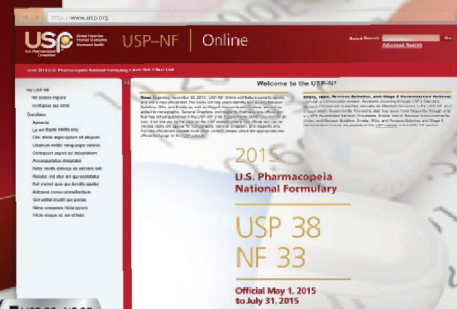
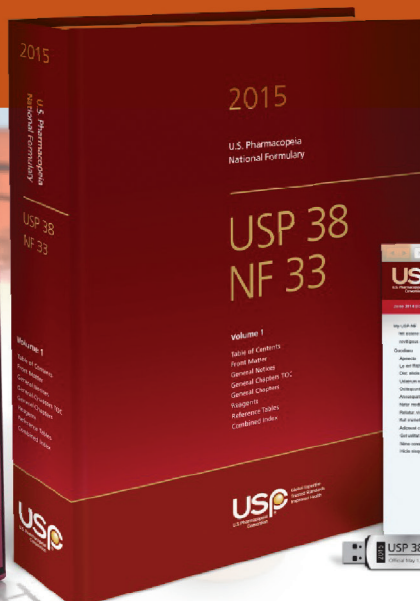
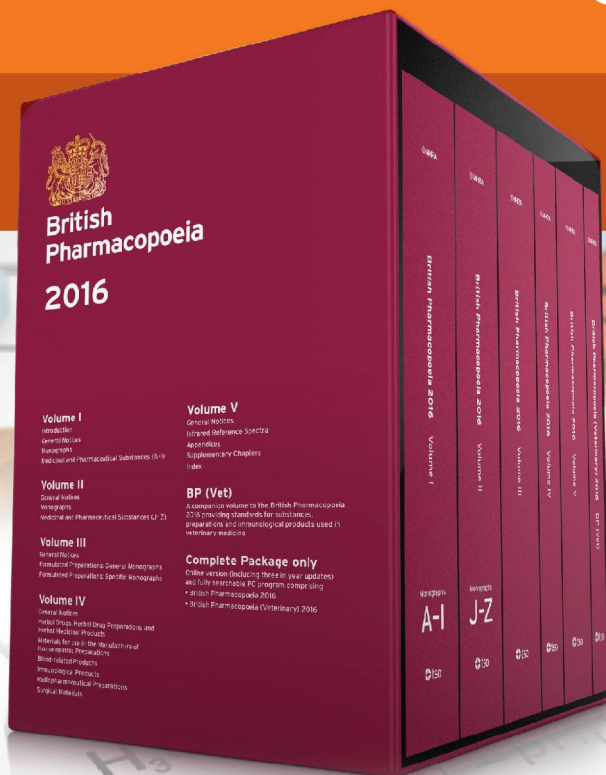




**Neutron<sup>®</sup>**  
Pharmaceutical Co.

# LABORATORY USP REAGENT



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## Acetic acid 100% glacial

Laboratory USP Reagent

**C<sub>2</sub>H<sub>4</sub>O<sub>2</sub>**

**M= 60.05 g/mol**

**1lit= 1.05 g/cm<sup>3</sup>**

### Specification

|                            |              |   |
|----------------------------|--------------|---|
| Assay                      | 99.5 – 100.5 | % |
| Color & Description        | Conforms     |   |
| Solubility                 | Conforms     |   |
| Identification             | Conforms     |   |
| Chloride (Cl)              | Conforms     |   |
| Sulfate                    | Conforms     |   |
| Heavy metals               | ≤ 0.001      | % |
| Nonvolatile residue        | ≤ 0.005      | % |
| Ready oxidizable substance | Conforms     |   |

| Glass Bottles |       |   | Plastic Bottles |       |   | Plastic Gallon |       |  |
|---------------|-------|---|-----------------|-------|---|----------------|-------|--|
| 1             | Liter | ● | 1               | Liter |   | 5              | Liter |  |
| 2.5           | Liter | ● | 2.5             | Liter | ● | 10             | Liter |  |
|               |       |   |                 |       |   | 20             | Liter |  |

**Product Code: 1.1010.**

### Technical Information

|                                 |                                              |
|---------------------------------|----------------------------------------------|
| Formula:                        | C <sub>2</sub> H <sub>4</sub> O <sub>2</sub> |
| Chemical formula:               | CH <sub>3</sub> COOH                         |
| Density:                        | 1.05 g/cm <sup>3</sup> (20 °C)               |
| Molar mass:                     | 60.05 g/mol                                  |
| CAS number:                     | 64-19-7                                      |
| EC index number:                | 607-002-00-6                                 |
| HS code:                        | 29152100                                     |
| EC number:                      | 200-580-7                                    |
| Storage (temperature):          | Store at +20 °C to +25 °C                    |
| SDS                             | available                                    |
| RTECS:                          | AF1225000                                    |
| R phrase:                       | R 10-35                                      |
| S phrase:                       | S 23.2-26-45                                 |
| Odour:                          | pungent                                      |
| Form:                           | liquid                                       |
| Color:                          | colourless                                   |
| Explosion limit:                | 4 -19.9 Vol %                                |
| Ignition temperature:           | 485 °C                                       |
| PH value:                       | 2.5 (50 g/l 20 °C)                           |
| Solubility in water:            | (20°C) soluble                               |
| Solubility in ethanol:          | soluble                                      |
| Refractive index:               | 1.37 (20 °C)                                 |
| Flash point:                    | 39 °C (c.c.)                                 |
| Boiling point:                  | 116 - 118 °C (1013 hPa)                      |
| Melting point:                  | 17 °C                                        |
| Vapour pressure:                | 15.4 hPa (20 °C)                             |
| Viscosity dynamical :           | 1.22 mPa*s (20 °C)                           |
| Viscosity kinematic:            | 1.17 mPa*s (20 °C)                           |
| Saturation concentration (air): | 38 g/m <sup>3</sup> (20 °C)                  |



## Acetone

Laboratory USP Reagent

**C<sub>3</sub>H<sub>6</sub>O**

**M= 58.08 g/mol**

**1lit= 0.79 g/cm<sup>3</sup>**

### Specification

|                            |               |                   |
|----------------------------|---------------|-------------------|
| Assay                      | ≥ 99.0        | %                 |
| Description                | Conforms      |                   |
| Solubility                 | Conforms      |                   |
| Identification             | Conforms      |                   |
| Specific gravity           | 0.789 – 0.791 | g/cm <sup>3</sup> |
| Nonvolatile residue        | ≤ 0.004       | %                 |
| Ready oxidizable substance | Conforms      |                   |
| Water                      | ≤ 0.5         | %                 |

| Glass Bottles |       |   | Plastic Bottles |       |   | Plastic Gallon |       |  |
|---------------|-------|---|-----------------|-------|---|----------------|-------|--|
| 1             | Liter | ● | 1               | Liter |   | 5              | Liter |  |
| 2.5           | Liter | ● | 2.5             | Liter | ● | 10             | Liter |  |
|               |       |   |                 |       |   | 20             | Liter |  |

**Product Code: 1.1040.**

### Technical Information

|                           |                                   |
|---------------------------|-----------------------------------|
| Formula:                  | C <sub>3</sub> H <sub>6</sub> O   |
| Chemical formula:         | CH <sub>3</sub> COCH <sub>3</sub> |
| Density:                  | 0.79 g/cm <sup>3</sup> (20 °C)    |
| Molar mass:               | 58.08 g/mol                       |
| CAS number:               | 67-64-1                           |
| EC index number:          | 606-001-00-8                      |
| HS code:                  | 29141100                          |
| EC number:                | 200-662-2                         |
| Storage (temperature):    | Store at +15 °C to +25 °C         |
| MSDS                      | available                         |
| RTECS:                    | AL3150000                         |
| R phrase:                 | R 11-36-66-67                     |
| S phrase:                 | S 9-16-26                         |
| Odour:                    | fruity                            |
| Form:                     | liquid                            |
| Color:                    | colourless                        |
| Explosion limit:          | 2.6 -12.8 Vol %                   |
| Ignition temperature:     | 465 °C (DIN 51794)                |
| PH value:                 | 5 - 6 (395 g/l 20 °C)             |
| Solubility in water:      | (20°C) soluble                    |
| Solubility in ethanol:    | soluble                           |
| Solubility in chloroform: | soluble                           |
| Flash point:              | < -20 °C (c.c.)                   |
| Boiling point:            | 56.2 °C (1013 hPa)                |
| Melting point:            | -95 °C                            |
| Vapour pressure:          | 233 hPa (20 °C)                   |
| Viscosity dynamical :     | 0.32 mPa*s (20 °C)                |





## Ammonia solution 25 %

Laboratory USP Reagent

**NH<sub>3</sub>**

**M=17.03 g/mol**

**1lit= 0.91 g/cm<sup>3</sup>**

### Specification

|                               |   |             |                   |
|-------------------------------|---|-------------|-------------------|
| Assay                         |   | 24.0 – 26.0 | %                 |
| Description                   |   | Conforms    |                   |
| Identification                |   | Conforms    |                   |
| Readily oxidizable substances |   | Conforms    |                   |
| Specific gravity              | ~ | 0.9         | g/cm <sup>3</sup> |
| Limit of nonvolatile residue  | ≤ | 0.05        | %                 |
| Heavy metals                  | ≤ | 0.0013      | %                 |

| Glass Bottles |       |   | Plastic Bottles |       |   | Plastic Gallon |       |  |
|---------------|-------|---|-----------------|-------|---|----------------|-------|--|
| 1             | Liter | ● | 1               | Liter |   | 5              | Liter |  |
| 2.5           | Liter | ● | 2.5             | Liter | ● | 10             | Liter |  |
|               |       |   |                 |       |   | 20             | Liter |  |

