

### Allgemeines:

Die Mischung mehrerer Medien kann sowohl zu einer Verbesserung als auch zu einer Verschlechterung der Beständigkeit führen. Angaben über die Beständigkeit gelten somit immer nur für ein Medium. Die jeweiligen Betriebsbedingungen, wie höhere Temperatur, extreme chemische, mechanische und hiermit kombinierte dynamische Belastungen beeinflussen die Einsatzbarkeit jedes Schlauches zusätzlich. Kommen Kunststoffe mit Medien in Kontakt, bei denen sie laut Beständigkeitslisten unbeständig sind, so muss dies noch lange nicht zum Versagen des Produktes führen. So kann eine starke aber reversible Quellung z.B. als unbeständig eingestuft sein.

Wir empfehlen daher in den Fällen, in denen exakte Angaben gefordert werden,

- einen Versuch in unserem Labor mit dem entsprechenden Medium bei der Anwendungstemperatur,
- diese Daten durch Versuche am Einsatzort zu ermitteln (Wenn noch keine Einsatzerfahrungen vorliegen, stellen wir das erforderliche Versuchsmaterial gerne zur Verfügung.).

Die angegebenen Beständigkeiten sind unverbindliche Mess- oder Erfahrungswerte von Laborversuchen und daher nur Richtwerte mit vorbehaltlichen Änderungen und Abweichungen.

Da die Betriebsbedingungen beim Anwender außerhalb unserer Kontrolle liegen, kann keine Garantie übernommen werden.

Die Angaben bedeuten:

#### 1 sehr gute Beständigkeit:

Das Material wird wahrscheinlich nicht durch das Medium angegriffen.

#### 2 mittlere Beständigkeit:

Das Material wird wahrscheinlich Monate bis hin zu Jahren eine befriedigende Gebrauchsfähigkeit haben. Später kann eine fortschreitende Schädigung jedoch zur Zerstörung führen.

#### 3 bedingte Beständigkeit:

Bei kurzzeitigem, gelegentlichem Kontakt oder bei schwachen Konzentrationen des Mediums wird das Material wahrscheinlich eine gewisse Gebrauchstauglichkeit haben. Bei dauerndem Kontakt muss mit der Zerstörung des Materials gerechnet werden.

#### - unbeständig bzw. löslich:

Der Einsatz des Materials kann nicht empfohlen werden, da die mechanischen Eigenschaften zu stark abfallen, das Material abgebaut wird oder sich auflöst.

Technische Änderungen vorbehalten.

### General:

The mixture of different media can lead both to an improvement and to a debasement of the resistance. Statements in the resistance table are only valid for one medium. The respective working conditions, such as higher temperatures, extreme chemical and mechanical stress, combined with dynamical factors may effect the performance of every hose additionally. If plastics come into contact with media, against which according to the resistance table they are unresistant, so this may not necessarily lead to the failure of the product. A strong, but reversible swelling can therefore be classified as unresistant.

Therefore we recommend in all cases, in which exact details are required,

- a test in our laboratory with the corresponding medium at the temperature of use,
- to find out these data by tests at the place of application (If experiences concerning the application are not available, we will gladly put the required test material at your disposal.).

The stated resistances are non-committal measure or experience values of bench tests and therefore only standard values subject to changes and deviations.

As the operating conditions with the user are outside our control, no guarantee can be given.

The data means:

#### 1 very good resistance:

The material will be probably not attacked by the medium.

#### 2 medium resistance:

The material will probably have a satisfactory fitness for use for months or up to years. Later an advanced damage could lead to destruction.

#### 3 conditional resistance:

By short term and occasional contact, or at weak concentration of the medium, the material will probably have a certain fitness for use. At continuous contact you have to reckon with the destruction of the material.

#### - unresistant or soluble:

The application of the material cannot be recommended, as the mechanical properties will be reduced strongly, the material will be disintegrated or decomposed.

Engineering modifications subject to change.

