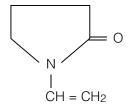
N-Vinyl-2-Pyrrolidone

Technical Data Sheet

February 1997



Description

N-Vinyl-2-pyrrolidone (NVP) is either caustic stabilized with 0.1% NaOH, or amine stabilized with 10 ppm N,N'-disec-butyl-paraphenylene diamine.

NVP is a slightly to moderately yellow heterocyclic, reactive vinyl monomer made from the reaction of acetylene and 2-pyrrolidone. The inherent properties of high polarity, low toxicity, water solubility, chemical stability and pseudo-cationic activity are imparted to its homopolymers and copolymers.

Safety

N-Vinyl-2-pyrrolidone may irritate the skin and eyes and contact may result in corneal opacity. Inhalation of vapors or mists may irritate the respiratory tract.

Always refer to the Material Safety Data Sheet (MSDS) for detailed information on safety.

Applications

The NVP monomer is commonly used as a reactive diluent in ultraviolet and electron-beam curable polymers applied as inks, coatings or adhesives. Copolymers of NVP are used in the

Customer Service:

EAST 1-800-426-8696 WEST 1-800-543-1740

| Product Specifications | Value | Test Method |
|---|-------|-------------|
| Assay, % minimum | 99.0 | STI 8908 |
| Impurities: | | |
| Water, % maximum | 0.1 | STI 8413 |
| 2-Pyrrolidone, % maximum | 0.2 | STI 8908-1 |
| Color, APHA maximum (at time of drumming) | 100 | STI 8415 |
| Foreign matter | none | STI 8412 |

| Physical Properties | | |
|-----------------------------|-------|------|
| Boiling range, °C @ 13 mbar | ar90- | - 92 |
| Melting point, °C | | 13.6 |
| Density @ 20°C, g/ml | | .043 |
| Flash point, °C | | . 95 |
| | | |

above applications and also for textile finishes and sizes, cosmetics, pharmaceuticals and as a vehicle for hair spray.

Packaging

Available in 4,000 gallon minimum tank trucks and 440 lb (net weight) /490 lb (gross weight) non-returnable steel drums.

Storage & Handling

NVP tends to polymerize as storage time and temperature increase. To prevent this undesirable polymerization, small amounts of a stabilizer are added during drumming and prior to shipping bulk quantities. It may assume a yellow color after several months of storage, but its quality will not be impaired.

It is neither explosive nor spontaneously flammable. However, it is combustible.

If a drum of NVP has solidified, it should be melted carefully in a waterbath or warm room at 30°C maximum. The drum should not be heated with steam.

Always refer to the Material Safety Data Sheet (MSDS) for detailed information on handling and disposal. IMPORTANT: While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, it is provided for your guidance only. Because many factors may affect processing or application/use, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. NO WAR-RANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE RE-GARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DE-SIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTEL-LECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DE-SCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. Further, you expressly understand and agree that the descriptions, designs, data and information furnished by BASF hereunder are given gratis and BASF assumes no obligation or liability for the description, designs, data and information given or results obtained, all such being given and accepted at your risk.

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