**Product Code: 1.1810.**

### Technical Information

|                       |                        |
|-----------------------|------------------------|
| Formula               | NH <sub>3</sub>        |
| Density               | 0.91 g/cm <sup>3</sup> |
| Molar mass            | 17.03 g/mol            |
| CAS number            | 1336-21-6              |
| HS code               | 28142000               |
| EC number             | 215-647-6              |
| Storage (temperature) | +2 OC to +25 OC        |
| SDS                   | Available              |
| RTECS                 | BQ9625000              |
| R phrase              | R 34 - 50              |
| S phrase              | S 26-36/37/39-45-61    |



## Butylated hydroxytoluene (BHT)

Laboratory USP Reagent

**C<sub>15</sub>H<sub>24</sub>O**

**M= 220.35 g/mol**

### Specification

|                       |   |          |    |
|-----------------------|---|----------|----|
| Assay                 | ≥ | 99.0     | %  |
| Solubility            |   | Conforms |    |
| Description           |   | Conforms |    |
| Identification        |   | Conforms |    |
| Congeeing temperature | ≥ | 69.2     | °C |
| Melting range         |   | 69 - 72  | °C |
| Residue on ignition   | ≤ | 0.002    | %  |
| Heavy metals          | ≤ | 0.001    | %  |

| Glass Bottles |    |  | Plastic Container |    |  | Plastic Container |    |   |
|---------------|----|--|-------------------|----|--|-------------------|----|---|
| 5             | gr |  | 100               | gr |  | 1                 | kg | ● |
| 10            | gr |  | 500               | gr |  | 5                 | kg |   |
| 25            | gr |  | 800               | gr |  | 10                | kg |   |

**Product Code: 1.1940.**

### Technical Information

|                       |                                   |
|-----------------------|-----------------------------------|
| Formula               | C <sub>15</sub> H <sub>24</sub> O |
| Density               | 1.05 g/cm <sup>3</sup>            |
| Molar mass            | 220.36 g/mol                      |
| CAS number            | 128-37-0                          |
| HS code               | 29071900                          |
| EC number             | 017-014-00-8                      |
| Storage (temperature) | at +15 °C to +25 °C               |
| SDS                   | Available                         |
| R phrase              | R 53                              |
| S phrase              | S 61                              |



## Bismuth(III) nitrate basic (Bismuth subnitrate)

Laboratory USP Reagent

**Bi5H9N4O22**

**M = 1461.99 g/mol**

### Specification

|                                    |   |          |   |
|------------------------------------|---|----------|---|
| Assay                              | ≥ | 79.0     | % |
| Description                        |   | Conforms |   |
| Identification                     |   | Conforms |   |
| Solubility                         |   | Conforms |   |
| Carbonate                          |   | Conforms |   |
| Chloride                           | ≤ | 0.035    | % |
| Sulphate                           |   | Conforms |   |
| Ammonium salts                     |   | Conforms |   |
| Copper                             |   | Conforms |   |
| Lead                               |   | Conforms |   |
| Silver                             |   | Conforms |   |
| Limit of alkalis & alkaline earths | ≤ | 0.5      | % |
| Heavy methals                      | ≤ | 0.0005   | % |
| Loss on drying                     | ≤ | 3.0      | % |

| Glass Bottles |    |  | Plastic Container |    |  | Plastic Container |    |   |
|---------------|----|--|-------------------|----|--|-------------------|----|---|
| 5             | gr |  | 100               | gr |  | 1                 | kg | ● |
| 10            | gr |  | 500               | gr |  | 5                 | kg |   |
| 25            | gr |  | 800               | gr |  | 10                | kg |   |

**Product Code: 1.2960.**

### Technical Information

|                       |                         |
|-----------------------|-------------------------|
| Formula               | Bi5H9N4O22              |
| Chemical formula      | Bi5H9N4O22              |
| Density               | 4.93g/cm3               |
| Molar mass            | 1461.99 g/mol           |
| Bulk density          | ~ 600 kg/m3             |
| CAS number            | 1304-85-4               |
| HS Code               | 28342980                |
| EC number             | 215-136-8               |
| Storage               | Without limitation      |
| SDS                   | available               |
| RTECS                 | EB2977000               |
| Odour                 | odourless               |
| Form                  | solid                   |
| Color                 | colourless              |
| p H value             | ~ 3.2 (50g/l 20°C)      |
| Solubility in water   | almost insoluble (20°C) |
| Solubility in ethanol | almost insoluble (20°C) |
| Vapour pressure       | low                     |
| Thermal decomposition | 260 °C                  |



## Chloroform

Laboratory BP Reagent

**CHCl3**

**M= 119.38 g/mol**

**1 lit= 1.48 g/cm³**

### Specification

|                            |   |               |       |
|----------------------------|---|---------------|-------|
| Assay                      | ≥ | 99.0          | %     |
| Solubility                 |   | Conforms      |       |
| Description                |   | Conforms      |       |
| Identification             |   | Conforms      |       |
| Specific gravity           |   | 1.474 – 1.479 | g/cm³ |
| Acidity or Alkalinity      |   | Conforms      |       |
| Chloride                   |   | Conforms      |       |
| Free chlorine              |   | Conforms      |       |
| Aldehyde                   |   | Conforms      |       |
| Ethanol                    | ≤ | 1.0           | %     |
| Nonvolatile residue        | ≤ | 0.001         | %     |
| Foreign chlorine compounds |   | Conforms      |       |
| Total impurity             | ≤ | 0.001         | %     |
| Water                      | ≤ | 0.1           | %     |

| Glass Bottles |       |   | Plastic Bottles |       |  | Plastic Gallon |       |  |
|---------------|-------|---|-----------------|-------|--|----------------|-------|--|
| 1             | Liter | ● | 1               | Liter |  | 5              | Liter |  |
| 2.5           | Liter | ● | 2.5             | Liter |  | 10             | Liter |  |
|               |       |   |                 |       |  | 20             | Liter |  |

**Product Code: 1.1080.**

### Technical Information

|                                 |                           |
|---------------------------------|---------------------------|
| Formula:                        | CHCl3                     |
| Density:                        | 1.48 g/cm³ (20 °C)        |
| Molar mass:                     | 119.38 g/mol              |
| CAS number:                     | 67-66-3                   |
| EC index number:                | 602-006-00-4              |
| HS code:                        | 29031300                  |
| EC number:                      | 200-663-8                 |
| Storage (temperature):          | Store at +15 °C to +25 °C |
| SDS                             | available                 |
| RTECS:                          | FS9100000                 |
| R phrase:                       | R 22-38-40-48/20/22       |
| S phrase:                       | S 36/37                   |
| Odour:                          | sweetish                  |
| Form:                           | liquid                    |
| Color:                          | colourless                |
| Solubility in water:            | 8 g/l (20 °C)             |
| Boiling point:                  | 61 °C                     |
| Melting point:                  | -63 °C                    |
| Vapour pressure:                | 213 hPa (20 °C)           |
| Viscosity dynamical:            | 0.56 mPa*s (20 °C)        |
| Saturation concentration (air): | 1027 g/m³ (20 °C)         |





## Citric acid anhydrous

Laboratory USP Reagent

**C6H8O7**

**M=192.13 g/mol**

### Specification

|                           |              |    |
|---------------------------|--------------|----|
| Assay                     | 99.5 – 100.5 | %  |
| Description               | Conforms     |    |
| Identification            | Conforms     |    |
| Solubility                | Conforms     |    |
| Heavy metals              | ≤ 0.001      | %  |
| Sulfate                   | ≤ 0.015      | %  |
| Residue on ignition       | ≤ 0.1        | %  |
| Melting point             | ~ 153        | °C |
| Clarity of solution       | Conforms     |    |
| Color of solution         | Conforms     |    |
| Limit of oxalic acid      | ≤ 0.036      | %  |
| Water                     | ≤ 1.0        | %  |
| Readily carbonizable sub. | Conforms     |    |

| Glass Bottles |    |  | Plastic Container |    |  | Plastic Container |    |   |
|---------------|----|--|-------------------|----|--|-------------------|----|---|
| 5             | gr |  | 100               | gr |  | 1                 | kg | ● |
| 10            | gr |  | 500               | gr |  | 5                 | kg | ● |
| 25            | gr |  | 800               | gr |  | 10                | kg | ● |

**Product Code: 1.1090.**

### Technical Information

|                           |                                 |
|---------------------------|---------------------------------|
| Formula:                  | C6H8O7                          |
| Chemical formula:         | (HOOCCH2)2C(OH)COOH             |
| Density:                  | 1.665 g/cm <sup>3</sup> (18 °C) |
| Molar mass:               | 192.13 g/mol                    |
| Bulk density:             | ~ 560 kg/m <sup>3</sup>         |
| CAS number:               | 77-92-9                         |
| HS code:                  | 29181400                        |
| EC number:                | 201-069-1                       |
| Storage (temperature):    | Without limitations.            |
| SDS                       | available                       |
| RTECS:                    | GE7350000                       |
| R phrase:                 | R 36                            |
| S phrase:                 | S 26                            |
| Odour:                    | odourless                       |
| Form:                     | powder                          |
| Color:                    | white                           |
| Ignition temperature:     | 345 °C                          |
| PH value:                 | ~ 1.7 (100 g/l 20 °C)           |
| Solubility in water:      | 1330 g/l (20 °C)                |
| Solubility in ethanol:    | 383 g/l (25 °C)                 |
| Solubility in chloroform: | insoluble                       |
| Boiling point:            | (decomposition)                 |
| Melting point:            | ~ 153 °C (decomposition)        |
| Vapour pressure:          | < 0.1 hPa (20 °C)               |
| Thermal decomposition:    | 175 °C                          |



