



TIB KAT 162

Description

TIB KAT 162, Stannous Chloride Anhydrous, also known as Anhydrous Stannous Chloride or Tin Dichloride, is a versatile high metal content stannous inorganic tin that is used in several reactions, including use as a reducing agent and esterification catalyst. Anhydrous Stannous Chloride is produced to the highest standards utilizing high-purity tin metal while minimizing stannic and maximizing stannous content.

TIB KAT 162 is used as a catalyst in the production of polyesters and oleochemical-based esters. Further on, it is used as an activator in the production of elastomers.

TIB KAT 162 can be used in the production of resins or polymer coating systems, which are used in food packaging. We recommend a use-level of 0.01 - 0.20 per cent by weight.

TIB KAT 162 is soluble in water and a number of nonaqueous polar solvents. During the esterification process, *TIB KAT 162* minimizes the dehydration of alcohols and avoids odors and discoloration of the products which can be formed by possible by-products.

It is important to know that *TIB KAT 162* quickly adsorbs humidity because of its hygroscopic nature. The catalyst can be removed from the ester by chemical methods (hydrolysis) and by adsorption with *TIB TINEX*[®] -products.

Product Data

Chemical Name	Stannous Chloride, anhydrous
CAS	7772-99-8
Molecular weight	189.7 g/mol
State of aggregation	solid
Melting point	246°C
Solubility	soluble in water, alcohols (C1 to C3), low-boiling aldehydes and ketones insoluble in non-polar aliphatic and aromatic solvents

Specification

SnCl ₂ content	≥ 99.5 %
Tin (II) content	≥ 62.3 %
Iron	Max 50 ppm
Lead	Max 75 ppm



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Storage

TIB KAT 162 can be stored for at least one year if kept closed in the original packaging. The container should be closed tightly after each use to maximize shelf life. Characteristic of most inorganic tins (Sn(II)), the primary cause of instability would be oxidation. Additionally, *TIB KAT 162* is hygroscopic.

Packaging

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

Packaging USA

55 lb (25 kg) plastic pail,
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.: 2827 3910



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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)	6,85	-	kg CO ₂ eq/kg
PCF excluding biogenic emissions	6,85	-	kg CO ₂ eq/kg
Biogenic emissions	-	-	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.