

## Alkylglucosides

Outstanding hydrotropes for alkaline cleaning. Mild and more sustainable chemistry.

### Environmentally adapted products

Nonionic surfactants have historically been synonymous with alkyl alkoxyates. Today another group of nonionic surfactants, the alkylglucosides, have created a growing interest, not only because of their more sustainable raw material sources and also their very special performance in cleaning applications.

The most obvious difference is that for alkoxyates a cloud point can be defined, but for alkyl glucosides it is mostly not possible to find any cloud point. This phenomenon influences the solubility of the surfactant and one of the greatest advantages with alkylglucosides is the good solubility in water containing high electrolytes. Alkylglucosides can be combined with all other types of surfactants and synergistic effects can then often be found.

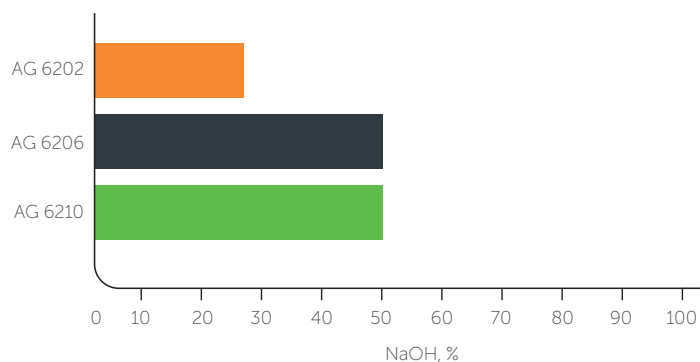
AG 6202, AG 6206 and AG 6210 give a low environmental impact as they are readily biodegradable and the aquatic toxicity is much lower than for the general alkyl alkoxyates.

| Product | Key features  |
|---------|---|
| AG 6202 | <ul style="list-style-type: none"> <li>• Low foaming alkylglucoside</li> <li>• Hydrotropic effect</li> <li>• Wetting properties</li> <li>• Soluble in caustic</li> <li>• Based on a short chained branched alcohol</li> <li>• 65% active matter</li> <li>• Readily biodegradable</li> </ul> |
| AG 6206 | <ul style="list-style-type: none"> <li>• Low foaming alkylglucoside</li> <li>• Hydrotropic effect</li> <li>• Very good solubility in high caustic</li> <li>• Based on a short chained alcohol</li> <li>• 75% active matter</li> <li>• Readily biodegradable</li> </ul>                      |
| AG 6210 | <ul style="list-style-type: none"> <li>• Medium to high foaming alkylglucoside</li> <li>• Very good wetting</li> <li>• Very good solubility in high caustic</li> <li>• Based on a blend of short chained alcohol</li> <li>• 61% active matter</li> </ul>                                    |

### Applications

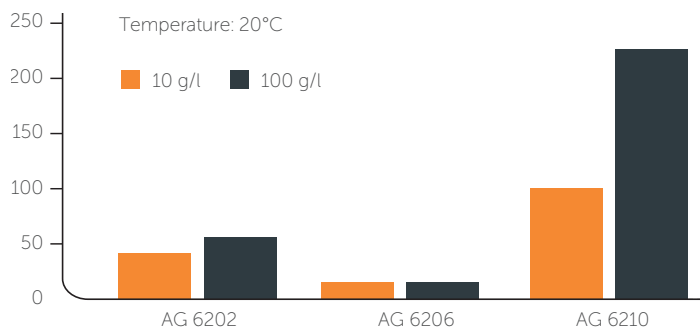
- Low toxic applications
- CIP (Cleaning In Place)
- High alkaline cleaning
- Machine dishwashing
- All purpose cleaning
- PET-cleaning (no stress cracking)
- Demulsification
- Vehicle cleaning

### Solubility of glucosides in NaOH



### Foaming

Foam height immediately, mm



## Environmental data

| Aquatic toxicity                 | AG 6202  | AG 6206   | AG 6210*  |
|----------------------------------|----------|-----------|-----------|
| LC <sub>50</sub> (96 h), Fish    | >300mg/l | >400 mg/l | 1-10mg/l  |
| EC <sub>50</sub> (48 h), Daphnia | >100mg/l | >400 mg/l | 1-10 mg/l |
| EC <sub>50</sub> (72 h), Algae   | >100mg/l | >100 mg/l | 1-10 mg/l |

| Biodegradability   | AG 6202 | AG 6206 | AG 6210 |
|--|---------|---------|---------|
| According to closed bottle test, OECD guidelines No 301D | >90%    | >60%    | >60%    |

\* = refers to the most toxic component in the product preparation

AG 6202, AG 6206 and AG 6210 are classified as readily biodegradable.

## Water based alkaline cleaner

| Ingredients, % w/w                | A    | B    | C   | D    | E    | F   | G    | H   | I   |
|-----------------------------------|------|------|-----|------|------|-----|------|-----|-----|
| Berol 260                         | 5    | 5    | 5   | 5    | -    | -   | -    | -   | 5   |
| Berol 266                         | -    | -    | -   | -    | 5    | 5   | 5    | 5   | -   |
| Na <sub>3</sub> NTA               | 7    | 7    | -   | -    | 7    | 7   | -    | -   | -   |
| TKPP                              | -    | -    | 5   | 5    | -    | -   | 5    | 5   | 5   |
| Na-metasilicate 5H <sub>2</sub> O | -    | -    | 2   | 2    | -    | -   | 2    | 2   | 2   |
| AG 6202                           | -    | 11,5 | -   | 9,5  | -    | 7   | -    | 6   | -   |
| AG 6206                           | 6,5  | -    | 6   | -    | 4,5  | -   | 4,5  | -   | -   |
| AG 6210                           | -    | -    | -   | -    | -    | -   | -    | -   | 15  |
| Water                             | 81,5 | 76,5 | 82  | 78,5 | 83,5 | 81  | 83,5 | 82  | 73  |
| <b>pH (10% solution)</b>          | ~10  | ~10  | ~11 | ~11  | ~10  | ~10 | ~11  | ~11 | ~11 |

Contact us directly for detailed product information and sample request at [cleaning@nouryon.com](mailto:cleaning@nouryon.com)

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