

PRODUCT SPECIFICATION: PHOSPHORIC ACID 65%- 85%

Section 1 – GENERAL																																											
Product Name:	Thermal Phosphoric Acid Chemically Pure (concentrations from 65% to 85% available on request) chemical formula H ₃ PO ₄																																										
Description:	Clear and odourless liquid																																										
Properties:	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Density at 20 °C</td> <td style="width: 20%;">65%</td> <td style="width: 50%;">1.45 g/cm³</td> </tr> <tr> <td>Density at 20 °C</td> <td>75%</td> <td>1.57 g/cm³</td> </tr> <tr> <td>Density at 20 °C</td> <td>80%</td> <td>1.63 g/cm³</td> </tr> <tr> <td>Density at 20 °C</td> <td>85%</td> <td>1.68 g/cm³</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td>Melting Point</td> <td>65%</td> <td>-73 °C</td> </tr> <tr> <td>Melting Point</td> <td>75%</td> <td>-20 °C</td> </tr> <tr> <td>Melting Point</td> <td>80%</td> <td>3 °C</td> </tr> <tr> <td>Melting Point</td> <td>85%</td> <td>21 °C</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td>Boiling Point</td> <td>65%</td> <td>120 °C</td> </tr> <tr> <td>Boiling Point</td> <td>75%</td> <td>135 °C</td> </tr> <tr> <td>Boiling Point</td> <td>80%</td> <td>145 °C</td> </tr> <tr> <td>Boiling Point</td> <td>85%</td> <td>158 °C</td> </tr> </table>	Density at 20 °C	65%	1.45 g/cm ³	Density at 20 °C	75%	1.57 g/cm ³	Density at 20 °C	80%	1.63 g/cm ³	Density at 20 °C	85%	1.68 g/cm ³				Melting Point	65%	-73 °C	Melting Point	75%	-20 °C	Melting Point	80%	3 °C	Melting Point	85%	21 °C				Boiling Point	65%	120 °C	Boiling Point	75%	135 °C	Boiling Point	80%	145 °C	Boiling Point	85%	158 °C
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Toxicity:	<p>Irritant effect on the skin. Irritant effect on eyes. Corrosive.</p> <p>Acute oral toxicity LD50 : 1530 mg/kg</p> <p>Species rat</p> <p>Source SAX/ Lewis</p>																																										
	<p>Remove soiled or soaked clothing immediately. Skin or eye contact with Phosphoric Acid can cause severe burns.</p> <p>In case of contact with skin wash off immediately with soap and water.</p> <p>Cover wounds with sterile dressing. In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.</p> <p>Ingestion</p> <p>When swallowed, drink water.</p> <p>Summon a doctor immediately.</p> <p>Drink aluminium oxide suspension.</p> <p>Treatment: treat symptomatically..</p>																																										
Special Precautions:	<p>Suitable extinguishing media : Water spray, fog or alcohol foam.</p> <p>Emergency equipment including a self-contained</p>																																										

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	breathing apparatus must be worn. The product under full combustion will form oxides of phosphorus.
Statutory Aspects:	UN 1805. Transported as Dangerous Goods. Chemical Initiatives (Pty) Ltd: Material Safety Data Sheet. Occupational Health and Safety Act, No:85 OF 1995

Section 2 – SPECIFICATION

	Specification	Typically
Appearance	Clear and odourless liquid	Clear and odourless liquid
Arsenic	3 ppm w/w maximum	Less than 2 ppm
Iron	20 ppm w/w maximum	Less than 15 ppm
Chlorides	20 ppm w/w maximum	Less than 10 ppm
Copper	5 ppm w/w maximum	Less than 1 ppm
Fluorides	10 ppm w/w maximum	Less than 3 ppm
Heavy metals	10 ppm w/w maximum	Less than 1 ppm
Manganese	0.6 ppm w/w maximum	Less than 0.4 ppm
Mercury	0.05 ppm w/w maximum	Less than 0.05 ppm
Nickel	5 ppm w/w maximum	Less than 2 ppm
Nitrates	Pass test	Pass test
Sulphates	100 ppm w/w maximum	50 ppm
Sulphides	0.1 ppm w/w maximum not detectable by odour	

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Section 3 – TESTING

The material is sampled and tested according to the most recent editions of the Laboratory Test Methods Procedure. The sample is tested to the most recent edition of the method specified.

This product is manufactured and tested at:
Chamdor and other traded acid facilities.

Section 4 – PACKING

Bulk road tanker or 1 cubic metre stainless steel and plastic flowbins,
210 litre HDPE blopacks and 25 litre HDPE polycans

Section 5 – DOCUMENTATION

This specification is based on: Information from the Chamdor Factory.

Section 6 – USES

Food Grade phosphoric acid.

Section 7 – REASON FOR REVISION

September 2013 – New template