| Medium  | Ester-PUR      | Ether-PUR (MHF) | Weich-PVC      | LLDPE (AFRUDUC®<br>und PROTAPE) | HDPE + LDPE (CP) | TPE            | NEOPRENE®      | HYPALON®       | VITON®         | Silicon        | PTFE            | PA             | ARAMID          |
|---|----------------|-----------------|----------------|---------------------------------|------------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|-----------------|
|   | 20 °C<br>60 °C | 20 °C<br>60 °C  | 20 °C<br>60 °C | 20 °C<br>60 °C                  | 20 °C<br>60 °C   | 20 °C<br>60 °C | 20 °C<br>60 °C | 20 °C<br>60 °C | 20 °C<br>60 °C | 20 °C<br>60 °C | 20 °C<br>100 °C | 20 °C<br>60 °C | 20 °C<br>100 °C |
| Abwasser  | -              | -               | 1              | 1                               | 1                | 1              | 1              | 1              | 2              | 1              | -               | -              | -               |
| Acetaldehyd (Ethanal), wässrig                  | 2              | 2               | 2              | 1                               | 1                | 2              | 2              | 2              | 2              | 1              | 1               | 2              | -               |
| Acetamid (Essigsäureamid)                       | -              | -               | 1              | 1                               | 1                | 2              | 2              | 2              | 2              | 1              | 1               | 1              | 3               |
| Aceton  | -              | -               | 1              | 1                               | 2                | 3              | 3              | 2              | 3              | 1              | 1               | 2              | 1               |
| Acetylaceton (2,4-Pentadion)                    | -              | -               | -              | -                               | -                | -              | -              | -              | -              | 1              | -               | -              | -               |
| Acetylen  | 1              | 1               | 2              | 3                               | 1                | 1              | 1              | 2              | 1              | 1              | 1               | 1              | 1               |
| Acetylsalicylsäure (Aspirin)                    | -              | -               | 1              | 1                               | 1                | 1              | 1              | 2              | 1              | 1              | 1               | 1              | 1               |
| Acrylnitril                                     | -              | -               | 1              | 1                               | 1                | 3              | 3              | 2              | 3              | 3              | 3               | 1              | 1               |
| Acrylsäureester (Ethylacrylat)                  | -              | -               | -              | 3                               | 1                | -              | 1              | -              | 2              | 1              | 1               | -              | -               |
| Acrylsäureethylester                            | -              | -               | -              | -                               | 3                | -              | 3              | -              | 3              | -              | 1               | 1              | 1               |
| Adipinsäure (Hexandisäure), wässrig             | 3              | 2               | 3              | 1                               | 2                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| Aetzkali → Kalilauge                            | -              | -               | -              | -                               | -                | -              | 1              | -              | -              | -              | -               | -              | -               |
| Aetzkalk → Calciumoxid                          | -              | -               | -              | -                               | -                | -              | 1              | -              | -              | -              | -               | -              | -               |
| Aetzatron → Natriumhydroxid                     | -              | -               | -              | -                               | -                | -              | -              | -              | -              | -              | -               | -              | -               |
| Akksäure → Schwefelsäure                        | -              | -               | -              | -                               | -                | -              | -              | -              | -              | -              | -               | -              | -               |
| Alaun, wässrig                                  | 1              | 2               | 1              | 1                               | 2                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| Aliphate, allgemein gilt (siehe exaktes Medium) | 1              | 2               | 1              | 2                               | 3                | -              | 1              | 1              | 2              | 3              | 1               | 1              | 1               |
| Alkohole, allgemein gilt (siehe exaktes Medium) | 2              | 2               | 2              | 2                               | 1                | 1              | 1              | 2              | 2              | 1              | 1               | 2              | 2               |
| Allylalkohol (Propenol)                         | 3              | 3               | 3              | 3                               | 1                | 1              | 1              | 1              | 3              | 3              | 1               | 1              | 3               |
| Allylchlorid                                    | -              | -               | -              | -                               | 3                | 2              | 1              | -              | 1              | 1              | 2               | 2              | 2               |
| Aluminiumacetate, wässrig (essigsäure Tonerde)  | -              | 3               | 1              | 1                               | 1                | 1              | 1              | 1              | -              | -              | 1               | 1              | -               |
| Aluminiumchlorid, 10%                           | 2              | 3               | 1              | 1                               | 1                | 1              | 1              | 2              | 1              | 1              | 1               | 1              | 3               |
| Aluminiumfluorid                                | 3              | 3               | 3              | 1                               | 1                | 1              | 1              | 1              | 1              | 3              | 1               | 1              | 1               |
| Aluminiumhydroxide                              | 3              | 2               | 2              | 1                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| Aluminiumnitrat                                 | 3              | 2               | 1              | 1                               | 1                | 1              | 1              | 1              | 2              | 1              | 1               | 3              | -               |
| Aluminiumphosphate (Phosphorsäure Tonerde)      | 2              | 1               | 1              | 1                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | -               |
| Aluminiumsulfat, wässrig                        | 2              | 1               | 3              | 1                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| Ameisensäure, 3% (Methansäure)                  | 2              | 2               | 1              | 1                               | 1                | 1              | 2              | 2              | 1              | 2              | 1               | 3              | 1               |
| Ameisensäure, 10%                               | 3              | 2               | 2              | 1                               | 1                | 1              | 1              | 3              | 2              | 1              | 2               | 3              | 2               |
| Ameisensäure, 100%                              | -              | -               | 2              | 1                               | 1                | 1              | 2              | 2              | 3              | -              | -               | 1              | 3               |
| Amine → siehe exaktes Medium                    | -              | -               | -              | -                               | -                | -              | -              | -              | -              | -              | -               | -              | -               |
| Aminoethanole                                   | -              | -               | -              | -                               | -                | 1              | 3              | 3              | 3              | -              | 1               | -              | -               |
| Ammoniak, flüssig 100%                          | -              | -               | 1              | 1                               | 1                | 1              | 1              | 1              | 3              | -              | 1               | 3              | 1               |
| Ammoniak, gasförmig                             | 3              | 2               | 1              | 1                               | 1                | 1              | 1              | 1              | 2              | 3              | 1               | 1              | 1               |
| Ammoniak, wässrig 3% (Salmiakgeist)             | 3              | 2               | 1              | 1                               | 1                | 1              | 1              | 2              | 3              | -              | 1               | 1              | 1               |
| Ammoniumacetat, wässrig                         | -              | 3               | -              | 1                               | 1                | 1              | 1              | 1              | 1              | 3              | -               | 1              | 1               |
| Ammoniumcarbonat, wässrig                       | -              | 3               | -              | 1                               | 2                | 1              | 1              | 1              | 1              | 1              | 2               | 1              | 1               |
| Ammoniumchlorid, wässrig 3% (Salmiak)           | 1              | 2               | 1              | 2                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| Ammoniumdiphosphat, wässrig                     | 3              | 1               | 1              | 1                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| Ammoniumfluoride, wässrig                       | -              | -               | 1              | 3                               | 1                | 1              | 1              | 1              | 1              | 2              | 1               | 1              | 1               |
| Ammoniummetaphosphat                            | 1              | 1               | 2              | 1                               | 1                | 1              | 1              | 1              | 2              | 1              | 1               | 1              | 1               |