## Dichloromethane (Methylene Chloride)

Laboratory USP Reagent

**CH2Cl2**

**M= 84.93 g/mol**

**1lit= 1.32 g/cm<sup>3</sup>**

### Specification

|                                |              |                   |
|--------------------------------|--------------|-------------------|
| Assay                          | ≥ 99.0       | %                 |
| Solubility                     | Conforms     |                   |
| Description                    | Conforms     |                   |
| Identification                 | Conforms     |                   |
| Specific gravity               | 1.318– 1.322 | g/cm <sup>3</sup> |
| Free Chlorine                  | Conforms     |                   |
| Limit of hydrogen chloride     | ≤ 0.01       | %                 |
| Limit of nonvolatilaie residue | ≤ 0.002      | %                 |
| Heavy metals                   | ≤ 1.0        | ppm               |
| Water                          | ≤ 0.02       | %                 |

| Glass Bottles |       |   | Plastic Bottles |       |  | Plastic Gallon |       |  |
|---------------|-------|---|-----------------|-------|--|----------------|-------|--|
| 1             | Liter | ● | 1               | Liter |  | 5              | Liter |  |
| 2.5           | Liter | ● | 2.5             | Liter |  | 10             | Liter |  |
|               |       |   |                 |       |  | 20             | Liter |  |

**Product Code: 1.1100.**

### Technical Information

|                                 |                                |
|---------------------------------|--------------------------------|
| Formula:                        | CH2Cl2                         |
| Density:                        | 1.33 g/cm <sup>3</sup> (20 °C) |
| Molar mass:                     | 84.93 g/mol                    |
| CAS number:                     | 75-09-2                        |
| EC index number:                | 602-004-00-3                   |
| HS code:                        | 29031200                       |
| EC number:                      | 200-838-9                      |
| Storage (temperature):          | Store at +15°C to +25 °C       |
| SDS                             | available                      |
| RTECS:                          | PA8050000                      |
| R phrase:                       | R 40                           |
| S phrase:                       | S 23.2-24/25-36/37             |
| Odour:                          | seweetish                      |
| Form:                           | liquid                         |
| Color:                          | colourless                     |
| Explosion limit:                | 13 -22 Vol %                   |
| Ignition temperature:           | 605 °C                         |
| Solubility in water:            | 20 g/l (20 °C)                 |
| Boiling point:                  | 40 °C (1013 hPa)               |
| Melting point:                  | -95 °C                         |
| Vapour pressure:                | 475 hPa (20 °C)                |
| Evaporation number:             | 1.9 °C                         |
| Thermal decomposition:          | > 120 °C                       |
| Viscosity dynamical:            | 0.43 mPa*s (20 °C)             |
| Saturation concentration (air): | 1549 g/m <sup>3</sup> (20 °C)  |



## Ethyl acetate

Laboratory USP Reagent

**C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>**

**M= 88.10 g/mol**

**1lit= 0.90 g/cm<sup>3</sup>**

### Specification

|                              |               |                   |
|------------------------------|---------------|-------------------|
| Assay                        | 99.0 – 100.5  | %                 |
| Description                  | Conforms      |                   |
| Solubility                   | Conforms      |                   |
| Specific gravity             | 0.894 – 0.898 | g/cm <sup>3</sup> |
| Identification               | Conforms      |                   |
| Acidity                      | ≤ 0.1         | %                 |
| Readily carbonizable sub.    | Conforms      |                   |
| Limit of methyl compounds    | Conforms      |                   |
| Limit of nonvolatile residue | ≤ 0.002       | %                 |
| Water                        | ≤ 0.1         | %                 |

| Glass Bottles |       |   |
|---------------|-------|---|
| 1             | Liter | ● |
| 2.5           | Liter | ● |

| Plastic Bottles |       |   |
|-----------------|-------|---|
| 1               | Liter |   |
| 2.5             | Liter | ● |

| Plastic Gallon |       |  |
|----------------|-------|--|
| 5              | Liter |  |
| 10             | Liter |  |
| 20             | Liter |  |

**Product Code: 1.1130.**

### Technical Information

|                                 |                                                  |
|---------------------------------|--------------------------------------------------|
| Formula:                        | C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>     |
| Chemical formula:               | CH <sub>3</sub> COOC <sub>2</sub> H <sub>5</sub> |
| Density:                        | 0.90 g/cm <sup>3</sup> (20 °C)                   |
| Molar mass:                     | 88.11 g/mol                                      |
| CAS number:                     | 141-78-6                                         |
| EC index number:                | 607-022-00-5                                     |
| HS code:                        | 29153100                                         |
| EC number:                      | 205-500-4                                        |
| Storage (temperature):          | Without limitations.                             |
| SDS                             | available                                        |
| RTECS:                          | AH5425000                                        |
| R phrase:                       | R 11-36-66-67                                    |
| S phrase:                       | S 9-16-26-33                                     |
| Odour:                          | fruit-like                                       |
| Form:                           | liquid                                           |
| Color:                          | colourless                                       |
| Explosion limit:                | 2.1 -11.5 Vol %                                  |
| Ignition temperature:           | 460 °C (DIN 51794)                               |
| Solubility in water:            | 85.3 g/l (20 °C)                                 |
| Solubility in ethanol:          | soluble                                          |
| Flash point:                    | -4 °C c.c., (DIN 51794)                          |
| Boiling point:                  | 77 °C                                            |
| Melting point:                  | -83 °C                                           |
| Vapour pressure:                | 97 hPa (20 °C)                                   |
| Viscosity dynamical:            | 0.44 mPa*s (20 °C)                               |
| Saturation concentration (air): | 336 g/m <sup>3</sup> (20 °C)                     |



## Ethylene glycol

(Mono Ethylene Glycol)

Laboratory USP Reagent

**C<sub>2</sub>H<sub>6</sub>O<sub>2</sub>**

**M= 62.07 g/mol**

**1lit= 1.11 g/cm<sup>3</sup>**

### Specification

|                       |           |                   |
|-----------------------|-----------|-------------------|
| Assay                 | ≥ 99.0    | %                 |
| Solubility            | Conforms  |                   |
| Description           | Conforms  |                   |
| Identification        | Conforms  |                   |
| Acidity               | ≤ 0.01    | %                 |
| Specification gravity | ~ 1.110   | g/cm <sup>3</sup> |
| Chloride              | ≤ 5       | ppm               |
| Boiling Range         | 194 - 200 | °C                |
| Water                 | ≤ 0.2     | %                 |
| Residue on ignition   | ≤ 0.005   | %                 |

| Glass Bottles |       |  |
|---------------|-------|--|
| 1             | Liter |  |
| 2.5           | Liter |  |

| Plastic Bottles |       |   |
|-----------------|-------|---|
| 1               | Liter |   |
| 2.5             | Liter | ● |

| Plastic Gallon |       |   |
|----------------|-------|---|
| 5              | Liter | ● |
| 10             | Liter | ● |
| 20             | Liter | ● |

**Product Code: 1.1140.**

### Technical Information

|                                 |                                              |
|---------------------------------|----------------------------------------------|
| Formula:                        | C <sub>2</sub> H <sub>6</sub> O <sub>2</sub> |
| Chemical formula:               | HOCH <sub>2</sub> CH <sub>2</sub> OH         |
| Density:                        | 1.11 g/cm <sup>3</sup> (20 °C)               |
| Molar mass:                     | 62.07 g/mol                                  |
| CAS number:                     | 107-21-1                                     |
| EC index number:                | 603-027-00-1                                 |
| HS code:                        | 29053100                                     |
| EC number:                      | 203-473-3                                    |
| Storage (temperature):          | Without limitations.                         |
| SDS                             | available                                    |
| R phrase:                       | R 22                                         |
| Odour:                          | almost odourless                             |
| Form:                           | liquid                                       |
| Color:                          | colourless                                   |
| Explosion limit:                | 3.2 -15.3 Vol %                              |
| Ignition temperature:           | 410 °C (DIN 51794)                           |
| PH value:                       | 6 – 7.5 °C (100 g/l 20 °C)                   |
| Solubility in water:            | 1000 g/l (20 °C)                             |
| Solubility in ethanol:          | freely soluble                               |
| Flash point:                    | 111 °C (c.c.)                                |
| Boiling point:                  | -13 °C                                       |
| Melting point:                  | -83 °C                                       |
| Vapour pressure:                | 0.053 hPa (20 °C)                            |
| Thermal decomposition:          | > 200 - 250 °C                               |
| Viscosity dynamical:            | 21 mPa*s (20 °C)                             |
| Saturation concentration (air): | 0.15 g/m <sup>3</sup> (20 °C)                |





