

# SUPERTHERM-300 联苯混合物

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**成份:** 联苯 26.5% 联苯醚 73.5%

**外观:** 淡黄色清澈透明液体

**温度范围:** 15°C~400°C

## 主要用途:

- (1) 广泛使用于各种涤纶、锦纶、丙纶等纺丝箱体加热, 是目前各种切片纺长丝及短纤设备中最常用的纺丝热媒。
- (2) 聚酯生产装置加热系统的热载体。
- (3) 石油、化工及其它行业工艺气液两相的加热系统等。

## SUPERTHERM 300 的产品性能参数:

|                |   |
|----------------|---|
| 常态沸点 (760mmHg) | -----494.8°F (257.1°C)                                  |
| 密度 (25°C)      | -----8.80lb/gal (1057kg/m <sup>3</sup> )                |
| 水分             | -----250ppm   |
| 结晶点:           | -----53.6°F (12.0°C)                                    |
| 闪点 (SETA)      | -----236°F (113°C)                                      |
| 着火点 (COC)      | -----245°F (118°C)                                      |
| 自燃温度 (ASTM)    | -----1110°F (599°C)                                     |
| 凝固时的体积收缩率      | -----6.63%  |
| 融化时的体积膨胀率      | -----7.10%  |
| 融化热            | -----23.40Kcal/Kg                                       |
| 电阻率            | -----6.4x10 <sup>11</sup> ohm-cm                        |
| 临界温度           | -----927°F (497°C)                                      |
| 临界压力           | -----30.93atm (31.96Kg/cm <sup>2</sup> )                |
| 临界体积           | -----0.0508ft <sup>3</sup> /lb (3.17cm <sup>3</sup> /g) |

## 附注:

1、SUPERTHERM-300 为上海联苯精细化工有限公司以日本新日铁化学公司提供的原料和技术而生产的优质产品, 纯度、水分等各项技术参数优于其它牌号, 详细技术指标参见原厂提供产品技术手册及出厂检测 C.O.A.。

2、与其它公司的联苯混合物化学组份完全相同, 如美国陶氏化学为 DOWTHERM A、德国拜尔为 DIPHYL、美国首诺为 THERMINOL VP-1 等。

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## SUPERTHERM-300 热力学性质:

| 温度    | 蒸气压                | 热焓<br>(液相) | 热焓<br>(气相) | 汽化<br>潜热 | 比热          | 密度<br>(液相)        | 密度<br>(气相)        | 比重    |
|-------|--------------------|------------|------------|----------|-------------|-------------------|-------------------|-------|
| ℃     | kg/cm <sup>2</sup> | kcal/kg    | kcal/kg    | kcal/kg  | cal/g.<br>℃ | g/cm <sup>3</sup> | kg/m <sup>3</sup> | t/25℃ |
| 12    | 0.0000             | 0.0        | 97.3       | 97.3     | 0.371       | 1.066             | 0.000             | 1.069 |
| 20    | 0.0000             | 3.0        | 99.3       | 96.3     | 0.376       | 1.060             | 0.000             | 1.063 |
| 30    | 0.0000             | 6.8        | 101.9      | 95.1     | 0.383       | 1.052             | 0.000             | 1.055 |
| 40    | 0.0001             | 10.6       | 104.6      | 93.9     | 0.390       | 1.044             | 0.000             | 1.047 |
| 50    | 0.0002             | 14.6       | 107.3      | 92.7     | 0.397       | 1.036             | 0.002             | 1.039 |
| 60    | 0.0005             | 18.6       | 110.2      | 91.6     | 0.404       | 1.028             | 0.003             | 1.031 |
| 70    | 0.0009             | 22.6       | 113.1      | 90.5     | 0.410       | 1.020             | 0.006             | 1.023 |
| 80    | 0.0017             | 26.8       | 116.1      | 89.3     | 0.417       | 1.012             | 0.010             | 1.014 |
| 90    | 0.0030             | 31.0       | 119.3      | 88.3     | 0.424       | 1.003             | 0.016             | 1.006 |
| 100   | 0.0051             | 35.2       | 122.4      | 87.2     | 0.430       | 0.995             | 0.027             | 0.998 |
| 110   | 0.0084             | 39.6       | 125.7      | 86.1     | 0.437       | 0.987             | 0.043             | 0.989 |
| 120   | 0.0134             | 44.0       | 129.1      | 85.1     | 0.443       | 0.978             | 0.067             | 0.981 |
| 130   | 0.0208             | 48.4       | 132.5      | 84.1     | 0.450       | 0.970             | 0.102             | 0.972 |
| 140   | 0.0315             | 53.0       | 136.0      | 83.0     | 0.456       | 0.961             | 0.151             | 0.964 |
| 150   | 0.0466             | 57.6       | 139.6      | 82.0     | 0.463       | 0.952             | 0.216             | 0.955 |
| 160   | 0.0674             | 62.3       | 143.2      | 81.0     | 0.470       | 0.943             | 0.306             | 0.946 |
| 170   | 0.0956             | 67.0       | 146.9      | 80.0     | 0.476       | 0.934             | 0.425             | 0.937 |
| 180   | 0.1331             | 71.8       | 150.7      | 78.9     | 0.483       | 0.925             | 0.579             | 0.928 |
| 190   | 0.1820             | 76.6       | 154.6      | 78.0     | 0.489       | 0.916             | 0.777             | 0.919 |
| 200   | 0.2540             | 81.6       | 158.5      | 76.9     | 0.496       | 0.907             | 1.025             | 0.910 |
| 210   | 0.3250             | 86.6       | 162.4      | 75.9     | 0.503       | 0.898             | 1.334             | 0.900 |
| 220   | 0.4250             | 91.6       | 166.5      | 74.9     | 0.510       | 0.888             | 1.717             | 0.891 |
| 230   | 0.5490             | 96.8       | 170.5      | 73.8     | 0.517       | 0.879             | 2.183             | 0.881 |
| 240   | 0.7000             | 102.0      | 174.7      | 72.7     | 0.523       | 0.869             | 2.742             | 0.871 |
| 250   | 0.8830             | 107.2      | 178.8      | 71.6     | 0.530       | 0.859             | 3.409             | 0.861 |
| 257.1 | 1.0330             | 111.1      | 181.8      | 70.8     | 0.535       | 0.852             | 3.957             | 0.854 |
| 260   | 1.1000             | 112.6      | 183.0      | 70.5     | 0.538       | 0.849             | 4.194             | 0.851 |
| 270   | 1.3590             | 118.0      | 187.2      | 69.3     | 0.545       | 0.839             | 5.126             | 0.841 |
| 280   | 1.6630             | 123.5      | 191.5      | 68.1     | 0.552       | 0.828             | 6.210             | 0.831 |
| 290   | 2.0170             | 129.0      | 195.8      | 66.8     | 0.559       | 0.818             | 7.466             | 0.820 |
| 300   | 2.4260             | 134.7      | 200.2      | 65.5     | 0.567       | 0.807             | 8.911             | 0.809 |
| 310   | 2.8950             | 140.4      | 204.5      | 64.1     | 0.574       | 0.796             | 10.570            | 0.798 |
| 320   | 3.4310             | 146.2      | 208.9      | 62.7     | 0.582       | 0.784             | 12.480            | 0.787 |
| 330   | 4.0390             | 152.0      | 213.3      | 61.3     | 0.589       | 0.773             | 14.650            | 0.775 |
| 340   | 4.7240             | 157.9      | 217.8      | 59.8     | 0.594       | 0.761             | 17.120            | 0.763 |
| 350   | 5.4930             | 163.9      | 222.2      | 58.2     | 0.600       | 0.749             | 19.930            | 0.751 |
| 360   | 6.3530             | 170.0      | 226.6      | 56.6     | 0.605       | 0.736             | 23.100            | 0.738 |
| 370   | 7.3100             | 176.1      | 231.0      | 54.9     | 0.611       | 0.723             | 26.730            | 0.725 |
| 380   | 8.3710             | 182.3      | 235.4      | 53.2     | 0.617       | 0.709             | 30.870            | 0.711 |
| 390   | 9.5430             | 188.5      | 239.8      | 51.3     | 0.625       | 0.695             | 35.890            | 0.697 |
| 400   | 10.8400            | 194.9      | 244.2      | 49.3     | 0.635       | 0.680             | 40.980            | 0.682 |
| 410   | 12.2600            | 201.4      | 248.6      | 47.2     | 0.647       | 0.665             | 47.200            | 0.667 |
| 420   | 13.8100            | 208.0      | 252.8      | 44.8     | 0.663       | 0.648             | 54.510            | 0.650 |