| Ammoniumnitrat, wässrig                         | 3              | 2               | -              | 1                               | 1                | 1              | 1              | 2              | 1              | 1              | 1               | 1              | 1               |
| Ammoniumphosphate, wässrig                      | 2              | 2               | -              | 1                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| Ammoniumsulfat                                  | 1              | -               | 3              | 1                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| Ammoniumthiocyanat                              | 3              | 2               | 1              | 1                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| Amylacetat (Essigsäurepentylester)              | -              | -               | -              | 1                               | 2                | 3              | 3              | 3              | -              | -              | -               | 1              | 1               |
| Amylalkohole → Pentanole                        | -              | -               | -              | -                               | -                | -              | 1              | -              | -              | -              | -               | -              | -               |
| Amylchlorid                                     | -              | -               | -              | -                               | 3                | -              | -              | 2              | -              | 1              | 1               | 1              | 1               |
| Anilin (Aminobenzol, Phenylamin)                | -              | -               | -              | 2                               | 2                | 3              | -              | 2              | 3              | 3              | 3               | 1              | 3               |
| Anilinchlorhydrat                               | -              | -               | 2              | -                               | 1                | 1              | 2              | 3              | 3              | -              | -               | 1              | 1               |
| Anisöl  | -              | -               | 1              | 1                               | 3                | -              | -              | -              | -              | -              | -               | 1              | 1               |
| Änol → Cyclohexanon                             | -              | -               | -              | -                               | -                | -              | 2              | -              | -              | -              | -               | -              | -               |
| Anon → Cyclohexanon                             | -              | -               | -              | -                               | -                | -              | -              | -              | -              | -              | -               | -              | -               |
| Anthrachinonsulfonsäure, wässrig                | -              | -               | 1              | 1                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| Antimonchlorid, wasserfrei                      | -              | -               | 1              | 1                               | 1                | 1              | 1              | 1              | 2              | 2              | 3               | 1              | -               |
| Antimontrichlorid, wässrig                      | 3              | 2               | -              | 1                               | 1                | 1              | 1              | 1              | 1              | 1              | 2               | 1              | -               |
| Apfelsäure, wässrig (Apfelsaft)                 | -              | 3               | -              | 1                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| Argongas  | 1              | 1               | 1              | 1                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| Aromate, allgemein gilt (siehe exaktes Medium)  | -              | -               | -              | 1                               | 2                | 3              | 2              | 3              | 1              | 3              | -               | 1              | 1               |
| Arsensäure, wässrig                             | 3              | 3               | -              | 1                               | 2                | 1              | 1              | 1              | 2              | 1              | 1               | 1              | 1               |
| Asphalt (Erdpech)                               | 2              | 2               | 2              | 3                               | 1                | 1              | 2              | 3              | 2              | 3              | 1               | 3              | 1               |
| ASTM-Kraftstoffe → Benzin                       | -              | -               | -              | -                               | -                | -              | -              | -              | -              | -              | -               | -              | -               |
| ASTM-Öle → Öl                                   | -              | -               | -              | -                               | -                | -              | -              | -              | -              | -              | -               | -              | -               |
| ATE-Bremsflüssigkeit → Bremsflüssigkeit         | -              | -               | 1              | 1                               | -                | -              | -              | 1              | 1              | 3              | 1               | -              | -               |
| ATF-ÖL → Öl                                     | -              | -               | -              | -                               | -                | -              | -              | -              | -              | -              | -               | -              | -               |
| Bariumchlorid, wässrig                          | 1              | 3               | 1              | 2                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| Bariumhydroxid, wässrig                         | 3              | 2               | 3              | 1                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| Bariumsulfat (Bariumsalz)                       | 1              | 1               | 1              | 1                               | 1                | 1              | 1              | 2              | 1              | 1              | 1               | 1              | 1               |
| Bariumsulfid (Bariumsalz)                       | 3              | 2               | 3              | 1                               | 1                | 1              | 1              | 2              | 2              | 1              | 1               | 1              | 1               |
| Baumwollsaatöl (Baumwollsaatöl)                 | 1              | 1               | 1              | 1                               | 1                | 1              | 1              | 2              | 2              | 1              | 2               | 1              | 1               |
| Benzaldehyd                                     | -              | -               | -              | 1                               | 3                | 1              | -              | -              | 3              | -              | 1               | 3              | 1               |
| Benzin, allgemein gilt (siehe exaktes Medium)   | 1              | 1               | 3              | -                               | 1                | 2              | 3              | -              | 1              | -              | 1               | 1              | 1               |
| Benzin, ASTM-Kraftstoff A (Fuel A)              | 1              | 1               | 3              | -                               | -                | -              | -              | 1              | 1              | 3              | 1               | -              | -               |
| Benzin, ASTM-Kraftstoff B (Fuel B)              | 3              | 3               | 3              | -                               | -                | -              | -              | 1              | 3              | 1              | 1               | 1              | 1               |
| Benzin, ASTM-Kraftstoff C (Fuel C)              | -              | -               | 3              | -                               | -                | -              | -              | -              | 1              | -              | 1               | -              | -               |
| Benzin, Diesel/ Dieselöl/ Heizöl                | 1              | 1               | 3              | -                               | 1                | 2              | 3              | -              | -              | 1              | 3               | 1              | 1               |
| Benzin, FAM-Kraftstoff DIN 51 604-A             | 1              | 1               | 3              | -                               | -                | -              | -              | -              | -              | 1              | -               | -              | -               |
| Benzin, FAM-Kraftstoff DIN 51 604-B             | 2              | 2               | 3              | -                               | -                | -              | -              | -              | -              | 2              | -               | 1              | -               |
| Benzin, FAM-Kraftstoff DIN 51 604-C             | 3              | 2               | 3              | -                               | -                | -              | -              | -              | -              | 1              | -               | -              | -               |
| Benzin, Flug- (Kerosin)                         | 1              | 1               | 3              | -                               | 1                | 2              | 3              | -              | 1              | -              | 1               | 3              | 1               |
| Benzin, Testbenzin                              | 1              | 2               | 1              | 2                               | 3                | -              | 1              | -              | -              | 1              | -               | 1              | -               |
| Benzin-Benzol (50/ 50%)                         | 3              | 3               | 3              | -                               | -                | -              | -              | -              | 2              | -              | 1               | -              | -               |
| Benzin-Benzol (60/ 40%)                         | 2              | 2               | 3              | -                               | -                | -              | -              | -              | 2              | -              | 1               | -              | -               |
| Benzin-Benzol (70/ 30%)                         | 2              | 2               | 3              | -                               | -                | -              | -              | -              | 1              | 3              | 1               | 1              | -               |
| Benzin-Benzol (80/ 20%)                         | 2              | 2               | 3              | -                               | 3                | 2              | 3              | -              | -              | 1              | 3               | 1              | 1               |

