,05 | R | O |
| 36 | C 12/18 A, >10-20 EO | 1 | 1000 | 0,001 | | | 0,0035 | 0,05 | R | O |
| 37 | C 16/18 A, 2-8 EO | 3,2 | 1000 | 0,0032 | 0,4 | 100 | 0,004 | 0,05 | R | Y |
| 38 | C 16/18 A, >9-18 EO | 0,72 | 1000 | 0,00072 | 0,32 | 10 | 0,032 | 0,05 | R | Y |
| 39 | C 16/18 A, 20-30 EO | 4,1 | 1000 | 0,0041 | | | 0,0041 | 0,05 | R | Y |
| 40 | C 16/18 A, >30 EO | 30 | 1000 | 0,03 | | | 0,03 | 0,5 | I | Y |
| 41 | C12-15 A 2-6 EO 2-6 PO | 0,78 | 1000 | 0,00078 | 0,36 | 100 | 0,0036 | 0,05 | R | O |
| 42 | C10-16 A 0-3 PO 6-7 EO | 3,2 | 5000 | 0,00064 | 1 | 100 | 0,01 | 0,05 | R | O |
| 43 | Glycerin (1-5 EO) cocoate | 16 | 1000 | 0,016 | 6,3 | 100 | 0,063 | 0,05 | R | Y |
| 44 | Glycerin (6-17 EO) cocoate | 100 | 1000 | 0,1 | | | 0,1 | 0,05 | R | Y |
| 45 | C 12/14 Glucose amide | 13 | 1000 | 0,013 | 4,3 | 50 | 0,086 | 0,05 | R | Y |
| 46 | C 16/18 Glucose amide | 1 | 1000 | 0,001 | 0,33 | 50 | 0,0066 | 0,05 | R | Y |
| 47 | C 8/10 Alkyl polyglycoside | 28 | 1000 | 0,028 | 5,7 | 100 | 0,057 | 0,05 | R | Y |
| 48 | C8/12 Alkyl polyglycoside, branched | 480 | 1000 | 0,48 | 100 | 100 | 1 | 0,05 | R | N |
| 49 | C 8/16 or C12-14 Alkyl polyglycoside | 5,3 | 1000 | 0,0053 | 1 | 10 | 0,1 | 0,05 | R | Y |
| 50 | Coconut fatty acid monoethanolamide | 9,5 | 1000 | 0,0095 | 1 | 100 | 0,01 | 0,05 | R | Y |
| 51 | Coconut fatty acid monoethanolamide 4-5 EO | 17 | 10000 | 0,0017 | | | 0,0017 | 0,05 | R | Y |
| 52 | Coconut fatty acid diethanolamide | 2 | 1000 | 0,002 | 0,3 | 100 | 0,003 | 0,05 | R | O |
| 53 | PEG-4 Rapeseed amide | 7 | 1000 | 0,007 | | | 0,007 | 0,05 | R | Y |

## Amphoteric surfactants

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 60 | C12/15 Alkyl dimethylbetaine | 1,7 | 1000 | 0,0017 | 0,1 | 100 | 0,001 | 0,05 | R | O |
| 61 | Alkyl C12/18 amidopropylbetaine | 1,8 | 1000 | 0,0018 | 0,09 | 100 | 0,0009 | 0,05 | R | Y |
| 62 | C12/18 Alkyl amine oxide | 0,3 | 1000 | 0,0003 | | | 0,0003 | 0,05 | R | Y |

## Cationic surfactants

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 70 | Alkyl trimethyl ammonium salts | 0,1 | 1000 | 0,0001 | 0,046 | 100 | 0,00046 | 0,5 | I | O |
| 71 | Alkyl ester ammonium salts | 2,9 | 1000 | 0,0029 | 1 | 10 | 0,1 | 0,05 | R | Y |

