## **Ammonium Formate, Crystal and Solution**

**Technical Data Sheet** 





| Product        | Synonyms Formic Acid, Ammonium Salt                                                                                                                                                                                        |                                                           |                                |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--------------------------------|
| Identification | CAS No.                                                                                                                                                                                                                    | 540-69-2                                                  |                                |
|                | EINECS/ELINCS                                                                                                                                                                                                              | 208-753-9                                                 |                                |
|                | Molecular Formula                                                                                                                                                                                                          | $CH_6NO_2$                                                |                                |
|                | Molecular Weight                                                                                                                                                                                                           | 63.06                                                     |                                |
|                | Quality Available                                                                                                                                                                                                          | Crystal-Reagent; Solution-Purified                        |                                |
| Specifications |                                                                                                                                                                                                                            | <b>Crystal-Reagent</b>                                    | Solution-Purified              |
|                | Assay                                                                                                                                                                                                                      | 97-103%                                                   | 50%±0.5%                       |
|                | Chloride                                                                                                                                                                                                                   | 0.0005% maximum                                           | 0.005% maximum                 |
|                | Heavy metals (as Pb)                                                                                                                                                                                                       | 0.001% maximum                                            | 0.005% maximum                 |
|                | Insoluble matter                                                                                                                                                                                                           | 0.005% maximum                                            |                                |
|                | Iron                                                                                                                                                                                                                       | 0.001% maximum                                            | 0.005% maximum                 |
|                | pH of a 5% Sol'n at 25°                                                                                                                                                                                                    | <b>C</b> 6.5-7.0                                          | 6.5-7.5                        |
|                | Residue after ignition                                                                                                                                                                                                     | 0.005% maximum                                            | 0.005% maximum                 |
|                | Sulfate                                                                                                                                                                                                                    | 0.005% maximum                                            | 0.01% maximum                  |
| Physical       | <u>Property</u> <u>V</u>                                                                                                                                                                                                   | alue-Solid                                                | Value-Liquid                   |
| Properties     | <b>Appearance</b> Do                                                                                                                                                                                                       | Deliquescent granules or crystals Clear, colorless liquid |                                |
| -              | Melting Point 11                                                                                                                                                                                                           | 6°C                                                       |                                |
|                | Solubility in water 10                                                                                                                                                                                                     | 2 g/100 ml @ 0°C                                          | Miscible (density -9.3 lb/gal) |
|                | Odor SI                                                                                                                                                                                                                    | ight ammoniacal odor                                      | Slight ammoniacal odor         |
|                | <b>Boiling Point</b> d                                                                                                                                                                                                     | 180°C                                                     | 111°C                          |
|                | Specific gravity (Relative to water)                                                                                                                                                                                       |                                                           | 1.2@ 77°F                      |
| Packaging      | Crystals: 25 pound rocons and 150 pound fiber drums. Solution: 55 gallon steel drums. Also non-returnable totes.                                                                                                           |                                                           |                                |
| Applications   | Pharmaceutical Applications: Ammonium Formate is used in the manufacture of protease inhibitors and related drugs.  Specialty/Fine Chemical Applications: Ammonium Formate is used in the manufacture of catalyst systems. |                                                           |                                |

For toxicity or regulatory information please consult the Material Safety Data Sheet.

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