Alle angegebenen Maße und Werte sind ca.-Angaben und wurden bei 20 °C ermittelt.  
Technische Änderungen vorbehalten.

| media                                    | Ester-PUR      | Ether-PUR (MHF) | Soft-PVC       | LLDPE (AFRUDUC®<br>und PROTAPE) | HDPE + LDPE (CP) | TPE            | NEOPRENE®      | HYPALON®       | VITON®         | Silicon        | PTFE            | PA             | ARAMID          |
|--|----------------|-----------------|----------------|---------------------------------|------------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|-----------------|
|  | 20 °C<br>60 °C | 20 °C<br>60 °C  | 20 °C<br>60 °C | 20 °C<br>60 °C                  | 20 °C<br>60 °C   | 20 °C<br>60 °C | 20 °C<br>60 °C | 20 °C<br>60 °C | 20 °C<br>60 °C | 20 °C<br>60 °C | 20 °C<br>100 °C | 20 °C<br>60 °C | 20 °C<br>100 °C |
| acetaldehyde, aqueous                    | 2              | 2               | 2              | 1                               | 1                | 2              | 2              | 2              | 2              | 1              | 1               | 2              | -               |
| acetamide                                | -              | -               | -              | 1                               | 1                | 1              | 2              | 2              | 2              | 2              | 1               | 1              | 3               |
| acetic acid 10%                          | -              | 2               | 3              | 1                               | 1                | 1              | 3              | 1              | 2              | 2              | 3               | 1              | 1               |
| acetic acid 100%                         | -              | -               | -              | 1                               | 3                | -              | 2              | 2              | 2              | -              | 1               | -              | 1               |
| acetic acid 3%                           | 3              | -               | 1              | 2                               | 1                | 1              | 1              | 2              | 1              | 1              | 2               | 3              | 1               |
| acetic acid ethyl ester (ethyl acetates) | -              | -               | -              | 1                               | 1                | 2              | 2              | -              | 3              | 3              | -               | 1              | 1               |
| acetic anhydride                         | -              | -               | -              | 1                               | 1                | 2              | 2              | 1              | 1              | 1              | 1               | 1              | -               |
| acetone                                  | -              | -               | -              | 1                               | 1                | 1              | 2              | 3              | 2              | 3              | 1               | 1              | 2               |
| acetylacetone                            | -              | -               | -              | -                               | -                | -              | -              | -              | -              | -              | -               | -              | -               |
| acetylene                                | 1              | 1               | 1              | 2                               | 3                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| acetylsalicylic acid (Aspirin)           | -              | -               | -              | -                               | -                | -              | -              | -              | -              | -              | -               | -              | -               |
| acids, generally (see exact media)       | 3              | -               | 2              | 3                               | 1                | 2              | 1              | 2              | 3              | 2              | 3               | -              | 1               |
| acrylic acid ethylester                  | -              | -               | -              | -                               | -                | -              | -              | -              | 3              | -              | -               | 3              | -               |
| acrylic esters (ethyl acrylate)          | -              | -               | -              | -                               | 3                | 1              | -              | -              | 1              | -              | 2               | 1              | 1               |
| acrylonitrile                            | -              | -               | -              | 1                               | 1                | 1              | 1              | 3              | 3              | 2              | 3               | 3              | 1               |
| adipic acid, aqueous                     | 3              | -               | 2              | 3                               | 1                | 2              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| air, containing oil → oil                | -              | -               | -              | -                               | -                | -              | -              | -              | -              | -              | -               | -              | -               |
| air, dry                                 | 1              | 1               | 1              | 1                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| air, wet → water vapour                  | -              | -               | -              | -                               | -                | -              | -              | -              | -              | -              | -               | -              | -               |
| alcohols, generally (see exact media)    | 2              | -               | 2              | -                               | 1                | 1              | 1              | 2              | 2              | 1              | 1               | 2              | -               |
| aliphatics, generally (see exact media)  | 1              | 2               | 1              | 2                               | 3                | -              | 1              | 1              | 2              | 3              | -               | 1              | 1               |
| alkalis, generally (see exact media)     | 2              | 3               | 1              | 2                               | 1                | 1              | 1              | 2              | 2              | 1              | 1               | 2              | -               |
| allyl alcohol                            | 3              | -               | 3              | -                               | 1                | 1              | 2              | 1              | 1              | 3              | 3               | -              | 1               |
| allyl chloride                           | -              | -               | -              | -                               | 3                | 2              | -              | 1              | -              | 1              | 1               | 2              | -               |
| alum, aqueous                            | 1              | 2               | 1              | 1                               | 2                | 1              | 1              | 1              | 1              | 1              | 1               | 2              | 3               |
| aluminium acetates                       | -              | 3               | 1              | 1                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | -              | 1               |
| aluminium chloride, 10%                  | 2              | 3               | 1              | 1                               | 1                | 1              | 1              | 1              | 2              | 1              | 1               | -              | 1               |
| aluminium fluoride                       | 3              | -               | 3              | -                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | 3              | 1               |
| aluminium hydroxide                      | 3              | -               | 2              | -                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| aluminium nitrate                        | 3              | 2               | 1              | 1                               | 1                | 1              | 1              | 1              | 1              | 1              | 2               | 1              | 3               |
| aluminium phosphates                     | 2              | 1               | 1              | 1                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 1               |
| aluminium sulfate, aqueous               | 2              | -               | 1              | 3                               | 1                | 1              | 1              | 1              | 2              | 1              | 1               | 1              | 1               |
| amines → see exact media                 | -              | -               | -              | -                               | -                | -              | -              | -              | -              | -              | -               | -              | -               |
| aminoethanols                            | -              | -               | -              | -                               | -                | -              | 1              | 3              | 3              | 3              | -               | 1              | -               |
| ammonia, aqueous 100%                    | -              | -               | 1              | 1                               | 1                | 1              | 1              | 1              | 1              | 1              | 1               | 1              | 2               |
| ammonia, aqueous 3% (liquid ammonia)     | 3              | -               | 1              | 2                               | 1                | 1              | 1              | 1              | 2              | 3              | -               | 1              | 1               |
| ammonia, gaseous                         | 3              | -               | 1              | 2                               | 1                | 1              | 1              | 1              | 1              | 2              | 3               | 1              | 1               |
| ammonium acetate, aqueous                | -              | 3               | -              | 1                               | 1                | 1              | 1              | 1              | 1              | 1              | -               | 3              | -               |
| ammonium carbonate, aqueous              | -              | 3               | -              | 1                               | 2                | 1              | 1              | 1              | 1              | 1              | 1               | 2              |                 |

