

Phosphorus oxychloride PF



for pharmaceutical industry

DATA:11.03.2026

NUMBER STW: KF/072/02

PZZ.02B.F10 TECHNICAL SPECIFICATION PRODUCT

TECHNICAL SPECIFICATION PRODUCT

1. CHEMICAL NAME

Phosphorus oxychloride, phosphoryl trichloride, phosphoric trichloride

2. IDENTIFICATION NUMBERS

CAS: 10025-87-3

EC: 233-046-7

3. TECHNICAL REQUIREMENTS

Appearance at 20-25°C	colourless or straw liquid with acceptable opalescence without sediment
Density at 20°C, g/ml	1.672-1.678 (PN-C-82057:2000)
Phosphorus(III) oxychloride, % (w/w)	min. 99.50 (³¹ P-NMR)
Phosphorus(III) chloride, % (w/w)	max. 0.50 (³¹ P-NMR)
Crystallization temperature, °C	min. 0.5 (PN-ISO 1392:2002)
Arsenic content, As, ppm (w/w)	max. 5 (ICP)
Lead content, Pb, ppm (w/w)	max. 1 (ICP)
Iron content, Fe, ppm (w/w)	max. 2 (ICP)

4. INFORMATIVE DATA*

Solubility in water	reacts violently producing high heat of reaction
Molecular weight, g/mol	approx. 153
Boiling point, °C	105.3
Melting point, °C	1.2
Odour	pungent

*These informative data are not technical requirements and cannot form the basis for any claims.

5. USE

Intermediate under strictly controlled conditions for pharmaceutical industry.

6. PACKAGING

Bulk deliveries (isocontainers, rail tankers), containers made of teflon or appropriate acid resistant steel, glass bottles and other packaging as agreed with the customer (product must not be transported in steel containers without an internal chemical resistant lining, optimally use packaging with the following code: 6HA1).

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7. STORAGE

Store in tightly closed containers, protected against humidity or water flooding, at a temperature in the range from 1 to 30°C. Due to high vapour pressure, do not expose the substance to high temperatures. The product starts solidifying at a temperature below 1°C, after heating returns to its original form without changes to its properties. Use the product as quickly as possible. In the case of phosphorus oxychloride delivered in drums pump the product as soon as possible into storage containers.

8. SHELF LIFE

The shelf life is 12 months from the date of manufacture. After this period, the product may be used after verifying compliance with technical requirements.

9. TRANSPORTATION

This product is regulated for carriage according to ADR/RID, IMDG. IATA – forbidden.

Nr UN: 1810

Proper shipping name:	PHOSPHORUS OXYCHLORIDE
Transport hazard class:	6.1 (8)
Packing group:	I

10. CLASSIFICATION AND LABELLING

This technical specification is applicable only if accompanied by the Safety Data Sheet in force. Pursuant to statutory requirements, only the Safety Data Sheet includes updated safety information.

OTHERS

The information contained herein is provided in good faith, based on our state of the art knowledge and experience. We reserve the right to amend this Technical Specification as a result of technological progress and product development by the manufacturer. This product is intended for the purposes specified herein, for industrial and professional use. To use the product for purposes other than indicated herein, please contact PCC Rokita for consultation sending an e-mail to: fosforv@pcc.eu. We cannot assume any liability for the use and application of our products, technical assistance and information provided (whether verbal, written or by way of product evaluations), including any suggested formulations and recommendations. Therefore, it is imperative that you test our products, technical assistance and information provided to determine to your own satisfaction whether they are suitable for your needs, production, your intended uses and applications. Such analysis adopted to the conditions of the use and application should include at least application tests, technical feasibility of the suggested solutions, taking into account safety requirements, health and environmental issues. Unless otherwise specified in writing, our products are offered under our applicable Standard Terms and Conditions of Sale available on our website. Any information, including technical assistance, is provided without warrant and can change at any time without notice. The parties explicitly agree that the Customer accepts and explicitly releases us from any liability in tort, contract or otherwise, for any loss or damage arising from the use of our products, information or technical assistance. Any declarations and recommendations other than stated herein are not valid or binding. Nothing in this document is intended to be a recommendation to use any product in violation of patent claims concerning material of intended use.