## Glycerol anhydrous

Laboratory USP Reagent

**C<sub>3</sub>H<sub>8</sub>O<sub>3</sub>**

**M= 92.10 g/mol**

**1lit= 1.26 g/cm<sup>3</sup>**

### Specification

|                                |              |                   |
|--------------------------------|--------------|-------------------|
| Assay                          | 99.0 – 101.0 | %                 |
| Description                    | Conforms     |                   |
| Solubility                     | Conforms     |                   |
| Identification                 | Conforms     |                   |
| Specific density               | ≥ 1.249      | g/cm <sup>3</sup> |
| Chloride                       | ≤ 0.001      | %                 |
| Sulfate                        | ≤ 0.002      | %                 |
| Heavy metals                   | ≤ 0.0005     | %                 |
| Residue on ignition            | ≤ 0.01       | %                 |
| Limit of chlorinated compounds | ≤ 0.003      | %                 |
| Fatty acids & esters           | ≤ 1.0        | %                 |
| Diethylene glycol impurity     | ≤ 0.1        | %                 |
| Ethylene glycol impurity       | ≤ 0.1        | %                 |
| Other impurity                 | ≤ 0.1        | %                 |
| Total impurity                 | ≤ 1.0        | %                 |
| Water                          | ≤ 0.5        | %                 |

| Glass Bottles |       |   | Plastic Bottles |       |   | Plastic Gallon |       |   |
|---------------|-------|---|-----------------|-------|---|----------------|-------|---|
| 1             | Liter | ● | 1               | Liter |   | 5              | Liter | ● |
| 2.5           | Liter | ● | 2.5             | Liter | ● | 10             | Liter | ● |
|               |       |   |                 |       |   | 20             | Liter | ● |

**Product Code: 1.1170.**

### Technical Information

|                           |                                              |
|---------------------------|----------------------------------------------|
| Formula:                  | C <sub>3</sub> H <sub>8</sub> O <sub>3</sub> |
| Density:                  | 1.26 g/cm <sup>3</sup> (20°C)                |
| Molar mass:               | 92.10 g/mol                                  |
| CAS number:               | 56-81-5                                      |
| HS code:                  | 29054500                                     |
| EC number:                | 200-298-5                                    |
| Storage (temperature):    | Store at +5°C to +30°C.                      |
| SDS                       | available                                    |
| RTECS:                    | MA8050000                                    |
| Odour:                    | almost odourless                             |
| Form:                     | liquid                                       |
| Color:                    | colourless                                   |
| Explosion limit:          | 2.6 – 11.3 Vol %                             |
| Ignition temperature:     | 400°C                                        |
| PH value:                 | ~ 5 (100 g/l 20°C)                           |
| Solubility in water:      | (20°C) soluble                               |
| Solubility in ethanol:    | soluble                                      |
| Solubility in chloroform: | insoluble                                    |
| Flash point:              | ~ 180 °C (o.c.)                              |
| Boiling point:            | 290 °C (1013 hPa)                            |
| Melting point:            | ~ 18 °C                                      |
| Vapour pressure:          | < 0.001 hPa (20 °C)                          |
| Thermal decomposition:    | > 290 °C                                     |
| Viscosity dynamical:      | 1412 mPa*s (20 °C)                           |

## Hydrochloric acid 32%

Laboratory BP Reagent

**HCl**

**M= 36.46 g/mol**

**1lit= 1.16 g/cm<sup>3</sup>**

### Specification

|                            |             |                   |
|----------------------------|-------------|-------------------|
| Assay                      | 30.0 – 34.0 | %                 |
| Description                | Conforms    |                   |
| Identification             | Conforms    |                   |
| Solubility                 | Conforms    |                   |
| Relative density at 20 °C  | ~ 1.16      | g/cm <sup>3</sup> |
| Sulfate (SO <sub>4</sub> ) | ≤ 0.002     | %                 |
| Appearance of solution     | Conforms    |                   |
| Heavy metals               | ≤ 2         | ppm               |
| Residue on evaporation     | ≤ 0.01      | %                 |
| Free Chlorine              | ≤ 4         | ppm               |

| Glass Bottles |       |   | Plastic Bottles |       |   | Plastic Gallon |       |  |
|---------------|-------|---|-----------------|-------|---|----------------|-------|--|
| 1             | Liter | ● | 1               | Liter |   | 5              | Liter |  |
| 2.5           | Liter | ● | 2.5             | Liter | ● | 10             | Liter |  |
|               |       |   |                 |       |   | 20             | Liter |  |

**Product Code: 1.1180.**

### Technical Information

|                        |                                  |
|------------------------|----------------------------------|
| Density:               | ~ 1.16 g/cm <sup>3</sup> (20 °C) |
| HS code:               | 28061000                         |
| Storage (temperature): | with out limitation              |
| SDS                    | available                        |
| R phrase:              | R 34-37                          |
| S phrase:              | S 26-36/37/39-45                 |
| Odour:                 | pungent                          |
| Form:                  | liquid                           |
| Color:                 | colourless                       |
| Solubility in water:   | (20°C) soluble                   |
| Vapour pressure:       | 21.3 hPa (20 °C)                 |
| Viscosity dynamical:   | 1.9 mPa*s (15 °C)                |



## Hydrochloric acid 37%

Laboratory BP Reagent

HCl

M= 36.46 g/mol

1lit= 1.18 g/cm<sup>3</sup>

### Specification

|                            |   |             |                   |
|----------------------------|---|-------------|-------------------|
| Assay                      |   | 35.0 – 39.0 | %                 |
| Description                |   | Conforms    |                   |
| Identification             |   | Conforms    |                   |
| Solubility                 |   | Conforms    |                   |
| Relative density at 20 °C  | ~ | 1.18        | g/cm <sup>3</sup> |
| Sulfate (SO <sub>4</sub> ) | ≤ | 0.002       | %                 |
| Appearance of solution     |   | Conforms    |                   |
| Heavy metals               | ≤ | 2           | ppm               |
| Residue on evaporation     | ≤ | 0.01        | %                 |
| Free Chlorine              | ≤ | 4           | ppm               |

| Glass Bottles |       |   |
|---------------|-------|---|
| 1             | Liter | ● |
| 2.5           | Liter | ● |

| Plastic Bottles |       |   |
|-----------------|-------|---|
| 1               | Liter |   |
| 2.5             | Liter | ● |

| Plastic Gallon |       |  |
|----------------|-------|--|
| 5              | Liter |  |
| 10             | Liter |  |
| 20             | Liter |  |

**Product Code: 1.1190.**

### Technical Information

|                        |                                  |
|------------------------|----------------------------------|
| Density:               | ~ 1.18 g/cm <sup>3</sup> (20 °C) |
| HS code:               | 28061000                         |
| Storage (temperature): | Store at +2 °C to +25 °C         |
| SDS                    | available                        |
| R phrase:              | R 34-37                          |
| S phrase:              | S 26-36/37/39-45                 |
| Odour:                 | pungent                          |
| Form:                  | liquid                           |
| Color:                 | colourless                       |
| Solubility in water:   | (20°C) soluble                   |
| Vapour pressure:       | 190 hPa (20 °C)                  |
| Viscosity dynamical:   | 2.3 mPa*s (15 °C)                |



## Iodine

Laboratory USP Reagent

I<sub>2</sub>

M= 253.81 g/mol

### Specification

|                            |   |              |   |
|----------------------------|---|--------------|---|
| Assay                      |   | 99.8 - 100.5 | % |
| Solubility                 |   | Conforms     |   |
| Description                |   | Conforms     |   |
| Identification             |   | Conforms     |   |
| Bromide & Chloride (as Cl) | ≤ | 0.025        | % |
| Non volatile matter(105OC) | ≤ | 0.05         | % |

| Glass Bottles |    |   |
|---------------|----|---|
| 5             | gr |   |
| 10            | gr |   |
| 25            | gr | ● |

| Plastic Container |    |   |
|-------------------|----|---|
| 100               | gr | ● |
| 500               | gr |   |
| 800               | gr |   |

| Plastic Container |    |  |
|-------------------|----|--|
| 1                 | kg |  |
| 5                 | kg |  |
| 10                | kg |  |

**Product Code: 1.2200.**

### Technical Information

|            |                  |
|------------|------------------|
| Formula    | I <sub>2</sub>   |
| Molar mass | 253.81 g/mol     |
| CAS number | 7553-56-2        |
| HS code    | 28012000         |
| EC number  | 231-442-4        |
| Storage    | +15 °C to +25 °C |
| SDS        | Available        |
| R phrase   | R 20/21-50       |
| S phrase   | S 23.2-25-61     |





## Methanol

Laboratory USP Reagent

**CH<sub>3</sub>OH**

**M = 32.04 g/mol**

**1lit = 0.79 g/cm<sup>3</sup>**

### Specification

|                                 |   |          |                   |
|---------------------------------|---|----------|-------------------|
| Assay                           | ≥ | 99.5     | %                 |
| Solubility                      |   | Conforms |                   |
| Color & Description             |   | Conforms |                   |
| Identification                  |   | Conforms |                   |
| Alkalinity                      | ≤ | 3.0      | ppm               |
| Acidity                         | ≤ | 0.45     | ml                |
| Readily carbonizable substances |   | Conforms | g/cm <sup>3</sup> |
| Acetone & aldehyde              |   | Conforms |                   |
| Nonvolatile residue             | ≤ | 0.001    | %                 |
| Readily oxidizable substance    |   | Conforms |                   |
| Water                           | ≤ | 0.1      | %                 |

| Glass Bottles |       |   | Plastic Bottles |       |   | Plastic Gallon |       |  |
|---------------|-------|---|-----------------|-------|---|----------------|-------|--|
| 1             | Liter | ● | 1               | Liter |   | 5              | Liter |  |
| 2.5           | Liter | ● | 2.5             | Liter | ● | 10             | Liter |  |
|               |       |   |                 |       |   | 20             | Liter |  |