| Medium                                     | Ester-PUR    |              | Ether-PUR (MHF) |              | Weich-PVC | LLDPE (AFRUDUC® und PROTAPPE) | HDPE + LDPE (CF) | TPE | NEOPRENE® | HYPALON® | VITON® | Silicon | PTFE | PA | ARAMID |
|--|--------------|--------------|-----------------|--------------|-----------|-------------------------------|------------------|-----|-----------|----------|--------|---------|------|----|--------|
|  | 20°C<br>60°C | 20°C<br>60°C | 20°C<br>60°C    | 20°C<br>60°C |           |                               |                  |     |           |          |        |         |      |    |        |
| Benzin-Benzol-Ethanol (50/ 30/ 20%)        | 3            | 3            | 3               | -            |           |                               |                  |     |           |          |        |         |      |    |        |
| Benzoessäure, wässrig                      | 3            | -            | 2               | 3            | 1         | 2                             | 1                | 1   | 1         | 1        | 1      | 1       | 3    | -  | 2      |
| Benzol                                     | -            | -            | -               | 1            | 3         | -                             | -                | -   | -         | 1        | 1      | 1       | 3    | -  | 1      |
| Benzylalkohol                              | -            | -            | 3               | -            | 1         | 1                             | 1                | 1   | 1         | 1        | 1      | 1       | 1    | -  | 1      |
| Benzylbenzoat                              | -            | -            | -               | -            | -         | -                             | -                | -   | -         | -        | -      | -       | -    | -  | -      |
| Benzylchlorid                              | -            | -            | 1               | 2            | -         | -                             | -                | -   | -         | 2        | 2      | -       | 1    | 1  |        |
| Bergblau → Kupferhydroxid                  |              |              |                 |              |           |                               |                  |     |           |          |        |         |      |    |        |
| Bernsteinsäure, wässrig (Butandisäure)     | -            | 3            | -               | 1            | 1         | 1                             | 1                | 1   | 1         | 1        | 1      | 1       | 2    | -  | 1      |
| Bier                                       | 1            | 1            | 1               | 1            | 1         | 1                             | 1                | 1   | 1         | 1        | 1      | 1       | 1    | 1  | 1      |
| Biogas (Sumpfgas)                          | 1            | 1            | 1               | 1            | 1         | -                             | -                | -   | -         | 1        | 1      | 1       | 1    | 1  | 1      |
| Biphenyle, polychlorierte (Pyranole; Öle)  | 2            | 2            | 3               | 3            |           |                               |                  |     | 3         | -        | -      | -       | -    | -  | -      |
| Bismutcarbonate (Wismutcarbonat)           | 1            | 1            | 1               | 1            |           |                               |                  |     | 1         | 1        | 1      | 1       | 1    | 1  | 1      |
| Bisulfittauge (Hydrogensulfite)            | -            | 3            | -               | 1            | 1         | 1                             | 2                | 1   | 1         | 2        | 3      | 1       |      |    |        |
| Bittersalz → Magnesiumsulfat               |              |              |                 |              |           |                               |                  |     |           |          |        |         |      |    |        |
| Bitumen                                    | 2            | -            | 2               | -            | 2         | 3                             | 1                | 1   | 2         | 3        | 2      | -       | 3    | -  | 1      |
| Blausäure                                  | 3            | 2            | 1               | 3            | 1         | 1                             | 1                | 1   | 1         | 1        | 1      | 1       | 1    | 1  | 1      |
| Bleiacetate, wässrig                       | 1            | 1            | 1               | 1            | 1         | 1                             | 1                | 1   | 2         | 1        | 1      | 1       | 1    | 1  | 2      |
| Bleiarсенat; wässrig                       | 3            | 1            | 1               | 1            | 1         | 1                             | 1                | 1   | 1         | 1        | 1      | 1       | 1    | 1  | 1      |
| Bleichlaug → Natriumhypochlorit            |              |              |                 |              |           |                               |                  |     |           |          |        |         |      |    |        |
| Bleinitrat, wässrig                        | 2            | 1            | 1               | 1            | 1         | 1                             | 1                | 1   | 1         | 1        | 1      | 2       | 1    |    |        |
| Bleisulfat                                 | 1            | 1            | 1               | 1            | 1         | 1                             | 1                | 1   | 1         | 1        | 1      | 1       | 1    | 1  | 1      |
| Blut                                       |              |              |                 |              |           |                               |                  |     |           |          |        |         |      |    |        |
| Borax, wässrig                             | 2            | 3            | 1               | 1            | 1         | 1                             | 1                | 1   | 1         | 1        | 1      | 1       | 1    | 1  | 1      |
| Borsäure, wässrig                          | 2            | 3            | 1               | 2            | 1         | 1                             | 1                | 1   | 1         | 1        | 1      | 1       | 1    | 1  | 3      |
| Brantweine                                 | 1            | 1            | 1               | 1            | 1         | 1                             | 1                | 1   | 1         | 1        | 1      | 1       | 1    | 1  | 1      |
| Braunkohlenteeröl (a. Steinkohlenteer)     | 3            | 3            | 2               | 2            |           |                               |                  |     | 3         | -        | -      | -       | -    | -  | -      |
| Bremsflüssigkeit, ATE-                     | -            | -            | -               | -            | 1         | 1                             | 1                | 1   | -         | 1        | 3      | 2       | 1    | 1  | 1      |
| Bremsflüssigkeit, ATS-                     | -            | -            | -               | -            | 1         | 1                             | 1                | 1   | -         | 1        | 3      | 2       | 1    | 1  | 1      |
| Bremsflüssigkeit, aus Glykolether          | -            | -            | -               | -            | -         | -                             | -                | -   | -         | -        | -      | -       | -    | -  | -      |
| Brennspiritus → Ethanol                    |              |              |                 |              |           |                               |                  |     |           |          |        |         |      |    |        |
| Brom                                       | -            | -            | -               | -            | -         | -                             | -                | -   | -         | 3        | -      | -       | -    | -  | -      |
| Brombenzol                                 | -            | -            | -               | -            | 1         | 1                             | 2                | 3   | -         | -        | -      | -       | -    | 1  | 3      |
| Bromwasser                                 | -            | -            | -               | -            | -         | -                             | -                | -   | -         | 2        | -      | -       | -    | -  | -      |
| Bromwasserstoffsäure 50%                   | -            | 3            | -               | 1            | 1         | 1                             | 1                | 1   | 1         | -        | 1      | 1       | 1    | -  | -      |
| Butadien                                   | 2            | 3            | 1               | 2            | 1         | 2                             | -                | 3   | -         | 2        | 1      | 1       | 2    | 3  | 3      |
| Butan, flüssig                             | 1            | 1            | 1               | 2            | 1         |                               |                  |     | 1         | 1        | 1      | 3       | 1    | 1  | 1      |
| Butan, gasförmig                           | 1            | 1            | 3               | -            | 3         | 2                             | 3                | -   | 1         | 1        | 1      | -       | -    | 1  | 1      |
| Butandiole → Butylenglykol                 |              |              |                 |              |           |                               |                  |     |           |          |        |         |      |    |        |
| Butanol → Butylalkohol                     |              |              |                 |              |           |                               |                  |     |           |          |        |         |      |    |        |
| Butanon → Methyläthylketon (MEK)           |              |              |                 |              |           |                               |                  |     |           |          |        |         |      |    |        |
| Butindiol                                  | 1            | 1            |                 |              |           |                               |                  |     |           | 2        | 3      | 1       |      |    |        |