## Preservatives

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 80 | 1,2-Benzisothiazol-3-one | 0,15 | 1000 | 0,00015 | | | 0,00015 | 0,5 | I | N |
| 81 | Benzyl alcohol | 360 | 1000 | 0,36 | | | 0,36 | 0,05 | R | Y |
| 82 | 5-bromo-5-nitro-1,3-dioxane | 0,4 | 5000 | 0,00008 | | | 0,00008 | 1 | P | O |
| 83 | 2-bromo-2-nitropropane-1,3-diol | 0,78 | 1000 | 0,00078 | 0,2 | 100 | 0,002 | 0,5 | I | O |
| 84 | Chloroacetamide | 55,6 | 10000 | 0,00556 | | | 0,00556 | 1 | O | O |
| 85 | Diazolinidylurea | 35 | 5000 | 0,007 | | | 0,007 | 1 | P | O |
| 86 | Formaldehyde | 2 | 1000 | 0,002 | | | 0,002 | 0,05 | R | O |
| 87 | Glutaraldehyde | 0,31 | 1000 | 0,00031 | | | 0,00031 | 0,05 | R | O |
| 88 | Guanidine, hexamethylene-, homopolymer | 0,18 | 1000 | 0,00018 | 0,024 | 100 | 0,00024 | 1 | P | O |
| 89 | CMI + MIT in mixture 3:1 (§) | 0,0067 | 1000 | 0,0000067 | 0,0057 | 50 | 0,000114 | 0,5 | I | O |
| 90 | 2-Methyl-2H-isothiazol-3-one (MIT) | 0,06 | 1000 | 0,00006 | | | 0,00006 | 0,5 | I | O |
| 91 | Methyldibromoglutaronitrile | 0,15 | 1000 | 0,00015 | | | 0,00015 | 0,05 | R | O |
| 92 | e-phtaloimidoperoxyhexanoic acid | 0,59 | 5000 | 0,000118 | | | 0,000118 | 1 | P | O |
| 93 | Methyl-, Ethyl- and Propylparaben | 15,4 | 5000 | 0,00308 | | | 0,00308 | 0,05 | R | N |
| 94 | o-Phenylphenol | 0,92 | 1000 | 0,00092 | | | 0,00092 | 0,05 | R | O |
| 95 | Sodium benzoate | 128 | 1000 | 0,128 | | | 0,128 | 0,05 | R | Y |
| 96 | Sodium hydroxy methyl glycinate | 36,5 | 5000 | 0,0073 | | | 0,0073 | 1 | O | O |
| 97 | Sodium Nitrite | 87 | 10000 | 0,0087 | | | 0,0087 | 1 | NA | NA |
| 98 | Triclosan | 0,0014 | 1000 | 0,0000014 | **0,00069** | **10** | **0,000069** | 0,5 | I | O |
| 99 | Phenoxy-ethanol | 344 | 1000 | 0,344 | **200** | **100** | **2** | 0,05 | R | O |