**Product Code: 1.1220.**

### Technical Information

|                                 |                                |
|---------------------------------|--------------------------------|
| Formula:                        | CH <sub>4</sub> O              |
| Chemical formula:               | CH <sub>3</sub> OH             |
| Density:                        | 0.79 g/cm <sup>3</sup> (20 °C) |
| Molar mass:                     | 32.04 g/mol                    |
| CAS number:                     | 67-56-1                        |
| EC index number:                | 603-001-00-X                   |
| HS code:                        | 29051100                       |
| EC number:                      | 200-659-6                      |
| Storage (temperature):          | Without limitation             |
| SDS                             | available                      |
| RTECS:                          | PC1400000                      |
| R phrase:                       | R 11-23/24/25-39/23/24/25      |
| S phrase:                       | S 7-16-36/37-45                |
| Odour:                          | characteristic                 |
| Form:                           | liquid                         |
| Color:                          | colourless                     |
| Explosion limit:                | 5.5 -36.5 Vol %                |
| Ignition temperature:           | 455 °C (DIN 51794)             |
| Solubility in water:            | (20 °C) soluble                |
| Flash point:                    | 11 °C (c.c.)                   |
| Boiling point:                  | 64.5 °C (1013 hPa)             |
| Melting point:                  | -98 °C                         |
| Vapour pressure:                | 128 hPa (20 °C)                |
| Viscosity dynamical :           | 0.597 mPa*s (20 °C)            |
| Saturation concentration (air): | 166 g/m <sup>3</sup> (20 °C)   |



## Phosphoric acid 85%

Laboratory USP Reagent

**H<sub>3</sub>PO<sub>4</sub>**

**M = 98.00 g/mol**

**1lit = 1.71 g/cm<sup>3</sup>**

### Specification

|                                |   |             |                   |
|--------------------------------|---|-------------|-------------------|
| Assay                          |   | 85.0 – 88.0 | %                 |
| Description                    |   | Conforms    |                   |
| Solubility                     |   | Conforms    |                   |
| Identification                 |   | Conforms    |                   |
| Specific gravity               | ~ | 1.71        | g/cm <sup>3</sup> |
| Phosphorus and hypo phosphorus |   | Conforms    |                   |
| Sulfate                        |   | Conforms    |                   |
| Heavy metals                   | ≤ | 0.001       | %                 |
| Alkali phosphates              |   | Conforms    |                   |
| Limit of nitrate               |   | Conforms    |                   |

| Glass Bottles |       |   | Plastic Bottles |       |   | Plastic Gallon |       |  |
|---------------|-------|---|-----------------|-------|---|----------------|-------|--|
| 1             | Liter | ● | 1               | Liter |   | 5              | Liter |  |
| 2.5           | Liter | ● | 2.5             | Liter | ● | 10             | Liter |  |
|               |       |   |                 |       |   | 20             | Liter |  |

**Product Code: 1.1360.**

### Technical Information

|                        |                                 |
|------------------------|---------------------------------|
| Formula:               | H <sub>3</sub> PO <sub>4</sub>  |
| Density:               | 1.71 g/cm <sup>3</sup> (20 °C)  |
| HS code:               | 28092000                        |
| Storage (temperature): | Store above +15 °C              |
| SDS                    | available                       |
| R phrase:              | R 34                            |
| S phrase:              | S 26-36/37/39-45                |
| Odour:                 | odourless                       |
| Form:                  | liquid                          |
| Color:                 | colourless                      |
| PH value:              | < 0.5 (100 g/l 20 °C)           |
| Solubility in water:   | (20 °C) soluble                 |
| Solubility in ethanol: | (20 °C) soluble                 |
| Boiling point:         | ~ 158 °C                        |
| Melting point:         | ~ 21 °C                         |
| Vapour pressure:       | 2 hPa (20 °C)                   |
| Viscosity kinematic:   | 30.5 mm <sup>2</sup> /s (25 °C) |



## Potassium hydroxide

Laboratory USP Reagent

KOH

M= 56.11 g/mol

### Specification

|                                |   |          |   |
|--------------------------------|---|----------|---|
| Assay                          | ≥ | 85.0     | % |
| Description                    |   | Conforms |   |
| Solubility                     |   | Conforms |   |
| Identification                 |   | Conforms |   |
| K <sub>2</sub> CO <sub>3</sub> | ≤ | 3.5      | % |
| Heavy metals                   | ≤ | 0.003    | % |
| Insoluble substances           |   | Conforms |   |

| Glass Bottles |    |  |
|---------------|----|--|
| 5             | gr |  |
| 10            | gr |  |
| 25            | gr |  |

| Plastic Container |    |  |
|-------------------|----|--|
| 100               | gr |  |
| 500               | gr |  |
| 800               | gr |  |

| Plastic Container |    |   |
|-------------------|----|---|
| 1                 | kg | ● |
| 5                 | kg |   |
| 10                | kg |   |

**Product Code: 1.1390.**

### Technical Information

|                        |                                |
|------------------------|--------------------------------|
| Formula(Hill):         | HKO                            |
| Chemical formula:      | KOH                            |
| Density:               | 2.04 g/cm <sup>3</sup> (20 Oc) |
| Molar mass:            | 56.11 g/mol                    |
| CAS number:            | 1310-58-3                      |
| EC index number:       | 019-002-00-8                   |
| HS code:               | 28152010                       |
| EC number:             | 215-181-3                      |
| Storage (temperature): | store at +5 Oc to +30 Oc       |
| SDS                    | available                      |
| RTECS:                 | TT2100000                      |
| R phrase:              | R 22-35                        |
| S phrase:              | S 26-36/37/39-45               |
| Odour:                 | odourless                      |
| Form                   | solid                          |
| Color:                 | colourless                     |
| Ph value:              | ~14 (56 g/l 20 Oc)             |
| Solubility in water:   | 1130 g/l (20 Oc)               |
| Solubility in ethanol: | ~400 g/l (20 Oc)               |
| Boiling point:         | 1320 Oc                        |
| Melting point:         | 360 Oc                         |



## 2-Propanol (Iso Propanol)

Laboratory USP Reagent

C<sub>3</sub>H<sub>8</sub>O

M= 60.10 g/mol

1lit = 0.786 g/cm<sup>3</sup>

### Specification

|                       |   |               |                   |
|-----------------------|---|---------------|-------------------|
| Assay                 | ≥ | 99.5          | %                 |
| Solubility            |   | Conforms      |                   |
| Description           |   | Conforms      |                   |
| Identification        |   | Conforms      |                   |
| Evaporation residue   | ≤ | 0.002         | %                 |
| Acidity               | ≤ | 0.7           | ml                |
| Specification gravity |   | 0.784 – 0.785 | g/cm <sup>3</sup> |
| Refractive index      |   | 1.376 – 1.378 |                   |

| Glass Bottles |       |   |
|---------------|-------|---|
| 1             | Liter | ● |
| 2.5           | Liter | ● |

| Plastic Bottles |       |   |
|-----------------|-------|---|
| 1               | Liter |   |
| 2.5             | Liter | ● |

| Plastic Gallon |       |  |
|----------------|-------|--|
| 5              | Liter |  |
| 10             | Liter |  |
| 20             | Liter |  |

**Product Code: 1.1420.**

### Technical Information

|                                 |                                       |
|---------------------------------|---------------------------------------|
| Formula:                        | C <sub>3</sub> H <sub>8</sub> O       |
| Chemical formula:               | CH <sub>3</sub> CH(OH)CH <sub>3</sub> |
| Density:                        | 0.786 g/cm <sup>3</sup> (20 °C)       |
| Molar mass:                     | 60.10 g/mol                           |
| CAS number:                     | 67-63-0                               |
| EC index number:                | 603-117-00-0                          |
| HS code:                        | 29051200                              |
| EC number:                      | 200-661-7                             |
| Storage (temperature):          | Store at +5 °C to +30 °C              |
| SDS                             | available                             |
| RTECS:                          | NT8050000                             |
| R phrase:                       | R 11-36-67                            |
| S phrase:                       | S 7-16-24/25-26                       |
| Odour:                          | alcohol-like                          |
| Form:                           | liquid                                |
| Color:                          | colourless                            |
| Explosion limit:                | 2 - 12.7 Vol %                        |
| Ignition temperature:           | 425 °C (DIN 51794)                    |
| Solubility in water:            | (20 °C) soluble                       |
| Solubility in ethanol:          | soluble                               |
| Solubility in chloroform:       | soluble                               |
| Flash point:                    | 12 °C (c.c.)                          |
| Boiling point:                  | 82.4 °C (1013 hPa)                    |
| Melting point:                  | -89.5 °C                              |
| Vapour pressure:                | 43 hPa (20 °C)                        |
| Viscosity dynamical:            | 2.2 mPa*s (20 °C)                     |
| Saturation concentration (air): | 105 g/m <sup>3</sup> (20 °C)          |





## Paraffin Liquid (Mineral oil)

Laboratory USP Reagent

1lit= 0.88 g/cm<sup>3</sup>

### Specification

|                                   |   |                                 |
|-----------------------------------|---|---------------------------------|
| Solubility                        |   | Conforms                        |
| Description                       |   | Conforms                        |
| Identification                    |   | Conforms                        |
| Relative density                  |   | 0.845 – 0.905 g/cm <sup>3</sup> |
| Acidity or alkalinity             | ≤ | 0.1 ml                          |
| Dynamic viscosity at 20 °C        |   | 25.0 – 80.0 mPa.s               |
| Polycyclic aromatic hydrocarbones |   | Conforms                        |
| Readily carbonizable substances   |   | Conforms                        |
| Solid paraffin                    |   | Conforms                        |
| Kinematic viscosity at 40 °C      | ≤ | 34.5 cS                         |

| Glass Bottles |       |   |
|---------------|-------|---|
| 1             | Liter | ● |
| 2.5           | Liter | ● |

| Plastic Bottles |       |   |
|-----------------|-------|---|
| 1               | Liter |   |
| 2.5             | Liter | ● |

| Plastic Gallon |       |  |
|----------------|-------|--|
| 5              | Liter |  |
| 10             | Liter |  |
| 20             | Liter |  |