| Butter                                     | 2            | 1            | 2               | 1            | 1         | 1                             | 1                | 1   | 2         | 2        | 1      | 1       | 1    | 1  | 1      |
| Buttermilch                                | 2            | 1            | 1               | 1            | 1         | 1                             | 1                | 1   | 2         | 2        | 1      | 1       | 1    | 1  | 1      |
| Buttersäure, wässrig                       | 3            | -            | 2               | 3            | 1         | 3                             | 1                | 1   | 2         | 3        | 2      | 3       | -    | 1  | 3      |
| Butylacetat (Essigsäurebutylester)         | -            | -            | -               | -            | 1         | 1                             | 3                | -   | -         | -        | -      | -       | -    | -  | -      |
| Butylalkohol                               | 2            | 3            | 2               | 3            | 1         | 1                             | 1                | 1   | 1         | 1        | 1      | 3       | 2    | 1  | 1      |
| Butylamin                                  | 2            | 2            | -               | 3            |           |                               |                  |     | 3         | -        | -      | -       | 2    | 1  |        |
| Butylbenzoat                               | 1            | 1            | -               | -            | -         | -                             | -                | -   | -         | -        | -      | -       | -    | -  | -      |
| Butylcarbitol                              | -            | -            | -               | -            | -         | -                             | -                | -   | 3         | 2        | 1      | 2       | 1    | -  | -      |
| Butylen, flüssig (Buten)                   | 1            | 1            | 2               | 2            | -         | -                             | -                | -   | -         | -        | -      | 1       | 3    | 1  | -      |
| Butylenglykol, wässrig                     | 1            | 1            | 3               | 1            | 1         | 1                             | 1                | 1   | 2         | -        | 1      | 2       | 1    | 2  |        |
| Butylether                                 | -            | 3            | 1               | 1            |           |                               |                  |     | 2         | -        | -      | 3       | 1    | 1  |        |
| Butyloleat                                 | -            | -            | -               | -            | -         | -                             | -                | -   | -         | -        | -      | 1       | 1    | 1  |        |
| Butylphenole                               | -            | -            | 3               | -            | 1         | 1                             | 2                | 3   |           |          |        | 2       | 3    | -  | -      |
| Butylstearat                               | 1            | 1            | 1               | -            |           |                               |                  |     | -         | 2        | 1      | 1       | 1    |    |        |
| Butyraldehyd                               | -            | -            | -               | -            | 1         | 1                             | 1                | 1   | -         | 3        | -      | -       | -    | -  | -      |
| Calciumacetat                              | 2            | 2            | 1               | 1            | 1         | 1                             | 1                | 1   | 3         | 2        | -      | 2       | 1    |    |        |
| Calciumbisulfat, wässrig                   | 1            | 1            | 1               | 1            |           |                               |                  |     | 1         | 1        | 1      | 1       | 1    | 1  | 1      |
| Calciumbisulfid, wässrig                   | 3            | 3            | 1               | 1            |           |                               |                  |     | 1         | 1        | 1      | 2       | 1    |    |        |
| Calciumcarbonat                            | 1            | 1            | 1               | 1            | 1         | 1                             | 1                | 1   | 1         | 1        | 1      | 1       | 1    | 2  |        |
| Calciumchlorid, wässrig 10%                | 2            | -            | 1               | 3            | 1         | 1                             | 1                | 1   | 1         | 1        | 1      | 1       | 1    | 1  | 2      |
| Calciumhydroxid, wässrig (gelöschter Kalk) | 1            | 3            | 1               | 2            | 1         | 1                             | 1                | 1   | 1         | 1        | 1      | 1       | 1    | 2  | 1      |
| Calciumhypochlorit, wässrig                | -            | -            | 1               | 1            | 1         | 1                             | 1                | 1   | 3         | 1        | 1      | 3       | -    | 1  | -      |
| Calciumnitrat                              | 1            | 1            | 1               | 1            | 1         | 1                             | 1                | 1   | 1         | 1        | 1      | 1       | 1    | 1  | 1      |
| Calciumoxid (gebrannter Kalk)              | 1            | 1            | 1               | 1            | 1         | 1                             | 1                | 1   | 1         | 1        | 1      | 2       | 1    |    |        |
| Calciumphosphate, wässrig                  | 2            | 2            | -               | -            | 1         | 1                             | 1                | 1   | 1         | 1        | 1      | 1       | 3    |    |        |
| Calciumsulfat, wässrig                     | 1            | 1            | 1               | 1            | 1         | 1                             | 1                | 1   | 2         | 1        | 1      | 1       | 1    | 1  | 1      |
| Calciumsulfid                              | 1            | 1            | 1               | 1            |           |                               |                  |     | 1         | 1        | 1      | 2       | 1    |    |        |
| Campher (Campheröl)                        | -            | -            | -               | 1            | 1         | 3                             | -                | -   | -         | 3        | -      | 3       | -    | 1  | 1      |
| Carbolineum, wässrig                       | -            | -            | -               | -            | 1         | 1                             | 1                | 1   | -         | -        | -      | -       | -    | -  | -      |
| Carbolsäure → Phenol                       |              |              |                 |              |           |                               |                  |     |           |          |        |         |      |    |        |
| Carosche Säure (Peroxy-monoschwefels.)     |              |              |                 |              |           |                               |                  |     |           | 2        |        |         |      |    |        |
| Celluloseacetat (Acetylcellulose)          | 1            | 1            | 1               | -            |           |                               |                  |     | 1         |          |        | 1       | 1    | 1  | 1      |
| Chlor, flüssig                             | -            | -            | -               | -            | -         | -                             | -                | -   | -         | 3        | -      | -       | -    | -  | -      |
| Chlor, gasförmig trocken                   | -            | -            | -               | -            | -         | -                             | -                | -   | -         | 3        | 1      | -       | -    | -  | -      |
| Chloralhydrat, wässrig                     | -            | -            | -               | 1            | 1         | 1                             | 1                | 1   | 2         | 2        | 3      | 1       | 1    | -  | -      |
| Chloramin, wässrig                         | 2            | 2            |                 |              |           |                               |                  |     | 1         | 1        | 1      | 1       |      |    |        |
| Chlorbenzol                                | -            | -            | -               | 1            | 3         | -                             | -                | -   | -         | 2        | -      | -       | 1    | 1  | 1      |
| Chlorbrommethan                            | -            | -            | -               | 2            | -         | 3                             | -                | -   | -         | -        | -      | -       | 1    | 3  | -      |
| Chlorbutadien → Chloropren                 |              |              |                 |              |           |                               |                  |     |           |          |        |         |      |    |        |
| Chlordioxid                                | -            | -            | 2               | -            |           |                               |                  |     | 1         | 1        | 1      | 1       | 1    |    |        |
| Chlordiphenyl (Clophon)                    | -            | -            | -               | -            | 1         |                               |                  |     | -         | -        | -      | 1       | 2    | 1  |        |
| Chloressigsäure, Mono-                     | -            | -            | -               | 1            | 3         | 1                             | 1                | 1   | 3         | 2        | -      | -       | -    | -  | -      |
| Chloretan (Chloretyl) → Ethylchlorid       |              |              |                 |              |           |                               |                  |     |           |          |        |         |      |    |        |
| Chloretanol → Ethylchlorhydrin             |              |              |                 |              |           |                               |                  |     |           |          |        |         |      |    |        |