## Other ingredients

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 110 | Silicon | 250 | 1000 | 0,25 | | | 0,25 | 1 | P | N |
| 111 | Paraffin | 1000 | 10000 | 0,1 | | | 0,1 | 1 | P | O |
| 112 | Glycerol | 4400 | 5000 | 0,88 | | | 0,88 | 0,05 | R | Y |
| 113 | Phosphate, as STPP | 1000 | 1000 | 1 | | | 1 | 0,15 | NA | NA |
| 114 | Zeolite (Insoluble Inorganic) | 1000 | 1000 | 1 | 175 | 50 | 3,5 | 1 | NA | NA |
| 115 | Citrate and citric acid | 825 | 1000 | 0,825 | 80 | 50 | 1,6 | 0,05 | R | Y |
| 116 | Polycarboxylates | 200 | 1000 | 0,2 | 106 | 10 | 10,6 | 1 | P | N |
| 117 | Nitrilotriacetat (NTA) | 494 | 1000 | 0,494 | 64 | 50 | 1,28 | **0,05** | **R** | O |
| 118 | EDTA | 121 | 1000 | 0,121 | 22 | 50 | 0,44 | 0,5 | I | N |
| 119 | Phosphonates | 650 | 1000 | 0,65 | 25 | 50 | 0,5 | 1 | P | N |
| 120 | EDDS | 320 | 1000 | 0,32 | 32 | 50 | 0,64 | 0,05 | R | N |
| 121 | Clay (Insoluble Inorganic) | 1000 | 1000 | 1 | | | 1 | 1 | NA | NA |
| 122 | Carbonates | 250 | 1000 | 0,25 | | | 0,25 | 0,15 | NA | NA |
| 123 | Fatty acids C>=14 | 3,7 | 5000 | 0,00074 | | | 0,00074 | 0,05 | R | Y |
| 124 | Silicates | 250 | 1000 | 0,25 | | | 0,25 | 1 | NA | NA |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 125 | Polyasparaginic acid, Na-salt | 410 | 1000 | 0,41 | | | 0,41 | 0,05 | R | N |
| 126 | Perborates (as Boron) | 14 | 1000 | 0,014 | | | 0,014 | 1 | NA | NA |
| 127 | Percarbonate (See carbonate) | 250 | 1000 | 0,25 | | | 0,25 | 0,15 | NA | NA |
| 128 | Tetraacetylethylenediamine (TAED) | 250 | 1000 | 0,25 | 500 | 100 | 5 | 0,05 | R | O |
| 129 | C1-C4 alcohols | 1000 | 1000 | 1 | | | 1 | 0,05 | R | Y |
| 130 | Mono-, di- and triethanol amine | 90 | 1000 | 0,09 | 0,78 | 100 | 0,0078 | 0,05 | R | Y |
| 131 | Polyvinylpyrrolidon (PVP) | 1000 | 1000 | 1 | | | 1 | 0,5 | I | N |
| 132 | Carboxymethylcellulose (CMC) | 250 | 5000 | 0,05 | | | 0,05 | 0,5 | I | N |
| 133 | Sodium and magnesium sulphate | 1000 | 1000 | 1 | 100 | 100 | 1 | 1 | NA | NA |
| 134 | Calcium- and sodiumchloride | 1000 | 1000 | 1 | 100 | 100 | 1 | 1 | NA | NA |
| 135 | Urea | 1000 | 5000 | 0,2 | | | 0,2 | 1 | NA | NA |
| 136 | Silicon dioxide, quartz (Insoluble inorganic) | 1000 | 1000 | 1 | | | 1 | 1 | NA | NA |
| 137 | Polyethylene glycol, MW>4000 | 1000 | 10000 | 0,1 | | | 0,1 | 1 | P | N |
| 138 | Polyethylene glycol, MW<4000 | 1000 | 10000 | 0,1 | | | 0,1 | 0,05 | R | O |
| 139 | Cumene sulphonates | 450 | 1000 | 0,45 | | | 0,45 | 0,5 | I | N |
| 140 | Na-/Mg-/KOH | 30 | 1000 | 0,03 | | | 0,03 | 0,05 | NA | NA |
| 141 | Enzymes/proteins | 25 | 5000 | 0,005 | | | 0,005 | 0,05 | R | Y |
| 142 | Perfume, if not other specified (**) | 2 | 1000 | 0,002 | | | 0,002 | 0,5 | I | N |
| 143 | Dyes, if not other specified (**) | 10 | 1000 | 0,01 | | | 0,01 | 1 | P | N |
| 144 | Starch | 100 | 1000 | 0,1 | | | 0,1 | 0,05 | R | Y |
| 145 | Anionic polyester | 655 | 1000 | 0,655 | | | 0,655 | 1 | P | N |
| 146 | PVNO/PVPI | 530 | 1000 | 0,53 | | | 0,53 | 1 | P | N |
| 147 | Zn Ftalocyanin sulphonate | 0,2 | 1000 | 0,0002 | 0,16 | 100 | 0,0016 | 1 | P | N |
| 148 | Iminodisuccinat | 81 | 1000 | 0,081 | 17 | 100 | 0,17 | 0,05 | R | N |
| 149 | FWA 1 | 11 | 1000 | 0,011 | 10 | 100 | 0,1 | 1 | P | N |
| 150 | FWA 5 | 10 | 1000 | 0,01 | 1 | 10 | 0,1 | 1 | P | N |
| 151 | 1-decanol | 2,3 | 5000 | 0,00046 | | | 0,00046 | 0,05 | R | O |
| 152 | Methyl laurate | 1360 | 10000 | 0,136 | | | 0,136 | 0,05 | R | O |
| 153 | Formic acid (Ca salt) | 100 | 1000 | 0,1 | | | 0,1 | 0,05 | R | Y |
| 154 | Adipic acid | 31 | 1000 | 0,031 | | | 0,031 | 0,05 | R | O |
| 155 | Maleic acid | 106 | 1000 | 0,106 | | | 0,106 | 0,05 | R | Y |
| 156 | Malic acid | 106 | 1000 | 0,106 | | | 0,106 | 0,05 | R | O |
| 157 | Tartaric acid | 200 | 10000 | 0,02 | | | 0,02 | 0,05 | R | O |
| 158 | Phosphoric acid | 138 | 1000 | 0,138 | | | 0,138 | 0,15 | NA | NA |