**Product Code: 1.1750.**

### Technical Information

|                        |                                |
|------------------------|--------------------------------|
| Density:               | 0.86 g/cm <sup>3</sup> (20 °C) |
| CAS number:            | 8012 - 95 -1 kg/m <sup>3</sup> |
| HS code:               | 27122090                       |
| EC number:             | 232-315-6                      |
| Storage (temperature): | Without limitations.           |
| SDS                    | available                      |
| RTECS:                 | PY8030000                      |
| Odour:                 | odourless                      |
| Form:                  | liquid                         |
| Color:                 | colourless to white            |
| Solubility in water:   | (20 °C) insoluble              |
| Flash point:           | ~230 °C                        |
| Boiling point:         | ~ 300 - 500 °C                 |
| Vapour pressure:       | < 0.0001 hPa (20 °C)           |

## 1,2 – Propanediol (Propylene Glycol)

Laboratory USP Reagent

C<sub>3</sub>H<sub>8</sub>O<sub>2</sub>

M= 76.10 g/mol

1lit= 1.04 g/cm<sup>3</sup>

### Specification

|                     |   |               |                   |
|---------------------|---|---------------|-------------------|
| Assay               | ≥ | 99.5          | %                 |
| Identification      |   | Conforms      |                   |
| Solubility          |   | Conforms      |                   |
| Description         |   | Conforms      |                   |
| Acidity             | ≤ | 0.2           | ml                |
| Chloride            | ≤ | 0.007         | %                 |
| sulfate             | ≤ | 0.006         | %                 |
| Heavy metals        | ≤ | 5.0           | ppm               |
| Specific gravity    |   | 1.035 – 1.037 | g/cm <sup>3</sup> |
| Residue on ignition | ≤ | 3.5           | mg                |
| Water               | ≤ | 0.2           | %                 |

| Glass Bottles |       |   |
|---------------|-------|---|
| 1             | Liter | ● |
| 2.5           | Liter | ● |

| Plastic Bottles |       |   |
|-----------------|-------|---|
| 1               | Liter |   |
| 2.5             | Liter | ● |

| Plastic Gallon |       |  |
|----------------|-------|--|
| 5              | Liter |  |
| 10             | Liter |  |
| 20             | Liter |  |



**Product Code: 1.1760.**

### Technical Information

|                       |                                          |
|-----------------------|------------------------------------------|
| Formula               | CH <sub>3</sub> CH(OH)CH <sub>2</sub> OH |
| Density               | 1.04 g/cm <sup>3</sup>                   |
| Molar mass            | 76.10 g/mol                              |
| CAS number            | 75-55-6                                  |
| HS code               | 29053200                                 |
| EC number             | 200-338-0                                |
| Storage (temperature) | Store at +15°C to +25°C                  |
| SDS                   | Available                                |
| RTECS                 | TY2000000                                |

## Potassium iodide

Laboratory USP Reagent

KI

M= 166.01 g/mol

### Specification

|                                     |             |       |
|-------------------------------------|-------------|-------|
| Assay                               | 99.0 -101.5 | %     |
| Description & Solubility            | Conforms    |       |
| Identification                      | Conforms    |       |
| Heavy metals                        | ≤ 0.001     | %     |
| Alkalinity                          | Conforms    |       |
| Iodate                              | ≤ 4         | µg/gr |
| Thiosulfate & barium                | Conforms    |       |
| Limit of nitrate, nitrite & ammonia | Conforms    |       |
| Loss on drying                      | ≤ 1.0       | %     |

| Glass Bottles |    |   |
|---------------|----|---|
| 5             | gr |   |
| 10            | gr |   |
| 25            | gr | ● |

| Plastic Container |    |   |
|-------------------|----|---|
| 100               | gr | ● |
| 500               | gr |   |
| 800               | gr |   |

| Plastic Container |    |  |
|-------------------|----|--|
| 1                 | kg |  |
| 5                 | kg |  |
| 10                | kg |  |



**Product Code: 1.1400.**

### Technical Information

|               |                          |
|---------------|--------------------------|
| Formula :     | IK                       |
| Density:      | 3.13 g/cm <sup>3</sup>   |
| Molar mass:   | 166.01 g/mol             |
| Bulk density: | ~ 1500 kg/m <sup>3</sup> |
| CAS number:   | 7681-11-0                |
| HS code:      | 28276000                 |
| EC number:    | 231-659-4                |
| Storage :     | Without limitations      |
| SDS:          | available                |
| RTECS:        | TT2975000                |

## Silver nitrate

Laboratory USP Reagent

AgNO<sub>3</sub>

M= 196.87 g/mol

### Specification

|                             |              |   |
|-----------------------------|--------------|---|
| Assay                       | 99.8 – 100.5 | % |
| Description                 | Conforms     |   |
| Solubility                  | Conforms     |   |
| Identification              | Conforms     |   |
| Clarity & color of solution | Conforms     |   |
| Copper                      | Conforms     |   |

| Glass Bottles |    |   |
|---------------|----|---|
| 5             | gr |   |
| 10            | gr |   |
| 25            | gr | ● |

| Plastic Container |    |   |
|-------------------|----|---|
| 100               | gr | ● |
| 500               | gr |   |
| 800               | gr |   |

| Plastic Container |    |  |
|-------------------|----|--|
| 1                 | kg |  |
| 5                 | kg |  |
| 10                | kg |  |



**Product Code: 1.1430.**

### Technical Information

|                  |                                |
|------------------|--------------------------------|
| Formula:         | AgNO <sub>3</sub>              |
| Density:         | 4.35 g/cm <sup>3</sup> (20 °C) |
| Molar mass:      | 196.87 g/mol                   |
| Bulk density:    | ~ 2350 kg/m <sup>3</sup>       |
| CAS number:      | 7761-88-8                      |
| EC index number: | 047-001-00-2                   |
| HS code:         | 28432100                       |
| EC number:       | 231-853-9                      |
| Storage          | Without limitations.           |
| SDS              | available                      |
| R phrase:        | R 34-50/53                     |
| S phrase:        | S 26-45-60-613                 |



## Sodium acetate anhydrous

Laboratory USP Reagent

**C<sub>2</sub>H<sub>3</sub>NaO<sub>2</sub>**

**M= 82.03 g/mol**

### Specification

|                     |   |              |   |
|---------------------|---|--------------|---|
| Assay               |   | 99.0 – 101.0 | % |
| Description         |   | Conforms     |   |
| Solubility          |   | Conforms     |   |
| Identification      |   | Conforms     |   |
| Sulfate             | ≤ | 0.005        | % |
| Chloride            | ≤ | 0.035        | % |
| Calcium & magnesium |   | Conforms     |   |
| pH (30mg/ml)        |   | 7.5 – 9.2    |   |
| Heavy metals        | ≤ | 0.001        | % |
| Insoluble matter    | ≤ | 0.05         | % |
| Potassium           |   | Conforms     |   |
| Loss on drying      | ≤ | 1.0          | % |

| Glass Bottles |    |  | Plastic Container |    |  | Plastic Container |    |   |
|---------------|----|--|-------------------|----|--|-------------------|----|---|
| 5             | gr |  | 100               | gr |  | 1                 | kg | ● |
| 10            | gr |  | 500               | gr |  | 5                 | kg |   |
| 25            | gr |  | 800               | gr |  | 10                | kg |   |

**Product Code: 1.1440.**

### Technical Information

|                        |                                                |
|------------------------|------------------------------------------------|
| Formula:               | C <sub>2</sub> H <sub>3</sub> NaO <sub>2</sub> |
| Chemical formula:      | CH <sub>3</sub> COONa                          |
| Density:               | 1.52 g/cm <sup>3</sup> (20 °C)                 |
| Molar mass:            | 82.03 g/mol                                    |
| Bulk density:          | 320 - 470 kg/m <sup>3</sup>                    |
| CAS number:            | 127-09-3                                       |
| HS code:               | 29152200                                       |
| EC number:             | 204-823-8                                      |
| Storage (temperature): | Without limitations.                           |
| SDS                    | available                                      |
| RTECS:                 | AJ4300010                                      |
| Odour:                 | odourless                                      |
| Form:                  | powder                                         |
| Color:                 | colourless                                     |
| Ignition temperature:  | 607 °C                                         |
| PH value:              | 7.5 – 9.2 (30 g/l 20 °C)                       |
| Solubility in water:   | 365 g/l (20°C)                                 |
| Solubility in ethanol: | sparingly soluble                              |
| Flash point:           | > 250 °C (c.c.)                                |
| Boiling point:         | > 400 °C (decomposition)                       |
| Melting point:         | 324 °C (decomposition)                         |

## Sodium carbonate

Laboratory USP Reagent

**Na<sub>2</sub>CO<sub>3</sub>**

**M= 105.99 g/mol**

### Specification

|                |   |             |   |
|----------------|---|-------------|---|
| Assay          |   | 99.5 -100.5 | % |
| Description    |   | Conforms    |   |
| Solubility     |   | Conforms    |   |
| Identification |   | Conforms    |   |
| Heavy metals   | ≤ | 0.001       | % |
| water          | ≤ | 0.5         | % |

| Glass Bottles |    |  | Plastic Container |    |  | Plastic Container |    |   |
|---------------|----|--|-------------------|----|--|-------------------|----|---|
| 5             | gr |  | 100               | gr |  | 1                 | kg | ● |
| 10            | gr |  | 500               | gr |  | 5                 | kg |   |
| 25            | gr |  | 800               | gr |  | 10                | kg |   |

