



## TIB KAT 439

### Description

*TIB KAT 439* (Dibutyl Tin bis-(Acetylacetonate) + plasticizer), is a formulation of a butyl-based organotin with a ketonate functionality. The alkylsulphonic phenyl ester-based plasticizer helps to minimize crystallization. *TIB KAT 439* is a highly reactive liquid butyl tin given its high tin content (18%) and related small ligand.

Due to its ketonate-based ligand, *TIB KAT 439* has a reduced hydrolytic stability compared to carboxylate functionalized organotins such as *TIB KAT 218* (Dibutyl Tin Dilaurate).

Dibutyl Tin bis-(Acetylacetonate) is on a broad range of international regulatory lists and is thus an ideal candidate for global formulation development. *TIB KAT 439* is on the ECHA's Substance of Very High Concern (SVHC) and thus the octyl version, *TIB KAT 223*, may be a better option for use in the EU.

*TIB KAT 439* can be used as homogeneous catalyst:

- 🔹 for synthesis of polyurethan-systems
- 🔹 for polycondensation reactions of RTV silicon resins and of silanes
- 🔹 for 1 component MS Silyl systems

### Product Data

Chemical name	Dibutyl Tin bis-(Acetylacetonate) plasticizer blend
CAS No.	22673-19-4
Molecular weight	431.1 g/mol
State of aggregation	liquid

### Specification

Tin content	17.5 – 20.0 %
Colour (Gardner)	≤ 6
Density (20°C)	1.15 – 1.20 g/cm <sup>3</sup>

### Storage

*TIB KAT 439* can be stored for at least one year if kept closed in the original packaging. As it is sensitive to moisture, immediate sealing of once opened drums is advised and flushing with nitrogen is recommended. This product has a tendency to crystallize, thus it is recommended that it be stored at temperatures above room temperature. If crystallization does occur, it is recommended that vented containers are warmed at 30-40°C.



## TIB KAT 439

### Packaging

Packaging size upon request.

### Packaging US

44 lb (20 kg) plastic pail,

440 lb (200 Kg) 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 439

### 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.