| 159 | Oxalic acid | 128 | 5000 | 0,0256 | | | 0,0256 | 0,05 | R | O |
| 160 | Acetic acid | 30 | 1000 | 0,03 | | | 0,03 | 0,05 | R | Y |
| 161 | Lactic acid | 130 | 1000 | 0,13 | | | 0,13 | 0,05 | R | Y |
| 162 | Sulphamic acid | 75 | 1000 | 0,075 | | | 0,075 | 1 | NA | NA |
| 163 | Salicylic acid | 46 | 1000 | 0,046 | | | 0,046 | 0,15 | R | O |
| 164 | Glycollic acid | 141 | 5000 | 0,0282 | | | 0,0282 | 0,05 | R | O |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 165 | Glutaric acid | 208 | 5000 | 0,0416 | | | 0,0416 | 0,05 | R | O |
| 166 | Malonic acid | 95 | 5000 | 0,019 | | | 0,019 | 0,05 | R | O |
| 167 | Ethylene glycol | 6500 | 1000 | 6,5 | | | 6,5 | 0,05 | R | Y |
| 168 | Ethylene glycol monobutyl ether | 747 | 5000 | 0,1494 | | | 0,1494 | 0,05 | R | O |
| 169 | Diethylene glycol | 4400 | 10000 | 0,44 | | | 0,44 | 0,05 | R | Y |
| 170 | Diethylene glycol monomethyl ether | 500 | 1000 | 0,5 | | | 0,5 | 0,15 | R | O |
| 171 | Diethylene glycol monoethyl ether | 3940 | 5000 | 0,788 | | | 0,788 | 0,05 | R | O |
| 172 | Diethylene glycol monobutyl ether | 1254 | 1000 | 1,254 | | | 1,254 | 0,05 | R | O |
| 173 | Diethylene glycol dimethylether | 2000 | 10000 | 0,2 | | | 0,2 | 0,5 | I | O |
| 174 | Propylene glycol | 32000 | 1000 | 32 | | | 32 | 0,15 | R | Y |
| 175 | Propylene glycol monomethyl ether | 12700 | 5000 | 2,54 | | | 2,54 | 0,05 | R | O |
| 176 | Propylene glycol monobutylether | 748 | 5000 | 0,1496 | | | 0,1496 | 0,05 | R | O |
| 177 | Dipropylene glycol | 1625 | 10000 | 0,1625 | | | 0,1625 | 0,05 | R | O |
| 178 | Dipropylene glycol monomethyl ether | 1919 | 5000 | 0,3838 | | | 0,3838 | 0,05 | R | O |
| 179 | Dipropylene glycol monobutylether | 841 | 5000 | 0,1682 | | | 0,1682 | 0,05 | R | O |
| 180 | Dipropylene glycol dimethylether | 1000 | 5000 | 0,2 | | | 0,2 | 0,5 | I | O |
| 181 | Triethylene glycol | 4400 | 1000 | 4,4 | | | 4,4 | 0,5 | I | O |
| 182 | Tall oil | 1,8 | 1000 | 0,0018 | | | 0,0018 | 0,5 | I | O |
| 183 | Ethylenebisstearamides | 140 | 5000 | 0,028 | | | 0,028 | 0,5 | I | O |
| 184 | Sodium gluconate | 10000 | 10000 | 1 | | | 1 | 0,05 | R | O |
| 185 | Glycol distearate | 100 | 5000 | 0,02 | | | 0,02 | 0,05 | R | Y |
| 186 | Hydroxyl ethyl cellulose | 209 | 5000 | 0,0418 | | | 0,0418 | 1 | P | O |
| 187 | Hydroxy propyl methyl cellulose | 188 | 5000 | 0,0376 | | | 0,0376 | 1 | P | O |
| 188 | 1-methyl-2-pyrrolidone | 500 | 1000 | 0,5 | | | 0,5 | 0,05 | R | O |
| 189 | Xanthan gum | 490 | 1000 | 0,49 | | | 0,49 | 0,05 | R | O |
| 190 | Trimethyl Pentanediol mono-isobutyrate | 18 | 1000 | 0,018 | 3,3 | 100 | 0,033 | 0,05 | R | O |
| 191 | Benzotriazole | 29 | 1000 | 0,029 | | | 0,029 | 1 | P | O |
| 192 | Piperidinol-propanetricarboxylate salt | 100 | 1000 | 0,1 | 120 | 100 | 1,2 | 0,5 | I | O |
| 193 | Diethylaminopropyl-DAS | 120 | 1000 | 0,12 | 120 | 100 | 1,2 | 1 | P | O |
| 194 | Methylbenzamide-DAS | 120 | 1000 | 0,12 | 120 | 100 | 1,2 | 0,5 | I | O |
| 195 | Pentaerythritol-tetrakis-phenol-propionate | 38 | 1000 | 0,038 | | | 0,038 | 1 | P | O |
| 196 | Block polymers (***) | 100 | 5000 | 0,02 | | | 0,02 | 1 | P | N |
| 197 | Denatonium benzoate | 13 | 5000 | 0,0026 | | | 0,0026 | 1 | O | O |
| 198 | Succinate | 374 | 10000 | 0,0374 | | | 0,0374 | 0,05 | R | O |
| 199 | Polyaspartic acid | 528 | 1000 | 0,528 | | | 0,528 | 0,05 | R | N |
| 200 | Xylene Sulphonate | 230 | 1000 | 0,23 | 31 | 100 | 0,31 | 0,5 | I | N |
| 201 | Proteinhydrolizates, wheatgluten | 113 | 5000 | 0,023 | | | 0,023 | 0,05 | R | O |
| 202 | Fatty acid, $C_{6-12}$ methyl ester | 21 | 10000 | 0,0021 | | | 0,0021 | 0,05 | R | O |
| 203 | Mn-Saltren (CAS 61007-89-4) | 39 | 1000 | 0,039 | 4,3 | 100 | 0,043 | 0,5 | I | O |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 204 | Tri-Sodium methylglycine diacetat | 100 | 1000 | 0,1 | 16,7 | 50 | 0,334 | 0,05 | R | O |