**Product Code: 1.1450.**

### Technical Information

|                        |                                 |
|------------------------|---------------------------------|
| Formula(Hill):         | CNa <sub>2</sub> O <sub>3</sub> |
| Chemical formula:      | Na <sub>2</sub> CO <sub>3</sub> |
| Density:               | 2.53g/cm <sup>3</sup> (20°C)    |
| Molar mass:            | 105.99 g/mol                    |
| Bulk density:          | ~ 1100kg/m <sup>3</sup>         |
| CAS number:            | 497-19-8                        |
| EC index number:       | 011-005-00-2                    |
| HS Code:               | 28362000                        |
| EC number:             | 207-838-8                       |
| Storage (temperature): | Without limitations.            |
| SDS:                   | available                       |
| RTECS:                 | VZ4050000                       |
| R phrase:              | R 36                            |
| S phrase:              | S 22-26                         |



## Sodium chloride

Laboratory USP Reagent

**NaCl**

**M= 58.44 g/mol**

### Specification

|                                   |              |      |
|-----------------------------------|--------------|------|
| Assay                             | 99.0 – 100.5 | %    |
| Description                       | Conforms     |      |
| Solubility                        | Conforms     |      |
| Identification                    | Conforms     |      |
| Appearance of solution            | Conforms     |      |
| Sulfate                           | Conforms     |      |
| Chloride                          | Conforms     |      |
| Barium                            | Conforms     |      |
| Iodides                           | Conforms     |      |
| Ferro cyanides                    | Conforms     |      |
| Magnesium & alkaline earth metals | ≤ 0.01       | %    |
| Iron                              | ≤ 2.0        | µg/g |
| Acidity or Alkalinity             | ≤ 0.5        | ml   |
| Arsenic                           | ≤ 1          | µg/g |
| Heavy metals                      | ≤ 5          | ppm  |
| Limit of Bromides                 | ≤ 0.01       | %    |
| Limit of Phosphates               | ≤ 0.0025     | %    |
| Nitrate                           | ≤ 0.01       | AU   |
| Loss on drying                    | ≤ 0.5        | %    |

| Glass Bottles |    |  | Plastic Container |    |  | Plastic Container |    |   |
|---------------|----|--|-------------------|----|--|-------------------|----|---|
| 5             | gr |  | 100               | gr |  | 1                 | kg | ● |
| 10            | gr |  | 500               | gr |  | 5                 | kg | ● |
| 25            | gr |  | 800               | gr |  | 10                | kg | ● |

**Product Code: 1.1460.**

### Technical Information

|                        |                                |
|------------------------|--------------------------------|
| Formula:               | CINa                           |
| Chemical formula:      | NaCl                           |
| Density:               | 2.17 g/cm <sup>3</sup> (20 °C) |
| Molar mass:            | 58.44 g/mol                    |
| Bulk density:          | ~ 1140 kg/m <sup>3</sup>       |
| CAS number:            | 7647-14-5                      |
| HS code:               | 25010091                       |
| EC number:             | 231-598-3                      |
| Storage (temperature): | Without limitations.           |
| SDS                    | available                      |
| RTECS:                 | VZ4725000                      |
| Odour:                 | odourless                      |
| Form:                  | solid                          |
| Color:                 | colourless                     |
| PH value:              | 4.5 – 7.0 (100 g/l 20 °C)      |
| Solubility in water:   | 358 g/l (20 °C)                |
| Solubility in ethanol: | 0.51 g/l (25 °C)               |
| Boiling point:         | 1461 °C (1013 hPa)             |
| Melting point:         | 801 °C                         |
| Vapour pressure:       | 1.3 hPa (865 °C)               |

## tri - Sodium citrate dihydrate

Laboratory USP Reagent

**C<sub>6</sub>H<sub>5</sub>Na<sub>3</sub>O<sub>7</sub> \* 2H<sub>2</sub>O**

**M=294.10 g/mol**

### Specification

|                |              |   |
|----------------|--------------|---|
| Assay          | 99.0 – 100.5 | % |
| Description    | Conforms     |   |
| Solubility     | Conforms     |   |
| Identification | Conforms     |   |
| Tartrate       | Conforms     |   |
| Alkalinity     | Conforms     |   |
| Heavy metals   | ≤ 0.001      | % |
| Water          | 10.0 – 13.0  | % |

| Glass Bottles |    |  | Plastic Container |    |  | Plastic Container |    |   |
|---------------|----|--|-------------------|----|--|-------------------|----|---|
| 5             | gr |  | 100               | gr |  | 1                 | kg | ● |
| 10            | gr |  | 500               | gr |  | 5                 | kg | ● |
| 25            | gr |  | 800               | gr |  | 10                | kg | ● |

**Product Code: 1.1490.**

### Technical Information

|                        |                                                                                  |
|------------------------|----------------------------------------------------------------------------------|
| Formula:               | C <sub>6</sub> H <sub>5</sub> Na <sub>3</sub> O <sub>7</sub> * 2H <sub>2</sub> O |
| Molar mass:            | 294.10 g/mol                                                                     |
| Bulk density:          | ~ 600 kg/m <sup>3</sup>                                                          |
| CAS number:            | 6132-04-3                                                                        |
| HS code:               | 29181500                                                                         |
| EC number:             | 200-675-3                                                                        |
| Storage (temperature): | Without limitations.                                                             |
| SDS                    | available                                                                        |
| Odour:                 | odourless                                                                        |
| Form:                  | powder                                                                           |
| Color:                 | white                                                                            |
| PH value:              | 7.5 – 9.0 (50 g/l 25 °C)                                                         |
| Solubility in water:   | 720 g/l (25 °C)                                                                  |
| Solubility in ethanol: | (25 °C) insoluble                                                                |
| Melting point:         | 150 °C                                                                           |
| Thermal decomposition: | > 230 °C                                                                         |



## Sodium dodecyl sulfate (SLS)

**Product Code: 1.1500.**

Laboratory USP Reagent

**C<sub>12</sub>H<sub>25</sub>NaO<sub>4</sub>S**

**M= 288.38 g/mol**

### Specification

|                                          |   |          |    |
|------------------------------------------|---|----------|----|
| Description                              |   | Conforms |    |
| Solubility                               |   | Conforms |    |
| Identification                           |   | Conforms |    |
| Heavy metals                             | ≤ | 0.002    | %  |
| Assay (Sodium chloride & Sodium sulfate) | ≤ | 8.0      | %  |
| Alkalinity                               | ≤ | 0.6      | ml |
| Unulfonated alcohols                     | ≤ | 4.0      | %  |
| Total alcohols                           | ≥ | 59.0     | %  |

| Glass Bottles |    |  | Plastic Container |    |  | Plastic Container |    |   |
|---------------|----|--|-------------------|----|--|-------------------|----|---|
| 5             | gr |  | 100               | gr |  | 1                 | kg | ● |
| 10            | gr |  | 500               | gr |  | 5                 | kg | ● |
| 25            | gr |  | 800               | gr |  | 10                | kg | ● |

### Technical Information

|                        |                                                      |
|------------------------|------------------------------------------------------|
| Formula:               | C <sub>12</sub> H <sub>25</sub> NaO <sub>4</sub> S   |
| Chemical formula:      | C <sub>12</sub> H <sub>25</sub> OSO <sub>2</sub> ONa |
| Density:               | 1.1 g/cm <sup>3</sup> (20 °C)                        |
| Molar mass:            | 288.38 g/mol                                         |
| Bulk density:          | ~ 200 -300 kg/m <sup>3</sup>                         |
| CAS number:            | 151-21-3                                             |
| HS code:               | 29209010                                             |
| EC number:             | 205-788-1                                            |
| Storage (temperature): | Store at +5 °C to +30 °C                             |
| SDS                    | available                                            |
| R phrase:              | R 11-21/22-36/37/38                                  |
| S phrase:              | S 26-36/37                                           |
| Odour:                 | almost odourless                                     |
| Form:                  | powder                                               |
| Color:                 | light yellowish                                      |
| PH value:              | 6 – 9 (10 g/l 20 °C)                                 |
| Solubility in water:   | 150 g/l (20 °C)                                      |
| Solubility in ethanol: | 9.96 g/l (20 °C)                                     |
| Flash point:           | > 150 °C                                             |
| Melting point:         | 204 - 207 °C                                         |
| Thermal decomposition: | 380 °C                                               |



## Sodium hydroxide flake

**Product Code: 1.1510.**

Laboratory USP Reagent

**NaOH**

**M= 40.00 g/mol**

### Specification

|                                      |   |              |   |
|--------------------------------------|---|--------------|---|
| Assay                                |   | 95.0 - 100.5 | % |
| Description                          |   | Conforms     |   |
| Solubility                           |   | Conforms     |   |
| Identification                       |   | Conforms     |   |
| Heavy metals                         | ≤ | 0.003        | % |
| Na <sub>2</sub> CO <sub>3</sub>      | ≤ | 3.0          | % |
| Potassium                            |   | Conforms     |   |
| Insoluble substance & organic matter |   | Conforms     |   |

| Glass Bottles |    |  | Plastic Container |    |  | Plastic Container |    |   |
|---------------|----|--|-------------------|----|--|-------------------|----|---|
| 5             | gr |  | 100               | gr |  | 1                 | kg | ● |
| 10            | gr |  | 500               | gr |  | 5                 | kg | ● |
| 25            | gr |  | 800               | gr |  | 10                | kg | ● |

