



## TIB KAT 728

### Description

*TIB KAT 728* (Bismuth Octoate) is a commonly used specialty metal-based bismuth catalyst for polyurethanes.

*TIB KAT 728* is commonly used in polyurethane applications. It is used in a wide range of polyurethane applications including coatings, adhesives and sealants, foams, plastics and elastomers. In addition to its use as a polyurethane catalyst, *TIB KAT 728* can be used in lubricant formulations.

*TIB KAT 728* can be dissolved in common solvents for polyurethane systems, but it's recommended to test solution stability carefully.

*TIB KAT 728* as a polyurethane catalyst results in good overall reactivity. A well-balanced cure is achievable, given the presence of both a low bismuth metal content and a large ligand. Thus, a balanced front-end/pot-life and back-end/final-cure reactivity profile can be achieved. Reactivity, especially in regard to back-end cure, is greatly improved with the addition of added and exothermically generated heat. It is typically used in concentrations between 0.01 - 0.1 wt.-%.

*TIB KAT 728* is hydrolytically stable within typical formulation moisture levels, but this stability breaks down with increasing moisture content. In general, bismuth carboxylates exhibit a lower hydrolytic stability compared to organotins.

### Product Data

Chemical name	Bismuth octoate
CAS No.	67874-71-9
Molecular weight	641.62
State of aggregation	Clear liquid at RT /25°C

### Specification

Bismuth content	26.5-28.5 %
Colour (Gardner)	≤ 3
Density (25°C)	1.2 – 1.4 g/ml



## TIB KAT 728

### Storage

TIB KAT 728 can be stored for at least half a year if kept closed in the original packaging. Sensitive to frost. The container should be closed tightly after each use to maximize shelf life. Characteristic of most Bismuth Carboxylates, the primary cause of instability would be hydrolysis.

### Packaging

25 kg pail, 200 kg drum,  
other packaging size upon request.

### Packaging USA

44 lb (20 kg) plastic pail  
440 lb (200 kg) plastic drum  
other 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.: 3815 9090**



## TIB KAT 728

### 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.