Insoluble inorganic Inorganic ingredient with very low, or no ability to dissolve in water.

(*) If no acceptable chronic toxicity data was found, these columns are empty. In that case TF(chronic) is defined as equal to TF(acute)

(**) As a general rule licence applicants must use the data on the list. Perfumes and dyes are exceptions. If toxicity data is submitted by the licence applicant the submitted data shall be used to calculate the TF and determine the degradability. If not, the values on the list shall be used.

(***) The applicants data on aerobic degradability of DID no. 196 Block polymers will be accepted after presentation of test-report.

(#) Due to a lack of toxicity results the TF has been calculated as an average of the values of C 12/14 Alkyl sulphate (AS) and C 16/18 Alkyl sulphate (AS).

(§) 5-Chloro-2-Methyl-4-isothiazolin-3-one and 2-Methyl-4-isothiazolin-3-one in mixture 3:1

## List of abbreviations:

| | |
|---|---|
| SF(acute) | Safety factor for acute toxicity. |
| TF(acute) | Toxicity factor based on acute toxicity on aquatic organisms. |
| SF(chronic) | Safety factor for chronic toxicity. |
| TF(chronic) | Toxicity factor based on chronic toxicity on aquatic organisms. |
| DF | Degradation factor |

Aerobic degradation:

| | |
|---|---|
| R | Readily biodegradable according to OECD guidelines. |
| I | Inherently biodegradable according to OECD guidelines. |
| P | Persistent. The ingredient has failed the test for inherent biodegradability. |
| O | The ingredient has not been tested. |
| NA | Not applicable |

Anaerobic degradation:

| | |
|---|---|
| Y | Biodegradable under anaerobic conditions. |
| N | Not biodegradable under anaerobic conditions. |
| O | The ingredient has not been tested. |
| NA | Not applicable |

# Detergents Ingredients Database

**Version January 2007**

## Part B.

### Critical Dilution Volume

The Critical Dilution Volume is calculated according to the following equation:

$$CDV = 1000 * \Sigma dosage(i) * DF(i)/TF(i)$$

Dosage(i)=Dosage of ingredient i, expressed in g/wash, or in some cases as g/100 g product.