### Technical Information

|                        |                               |
|------------------------|-------------------------------|
| Formula:               | HNaO                          |
| Chemical formula:      | NaOH                          |
| Density:               | 2.13 g/cm <sup>3</sup> (20°C) |
| Molar mass:            | 40.00 g/mol                   |
| CAS number:            | 1310-73-2                     |
| EC index number:       | 011-002-00-6                  |
| HS code:               | 28151100                      |
| EC number:             | 215-185-5                     |
| Storage (temperature): | Without limitations.          |
| SDS                    | available                     |
| RTECS:                 | WB4900000                     |
| R phrase:              | R 35                          |
| S phrase:              | S 26-36/27/39-45              |
| Odour:                 | odourless                     |
| Form:                  | solid                         |
| Color:                 | colourless                    |
| PH value:              | ~ 14 (50 g/l 20 °C)           |
| Solubility in water:   | 1090 g/l (20 °C)              |
| Solubility in ethanol: | 139 g/l                       |
| Boiling point:         | 1390 °C (1013 hPa)            |
| Melting point:         | 323 °C                        |



## Sodium hydroxide granulated

Laboratory USP Reagent

**NaOH**  
**M= 40.00 g/mol**

### Specification

|                                      |              |   |
|--------------------------------------|--------------|---|
| Assay                                | 95.0 - 100.5 | % |
| Description                          | Conforms     |   |
| Solubility                           | Conforms     |   |
| Identification                       | Conforms     |   |
| Heavy metals                         | ≤ 0.003      | % |
| Na <sub>2</sub> CO <sub>3</sub>      | ≤ 3.0        | % |
| Potassium                            | Conforms     |   |
| Insoluble substance & organic matter | Conforms     |   |

| Glass Bottles |    |  | Plastic Container |    |  | Plastic Container |    |   |
|---------------|----|--|-------------------|----|--|-------------------|----|---|
| 5             | gr |  | 100               | gr |  | 1                 | kg | ● |
| 10            | gr |  | 500               | gr |  | 5                 | kg | ● |
| 25            | gr |  | 800               | gr |  | 10                | kg | ● |

**Product Code: 1.1520.**

### Technical Information

|                        |                               |
|------------------------|-------------------------------|
| Formula:               | HNaO                          |
| Chemical formula:      | NaOH                          |
| Density:               | 2.13 g/cm <sup>3</sup> (20°C) |
| Molar mass:            | 40.00 g/mol                   |
| CAS number:            | 1310-73-2                     |
| EC index number:       | 011-002-00-6                  |
| HS code:               | 28151100                      |
| EC number:             | 215-185-5                     |
| Storage (temperature): | Without limitations.          |
| SDS                    | available                     |
| RTECS:                 | WB4900000                     |
| R phrase:              | R 35                          |
| S phrase:              | S 26-36/27/39-45              |
| Odour:                 | odourless                     |
| Form:                  | solid                         |
| Color:                 | colourless                    |
| PH value:              | ~ 14 (50 g/l 20 °C)           |
| Solubility in water:   | 1090 g/l (20 °C)              |
| Solubility in ethanol: | 139 g/l                       |
| Boiling point:         | 1390 °C (1013 hPa)            |
| Melting point:         | 323 °C                        |



## Sodium hydroxide powder

Laboratory USP Reagent

**NaOH**  
**M= 40.00 g/mol**

### Specification

|                                      |              |   |
|--------------------------------------|--------------|---|
| Assay                                | 95.0 - 100.5 | % |
| Description                          | Conforms     |   |
| Solubility                           | Conforms     |   |
| Identification                       | Conforms     |   |
| Heavy metals                         | ≤ 0.003      | % |
| Na <sub>2</sub> CO <sub>3</sub>      | ≤ 3.0        | % |
| Potassium                            | Conforms     |   |
| Insoluble substance & organic matter | Conforms     |   |

| Glass Bottles |    |  | Plastic Container |    |  | Plastic Container |    |   |
|---------------|----|--|-------------------|----|--|-------------------|----|---|
| 5             | gr |  | 100               | gr |  | 1                 | kg | ● |
| 10            | gr |  | 500               | gr |  | 5                 | kg | ● |
| 25            | gr |  | 800               | gr |  | 10                | kg | ● |

**Product Code: 1.2170.**

### Technical Information

|                        |                               |
|------------------------|-------------------------------|
| Formula:               | HNaO                          |
| Chemical formula:      | NaOH                          |
| Density:               | 2.13 g/cm <sup>3</sup> (20°C) |
| Molar mass:            | 40.00 g/mol                   |
| CAS number:            | 1310-73-2                     |
| EC index number:       | 011-002-00-6                  |
| HS code:               | 28151100                      |
| EC number:             | 215-185-5                     |
| Storage (temperature): | Without limitations.          |
| SDS                    | available                     |
| RTECS:                 | WB4900000                     |
| R phrase:              | R 35                          |
| S phrase:              | S 26-36/27/39-45              |
| Odour:                 | odourless                     |
| Form:                  | solid                         |
| Color:                 | colourless                    |
| PH value:              | ~ 14 (50 g/l 20 °C)           |
| Solubility in water:   | 1090 g/l (20 °C)              |
| Solubility in ethanol: | 139 g/l                       |
| Boiling point:         | 1390 °C (1013 hPa)            |
| Melting point:         | 323 °C                        |





## Sodium hydroxide Solution 50 %

**Product Code: 1.2020.**

Laboratory USP Reagent

**NaOH**

**M= 40.00 g/mol**

### Specification

|                                       |   |             |   |
|---------------------------------------|---|-------------|---|
| Assay                                 |   | 49.0 - 51.0 | % |
| Description                           |   | Conforms    |   |
| Solubility                            |   | Conforms    |   |
| Identification                        |   | Conforms    |   |
| Carbonate                             | ≤ | 0.2         | % |
| Heavy metals                          | ≤ | 0.003       | % |
| Potassium                             |   | Conforms    |   |
| Insoluble substances & organic matter |   | Conforms    |   |

### Technical Information

|                        |                               |
|------------------------|-------------------------------|
| Formula:               | HNaO                          |
| Chemical formula:      | NaOH                          |
| Density:               | 2.13 g/cm <sup>3</sup> (20°C) |
| Molar mass:            | 40.00 g/mol                   |
| CAS number:            | 1310-73-2                     |
| EC index number:       | 011-002-00-6                  |
| HS code:               | 28151100                      |
| EC number:             | 215-185-5                     |
| Storage (temperature): | Without limitations.          |
| SDS                    | available                     |
| RTECS:                 | WB4900000                     |
| R phrase:              | R 35                          |
| S phrase:              | S 26-36/27/39-45              |
| Odour:                 | odourless                     |
| Form:                  | liquid                        |
| Color:                 | colourless                    |
| PH value:              | ~ 14 (50 g/l 20 °C)           |

| Glass Bottles |       |  | Plastic Bottles |       |   | Plastic Gallon |       |  |
|---------------|-------|--|-----------------|-------|---|----------------|-------|--|
| 1             | Liter |  | 1               | Liter |   | 5              | Liter |  |
| 2.5           | Liter |  | 2.5             | Liter | ● | 10             | Liter |  |
|               |       |  |                 |       |   | 20             | Liter |  |



## Sodium sulfate anhydrous

**Product Code: 1.1540.**

Laboratory USP Reagent

**Na<sub>2</sub>SO<sub>4</sub>**

**M=142.04 g/mol**

### Specification

|                       |   |          |   |
|-----------------------|---|----------|---|
| Assay                 | ≥ | 99.0     | % |
| Description           |   | Conforms |   |
| Solubility            |   | Conforms |   |
| Identification        |   | Conforms |   |
| Chloride              | ≤ | 0.02     | % |
| Heavy metals          | ≤ | 0.001    | % |
| Acidity or Alkalinity | ≤ | 0.5      |   |
| Heavy metals          | ≤ | 0.001    | % |
| Loss on drying        | ≤ | 0.5      | % |

### Technical Information

|                        |                                  |
|------------------------|----------------------------------|
| Formula:               | Na <sub>2</sub> O <sub>4</sub> S |
| Chemical formula:      | Na <sub>2</sub> SO <sub>4</sub>  |
| Density:               | 2.70 g/cm <sup>3</sup> (20 °C)   |
| Molar mass:            | 142.04 g/mol                     |
| Bulk density:          | ~ 1400 - 1600 kg/m <sup>3</sup>  |
| CAS number:            | 7757-82-6                        |
| HS code:               | 28331100                         |
| EC number:             | 231-820-9                        |
| Storage (temperature): | Without limitations.             |
| SDS                    | available                        |
| RTECS:                 | WE1650000                        |
| Odour:                 | odourless                        |
| Form:                  | solid                            |
| Color:                 | white                            |
| PH value:              | 5.2 – 8.0 (50 g/l 20 °C)         |
| Solubility in water:   | 200 g/l (20°C)                   |
| Solubility in ethanol: | insoluble                        |
| Melting point:         | 888 °C                           |
| Thermal decomposition: | > 890 °C                         |

| Glass Bottles |    |  | Plastic Bottles |    |  | Plastic Container |    |   |
|---------------|----|--|-----------------|----|--|-------------------|----|---|
| 5             | gr |  | 100             | gr |  | 1                 | kg | ● |
| 10            | gr |  | 500             | gr |  | 5                 | kg | ● |
| 25            | gr |  | 800             | gr |  | 10                | kg | ● |