







TIB KAT 233

Description

TIB KAT 233 (Dibutyl Tin Diacetate), also commonly known as dibutyltin diacetate or DBTA, is a butyl-based organotin with a carboxylate functionality. Dibutyltin diacetate is a highly reactive neat liquid butyl tin given its high tin content (33%) and related small ligand. Dibutyltin Diacetate contains the highest concentration of all liquid butyl tin products of the tin (IV) family of organotins. The octyl-based organotin analog of *TIB KAT 233* is *TIB KAT 229* (Dioctyltin Diacetate).

TIB KAT 233 is used for following purposes:

-  catalyst for synthesis of polyurethan-systems
-  catalyst for transesterification reactions of acrylics, oleochemicals and other esters
-  catalyst for polycondensation reactions of RTV silicon resins and of silanes
-  catalyst for the production of raw material for polycarbonates

Given its high tin content, liquid form, small ligand, and good compatibility with a wide range of raw materials, dibutyltin diacetate catalyst tends to be highly reactive across a broad range of silicone and polyurethane formulations. In regard to silicone reactions, *TIB KAT 233*, like all tin-based catalysts, will catalyze the silanol/silane condensation reaction, acting as both a polymerization and crosslinking catalyst. *TIB KAT 233* is used in polyurethane coating formulations where “snap cure” is desired. As a polyurethane catalyst, *TIB KAT 233* will preferentially catalyze the urethane reaction and to a lesser extent the water reaction, thus it functions as a polymerization/gelation catalyst.

TIB KAT 233 is available in special formulations such as *TIB KAT 401-05G* or upon request.

Product Data

Chemical name	Dibutyltin diacetate
CAS No.	1067-33-0
Molecular weight	351.03 g/mol
Appearance	liquid

Specification

Total tin content	32.5 – 34.0 %
Colour (Gardner)	≤ 3
Density (20°C)	1.25 – 1.40 g /cm ³
Viscosity (20°C)	10 - 20 mPa.s
Refract. index (20°C)	1.4650 – 1.4750



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Storage

TIB KAT 233 can be stored for at least one year if kept closed in the original packaging. Sensitive to frost and slightly sensitive to moisture. The container should be closed tightly after each use to maximize shelf life. Characteristic of most Sn (IV) organotins, the primary cause of instability would be hydrolysis. Hydrolysis results in the formation of tin oxide insolubles leading to deactivation.

Packaging

25 kg pail, 50 kg pail, 200 kg drum,
other packaging size upon request.

Packaging USA

55 lb (25 kg) pail,
440 lb (200kg) steel 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.: 2931 9000



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Product Carbon Footprint (PCF)

Created by: KlimAktiv Consulting GmbH

PCF-results (emissions)	Value (Mannheim)	Value (Pittsburgh)	Unit
Sum of PCFs (Cradle-to-gate)	15,3	-	kg CO ₂ eq/kg
PCF excluding biogenic emissions	15,3	-	kg CO ₂ eq/kg
Biogenic emissions	7,93 E-03	-	kg CO ₂ 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 CO₂e/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.