Alle angegebenen Maße und Werte sind ca.-Angaben und wurden bei 20 °C ermittelt.  
Technische Änderungen vorbehalten.

| media                                      | Ester-PUR    |              | Ether-PUR (MHF) |              | Soft-PVC | LLDPE (AFRUDUC® und PROTAPPE) | HDPE + LDPE (CF) | TPE | NEOPRENE® | HYPALON® | VITON® | Silicon | PTFE | PA | ARAMID |
|--|--------------|--------------|-----------------|--------------|----------|-------------------------------|------------------|-----|-----------|----------|--------|---------|------|----|--------|
|  | 20°C<br>60°C | 20°C<br>60°C | 20°C<br>60°C    | 20°C<br>60°C |          |                               |                  |     |           |          |        |         |      |    |        |
| bitter salt → magnesium sulfate            |              |              |                 |              |          |                               |                  |     |           |          |        |         |      |    |        |
| bitumen (asphalt)                          | 2            | -            | 2               | -            | 2        | 3                             | 1                | 1   | 2         | 3        | 2      | -       | -    | 3  | -      |
| black liquor (cellulose-/ pulp-production) | -            | -            | -               | -            | -        | -                             | -                | -   | -         | 1        | 1      | 1       | 1    | 1  | 1      |
| blood                                      |              |              |                 |              |          |                               |                  |     |           |          |        |         |      |    |        |
| bone oils                                  | 1            | 1            | 2               |              |          |                               |                  |     | 2         | 3        | -      | -       | -    | 1  | 1      |
| borax, aqueous                             | 2            | 3            | 1               | 1            | 1        | 1                             | 1                | 1   | 1         | 1        | 1      | 1       | 1    | 1  | 1      |
| boric acid, aqueous                        | 2            | 3            | 1               | 2            | 1        | 1                             | 1                | 1   | 1         | 1        | 1      | 1       | 1    | 1  | 1      |
| brake fluid, ATE-                          | -            | -            | -               | -            | 1        | 1                             | 1                | 1   | 1         | -        | 1      | 3       | 2    | 1  | 1      |
| brake fluid, ATS-                          | -            | -            | -               | -            | 1        | 1                             | 1                | 1   | 1         | -        | 1      | 3       | 2    | 1  | 1      |
| brake fluid, out of glycol ethers          | -            | -            | -               | -            | 1        | 1                             | 1                | 1   | 1         | -        | 1      | 3       | 2    | 1  | 1      |
| brine → sodium chloride                    |              |              |                 |              |          |                               |                  |     |           |          |        |         |      |    |        |
| bromine                                    | -            | -            | -               | -            | -        | -                             | -                | -   | -         | 3        | -      | -       | -    | -  | -      |
| bromine water                              | -            | -            | -               | -            | -        | -                             | -                | -   | -         | 2        | -      | -       | -    | -  | -      |
| bromobenzene                               | -            | -            | -               | -            | 1        | 1                             | 2                | 3   | 3         | -        | -      | -       | -    | -  | -      |
| bromochloromethane                         | -            | -            | -               | -            | 2        | -                             | 3                | -   | -         | -        | -      | -       | -    | -  | -      |
| butadiene                                  | 2            | 3            | 1               | 2            | 1        | 2                             | -                | 3   | -         | 2        | 1      | 1       | 1    | 1  | 1      |
| butane, gaseous                            | 1            | 1            | 3               | -            | 3        | 2                             | 3                | -   | 1         | 1        | 1      | 1       | 1    | 1  | 1      |
| butane, liquid                             | 1            | 1            | 2               | 1            |          |                               |                  |     | 1         | 1        | 1      | 3       | 1    | 1  | 1      |
| butanediols → butylglycol                  |              |              |                 |              |          |                               |                  |     |           |          |        |         |      |    |        |
| butanol → butylalcohol                     |              |              |                 |              |          |                               |                  |     |           |          |        |         |      |    |        |
| butanone → methyl ethyl ketone (MEK)       |              |              |                 |              |          |                               |                  |     |           |          |        |         |      |    |        |
| butene, aqueous                            | 1            | 1            | 2               | 2            | -        | -                             | -                | -   | -         | 1        | 3      | 1       | -    | -  | -      |
| butter                                     | 2            | 1            | 2               | 1            | 1        | 1                             | 1                | 1   | 2         | 2        | 1      | 1       | 1    | 1  | 1      |
| butter milk                                | 2            | 1            | 1               | 1            | 1        | 1                             | 1                | 1   | 2         | 2        | 1      | 1       | 1    | 1  | 1      |
| butyl acetates                             | -            | -            | -               | -            | 1        | 1                             | 3                |     | -         | -        | -      | -       | -    | -  | -      |
| butyl benzoate                             | 1            | 1            |                 |              |          |                               |                  |     | -         | -        | -      | -       | -    | -  | -      |
| butyl carbitol                             | -            | -            | -               | -            | -        | -                             | -                | -   | 3         | 2        | 1      | 2       | 1    |    |        |
| butyl oleate                               | -            | -            | -               | -            | -        | -                             | -                | -   | -         | -        | -      | -       | -    | -  | -      |
| butyl phenol                               | -            | -            | -               | 3            | -        | 1                             | 1                | 2   | 3         |          |        |         |      |    |        |
| butyl stearate                             | 1            | 1            | 1               | -            |          |                               |                  |     | -         | 2        | 1      | 1       | 1    |    |        |
| butylalcohol                               | 2            | 3            | 2               | 3            | 1        | 1                             | 1                | 1   | 1         | 1        | 1      | 1       | 1    | 1  | 1      |
| butylamine                                 | 2            | 2            | -               | 3            |          |                               |                  |     | 3         | -        | -      | -       | 2    | 1  |        |
| butylether                                 | -            | 3            | 1               | 1            |          |                               |                  |     | 2         | -        | -      | 3       | 1    |    |        |
| butylglycol, aqueous                       | 1            | 1            | 3               | 1            | 1        | 1                             | 1                | 1   | 2         | -        | 1      | 1       | 2    | 2  | 2      |
| butylenediol                               | 1            | 1            |                 |              |          |                               |                  |     |           |          |        |         |      |    |        |
| butyraldehyde                              | -            | -            | -               | -            | 1        | 1                             | 1                | 1   | -         | 3        | -      | -       | -    | -  | -      |
| butyric acid                               | 3            | -            | 2               | 3            | 1        | 3                             | 1                | 1   | 2         | 3        | -      | 3       | 2    | 3  | 1      |
| calcium acetate                            |              |              |                 |              |          |                               |                  |     |           |          |        |         |      |    |        |