DF(i)= Degradation Factor for ingredient i.

TF(i)= Toxicity Factor for ingredient i.

#### PROCEDURE FOR ESTABLISHING PARAMETER VALUES FOR INGREDIENTS NOT ON THE DID-LIST

As a general rule the listed parameter values must be used for all ingredients on the DID-list. An exception is made for perfumes and dyes, where additional test results are accepted (see footnote in Part A).

**The following approach applies for ingredients that are not listed on the DID-list.**

### Aquatic toxicity

In the European Eco-label scheme, the CDV is calculated based on the chronic toxicity and chronic safety factors. If no chronic test results are available, the acute toxicity and safety factor must be used.

**The chronic toxicity factor ($TF_{chronic}$)**

- Calculate the Median value within each trophic level (fish, crustaceans or algae) using validated test results for chronic toxicity. If several test results are available for one species within a trophic level, a median for the species shall be calculated first, and these median values shall be used when calculating the median value for the trophic level .

- The Chronic toxicity factor ($TF_{chronic}$) is the lowest median of the trophic levels calculated.

- The $TF_{chronic}$ shall be used when calculating the critical dilution volume criterion.

**The acute toxicity factor ($TF_{acute}$)**

- Calculate the Median value within each trophic level (fish, crustaceans or algae) using validated test results for acute toxicity. If several test results are available for one species within a trophic level, a median for the species shall be calculated first, and these median values shall be used when calculating the median value for the trophic level .

- The Acute toxicity factor ($TF_{acute}$) is the lowest median of the trophic levels.

- The $TF_{acute}$ shall be used when calculating the critical dilution volume criterion.

### Safety Factor:

The Safety Factor (SF) is depending on how many trophic levels are tested, and whether chronic test results are available or not. SF is determined as follows:

| **Data** | **Safety factor (SF)** | **Toxicity factor (TF)** |
|---|---|---|
| **1 short-term L(E)C50** | **10000** | **Toxicity/10000** |
| **2 short-term L(E)C50 from species representing two trophic levels (fish and/or crustaceans and/or algae)** | **5000** | **Toxicity/5000** |
| **At least 1 short-term L(E)C50 from each of three trophic levels of the base-set1** | **1000** | **Toxicity/1000** |
| **One long-term NOEC (fish or crustaceans)** | **100** | **Toxicity/100** |
| **Two long-term NOEC from species representing two trophic levels (fish and/or crustaceans and/or algae)** | **50** | **Toxicity/50** |
| **Long-term NOEC from at least three species (normally fish, crustaceans and algae) representing three trophic levels** | **10** | **Toxicity/10** |

– The base set for testing the toxicity of substances towards aquatic organisms consists of acute tests with fish, daphnia and algae.

## Degradation Factors

The Degradation Factor is defined as follows:

Table 1. Degradation factor (DF):

| | DF |
|---|---|
| Readily biodegradable (*) | 0,05 |
| Readily biodegradable (**) | 0,15 |
| Inherently biodegradable | 0,5 |
| Persistent | 1 |

(*) All surfactants or other ingredients consisting of a series of homologues and fulfilling the final degradation requirement of the test, shall be included in this class regardless of fulfilment of the 10-day window criterion.

(**) 10-day window criterion not fulfilled.

For inorganic ingredients the DF is set according to observed degradation rate. If the ingredient degrade within 5 days: DF=0,05, within 15 days: DF=0,15 or within 50 days: DF=0,5.

## Anaerobic biodegradability

The ingredient must be classified into one of the following classes of compounds:

| Category | Label |
|---|---|
| Anaerobically not biodegradable, i.e. tested and found not biodegradable. | N |
| Anaerobically biodegradable i.e. tested and found biodegradable or not tested | Y |

| | |
|---|---|
| but demonstrated through analogy considerations etc. | |
| Not tested for anaerobic biodegradability | 0 |

## Aerobic biodegradability

The ingredient must be classified into one of the following classes of compounds:

| Category | Label |
|---|---|
| Readily biodegradable | R |
| Inherently biodegradable, but not readily biodegradable | I |
| Persistent | P |
| Not tested for aerobic biodegradability | O |

**Insoluble inorganic ingredients**

If an inorganic ingredient has a very low water-solubility, or is not soluble in water this must be indicated in the submitted file.