



## TIB KAT SP

### Description

*TIB KAT SP* is a formulation based on methane sulfonic acid and a phosphorous compound.

*TIB KAT SP* is an excellent catalyst providing high efficiency in esterification reactions. In general terms the use of *TIB KAT SP* leads to products with significantly lighter color values than using pure methane sulfonic acid, other sulfonic acids or sulfuric acid.

The advantages of *TIB KAT SP* are especially visible when using raw materials, which create colors during the esterification process.

The preferred temperature range for *TIB KAT SP* is between 60 - 180 °C. The dosage of the catalyst is depending on the application between 0.05 - 1 %.

The ratio between methane sulfonic acid and phosphorous compound can be changed upon request.

### Product Data

|                              |                               |
|------------------------------|-------------------------------|
| Chemical Name                | Modified methanesulfonic acid |
| CAS No.                      | 75-75-2                       |
| Content phosphorous compound | approx. 17 %                  |
| State of aggregation         | liquid, aqueous sol.          |

### Specification

|   |          |
|---|----------|
| Content CH <sub>3</sub> SO <sub>3</sub> H | ≥ 45.0 % |
| Sulfuric acid                             | ≤ 0.1 %  |
| Color (Gardner)                           | ≤ 1.0    |

### Storage

*TIB KAT SP* has a shelf life of at least one year if stored correctly in its original closed packaging at room temperature. Exposure of the solution to the atmosphere or light may result in a slight yellow discoloration of the product or development of a light odor.

### Packaging

25 kg pail, 50 kg pail, 1200 kg IBC,  
other packaging size upon request.

### Packaging USA

Packaging size upon request.

### Special advice for Security

Information concerning

- 📦 classification and labelling according to the regulations governing transport and hazardous chemicals
- 📦 protective measures for storage and handling
- 📦 safety measures in case of accident and fire
- 📦 toxicity and ecological effects

is given in our material safety data sheet.

**Customs Tariff No.: 2904 1000**



## TIB KAT SP

### Product Carbon Footprint (PCF)

Created by: KlimAktiv Consulting GmbH

| PCF-results (emissions)                 | Value (Mannheim) | Value (Pittsburgh) | Unit                     |
|---|------------------|--------------------|--------------------------|
| <b>Sum of PCFs (Cradle-to-gate)</b>     | -                | -                  | kg CO <sub>2</sub> eq/kg |
| <b>PCF excluding biogenic emissions</b> | -                | -                  | kg CO <sub>2</sub> eq/kg |
| <b>Biogenic emissions</b>               | -                | -                  | kg CO <sub>2</sub> eq/kg |

The Product Carbon Footprint (PCF) covers one of several environmental impacts of chemical products. The PCF does not allow comprehensive conclusions about the overall environmental performance of the product. Comparisons of PCFs from different data sources are only possible to a limited extent. The PCF presented here applies to the product sold by TIB Chemicals.

The PCF is based on data of the accounting year 2024 and follows the calculation method outlined in ISO 14067, the Tfs Guideline, the BASF Guideline, the cradle-to-gate system boundaries, the declared unit kg CO<sub>2</sub>e/kg product (excl. packaging) and the sum of different emissions from Scope 1, 2 and 3 (raw material and preliminary products (e.g. secondary data), transportation of purchased products and inbound logistics, as well as company- and site-specific processes including primary energy consumption, electricity and heat consumption). The emissions from biogenic carbon and land-use changes are considered as far as data sources are available.