

PHOSPHORUS TRICHLORIDE



PHOSPHORUS TRICHLORIDE is an important raw material for many of the Organo phosphorus pesticides, Dye intermediates and Fire retardant Plasticizers.

It is manufactured from Yellow Phosphorus, the technology of which has been indigenously developed by Excel. Excel's PCl_3 is exported worldwide and is considered To be at par with the best in the world.

PHYSICAL PROPERTIES

| | | |
|--------------------------|---|--------------------------|
| Chemical name | : | Phosphorus Trichloride |
| CAS No. | : | 7719-12-2 |
| Molecular formula | : | PCl_3 |
| Molecular weight | : | 137.35 |
| Physical state | : | Clear, colourless liquid |
| Odour | : | Pungent |
| Boiling point, °C | : | 75 -76 |
| Critical temperature, °C | : | 285.5 |
| Specific gravity at 27°C | : | 1.560 ± 0.002 |

TYPICAL ANALYSIS

| | | |
|------------------------|---|------------------------------------------------------------------------------|
| Assay, % | : | 99.5 Min. |
| Free Phosphorus, ppm | : | 5.0 Max. |
| Iron, ppm | : | 5.0 Max. |
| Distillation range, °C | : | Not less than 95% by volume shall be distilled within the range of 74.5 - 76 |
| Solubility | : | Soluble in Benzene, Carbon disulphide & Carbon tetrachloride |
| Colour, Hazen | : | 5.0 Max. |

PACKAGING

| | | |
|---------------|---|-----------------------------------------------------------------------------------------------------------------------------------------|
| Unit pack | : | 175 Kgs & 200 Kgs in Mild Steel drums, ISO tanks or bulk supply in tankers. 160 or 200 Kgs in UN approved packs available for Export |
| UN NO. | : | 1809 |
| IMCO class | : | Primary class 6.1 Subsidiary class 8 (Not approved for Air Transport) |
| Packing group | : | I |

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APPLICATIONS

PCl_3 is a highly reactive chemical and is used in diverse applications:

- It is a raw material used in the preparation of Phosphorus oxychloride, Phosphorus pentachloride and Thio phosphoryl chloride.
- The Phosphorus acid esters obtained from the reaction of PCl_3 and Alcohols or Phenols are used as Plasticizers and Stabilizers for plastic materials.
- It is used as a chlorinating agent in various processes.
- It is used in the preparation of Fatty Acid Chlorides.
- It is used in the manufacture of Organophosphorus pesticides.
- It is used in the manufacture of intermediates for bulk drugs like D-phenyl glycine which is a raw material for Cephalexin & Amoxicillin.
- It is used as an intermediate for Veterinary products.
- It is used in the manufacture of Naphthol Dyes/Blue -G.

SALIENT FEATURES

The consistent quality and reliability offered by Excel's PCl_3 has made it the best buy Nationally as well as Internationally. It is offered with the minimum of free Phosphorus to suit the process specifications of the customers. Coming from a company with integrated production capabilities from basic raw material, Yellow Phosphorus to final end products such as Glyphosate Technical, Phosphonates and Acetyl Chloride, Excel provides a complete understanding of the customer requirements in terms of quality and consistency in supply and can also provide the technical assistance required. Final delivery is made with strict adherence to safety procedures in handling, loading, unloading & transportation and is complete with training to client personnel on the safety aspects.

All specifications and suggestions appearing in this bulletin concerning the use of our products are based upon tests and data believed to be reliable. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by **EXCEL INDUSTRIES LIMITED** as to the effects of such use or the results to be obtained.

For any further information refer our Material Safety Data Sheet.

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