| Medium   | Ester-PUR |       | Ether-PUR (MHF) |       | Weich-PVC |       | LLDPE (AFRUDUC® und PROTAPE) |       | HDPE + LDPE (CP) |       | TPE   | NEOPRENE® | HYPALON® |       | VITON® | Silicon | PTFE  | PA    | ARAMID |        |
|--|-----------|-------|-----------------|-------|-----------|-------|------------------------------|-------|------------------|-------|-------|-----------|----------|-------|--------|---------|-------|-------|--------|--------|
|  | 20 °C     | 60 °C | 20 °C           | 60 °C | 20 °C     | 60 °C | 20 °C                        | 60 °C | 20 °C            | 60 °C | 20 °C | 60 °C     | 20 °C    | 60 °C | 20 °C  | 60 °C   | 20 °C | 60 °C | 20 °C  | 100 °C |
| Wasserstoff                                    | 1         | 1     | 1               | 1     | 1         | 1     | 1                            | 1     | 1                | 1     | 1     | 1         | 1        | 1     | 1      | 1       | 1     | 1     | 1      | 1      |
| Wasserstoffperoxid (Wasserstoffsuperoxid), 3%  | 1         | 2     | 1               | 2     | 1         | 1     | 1                            | 1     | 2                | 3     | 1     | 2         | -        | 1     | 1      | 1       | 1     | 1     | 1      | -      |
| Wasserstoffperoxid (Wasserstoffsuperoxid), 30% | 2         | -     | 2               | -     | 2         | 3     | 1                            | 1     | 3                | -     | 2     | 3         | 2        | 1     | 1      | 1       | 1     | 1     | 1      | -      |
| Wein   | 1         | 1     | 1               | 1     | 1         | 1     | 1                            | 1     | 1                | 1     | 1     | 1         | 1        | 1     | 1      | 1       | 1     | 1     | 1      | 1      |
| Weinsäure (Weinsteinsäure), wässrig            | 2         | 3     | 1               | 2     | 1         | 1     | 1                            | 1     | 1                | 1     | 1     | 2         | 1        | 1     | 1      | 1       | 1     | 1     | 2      | 1      |
| Weissöl → Paraffin                             |           |       |                 |       |           |       |                              |       |                  |       |       |           |          |       |        |         |       |       |        |        |
| Witterung, allgemein gilt                      | 2         | 2     | 2               | 2     | 3         | 3     | 3                            | 3     | 3                | 2     | 2     | 2         | 2        | 1     | 1      | 2       | 2     | 1     | 1      | 3      |
| Wollfett (Wollwachs) → Lanolin                 |           |       |                 |       |           |       |                              |       |                  |       |       |           |          |       |        |         |       |       |        |        |
| XYLAMON  | 3         | 3     |                 |       |           |       |                              |       |                  |       |       |           |          | 2     | -      | 1       |       |       |        |        |
| Xylol (Demethylbenzole)                        | 3         | -     | 3               | -     | -         | 1     | 1                            | -     | -                | -     | -     | 2         | -        | 2     | -      | 1       | 1     | 1     |        |        |
| Zinkacetat, wässrig                            | -         | -     | -               | -     | 1         | 1     | 1                            | 1     | 1                | 1     | 1     | 1         | 1        | 1     | 1      | 1       | 1     | 1     | 1      | 1      |
| Zinkchlorid, wässrig                           | 2         | 3     | 2               | 3     | 1         | 2     | 1                            | 1     | 1                | 1     | 1     | 1         | 1        | 1     | 1      | 1       | 1     | 1     | 3      |        |
| Zinksulfat, wässrig                            | 2         | 3     | 2               | 3     | 1         | 1     | 1                            | 1     | 1                | 1     | 1     | 1         | 1        | 1     | 1      | 1       | 1     | 1     | 2      |        |
| Zinn-II-Chlorid (Zinndichlorid), wässrig       | 3         | -     | 2               | 3     | 1         | 2     | 1                            | 1     | 2                | 1     | 2     | 3         | 1        | 1     | 2      | 1       | 1     | 3     |        |        |
| Zucker, trocken                                | 1         | 2     | 1               | 1     | 1         | 1     | 1                            | 1     | 1                | 1     | 1     | 1         | 1        | 1     | 1      | 1       | 1     | 1     | 1      | 1      |
| Zuckersirup (Saccharose)                       | 2         | 3     | 1               | 2     | 1         | 2     | 1                            | 1     | 1                | 1     | 1     | 1         | 1        | 1     | 1      | 1       | 1     | 1     | 1      | 1      |

| media                    | Ester-PUR |       | Ether-PUR (MHF) |       | Soft-PVC |       | LLDPE (AFRUDUC® and PROTAPE) |       | HDPE + LDPE (CP) |       | TPE   | NEOPRENE® | HYPALON® |       | VITON® | Silicon | PTFE  | PA    | ARAMID |        |
|--------------------------|-----------|-------|-----------------|-------|----------|-------|------------------------------|-------|------------------|-------|-------|-----------|----------|-------|--------|---------|-------|-------|--------|--------|
|                          | 20 °C     | 60 °C | 20 °C           | 60 °C | 20 °C    | 60 °C | 20 °C                        | 60 °C | 20 °C            | 60 °C | 20 °C | 60 °C     | 20 °C    | 60 °C | 20 °C  | 60 °C   | 20 °C | 60 °C | 20 °C  | 100 °C |
| white oil → paraffin     |           |       |                 |       |          |       |                              |       |                  |       |       |           |          |       |        |         |       |       |        |        |
| white spirits → gasoline |           |       |                 |       |          |       |                              |       |                  |       |       |           |          |       |        |         |       |       |        |        |
| wine                     | 1         | 1     | 1               | 1     | 1        | 1     | 1                            | 1     | 1                | 1     | 1     | 1         | 1        | 1     | 1      | 1       | 1     | 1     | 1      | 1      |
| wood oil                 | 3         | 2     | 3               | 2     |          |       |                              |       |                  |       |       |           | 3        | 1     | 3      | 1       |       |       |        |        |
| wool fat → lanolin       |           |       |                 |       |          |       |                              |       |                  |       |       |           |          |       |        |         |       |       |        |        |
| XYLAMON                  | 3         | 3     |                 |       |          |       |                              |       |                  |       |       |           |          | 2     | -      | 1       |       |       |        |        |
| xylenes                  | 3         | -     | 3               | -     | -        | 1     | 1                            | -     | -                | -     | -     | 2         | -        | 2     | -      | 1       | 1     |       |        |        |
| yeast, aqueous           | -         | 1     | 1               | 1     | 1        | 1     | 1                            | 1     | 1                | 1     | 1     | 1         | 1        | 1     | 1      | 1       | 1     | 1     | 1      | 1      |
| zinc acetate, aqueous    | -         | -     | -               | -     | 1        | 1     | 1                            | 1     | 1                | 1     | 1     | 1         | 1        | 1     | 1      | 1       | 1     | 1     | 1      | 1      |
| zinc chloride, aqueous   | 2         | 3     | 2               | 3     | 1        | 2     | 1                            | 1     | 1                | 1     | 1     | 1         | 1        | 1     | 1      | 1       | 1     | 1     | 3      |        |
| zinc sulfate, aqueous    | 2         | 3     | 2               | 3     | 1        | 1     | 1                            | 1     | 1                | 1     | 1     | 1         | 1        | 1     | 1      | 1       | 1     | 1     | 2      |        |

Alle angegebenen Maße und Werte sind ca.-Angaben und wurden bei 20 °C ermittelt.  
Technische Änderungen vorbehalten.

All stated dimensions, sizes and technical data are approx.- figures based on a temperature of 20 °C.  
Engineering modifications subject to change.