

# ISO/TS 11365:2011-03 (E)

## Petroleum and related products - Guidance for the maintenance and use of triaryl phosphate ester turbine-control fluids

---

<b>Contents</b>		<b>Page</b>
Foreword .....		v
Introduction .....		vi
1	Scope .....	1
2	Normative references .....	1
3	Description of triaryl phosphate ester fluids .....	1
4	Health and safety precautions .....	2
4.1	Fluid Handling .....	2
4.2	Waste disposal .....	2
5	Fire hazards .....	3
5.1	General points .....	3
5.2	Methods of extinguishing fires .....	3
6	Compatibility of materials .....	3
6.1	Seals, paints and gaskets .....	3
6.2	Electrical wire insulation .....	4
7	Factors affecting service life .....	4
7.1	General .....	4
7.2	System design .....	4
7.3	System operating conditions .....	5
7.4	System maintenance .....	5
7.5	Fluid contamination .....	5
7.6	Fluid condition monitoring .....	6
7.7	Fluid purification .....	6
7.8	Fluid top up .....	6
8	Delivery and storage .....	7
9	Flushing the system .....	7
10	Fluid sampling .....	7
10.1	General .....	7
10.2	Containers .....	8
10.3	Sampling in service .....	8
10.4	Sampling of fresh fluid .....	9
10.5	Labelling .....	9
11	Recommended procedures for fluid monitoring .....	10
11.1	Appearance and colour .....	10
11.2	Water content .....	10
11.3	Total acid number (TAN) .....	11
11.4	Fluid cleanliness .....	11
11.5	Direct current resistivity (Volume resistivity) .....	12
11.6	Chlorine content .....	12
11.7	Mineral oil content .....	13

11.8	Viscosity .....	13
11.9	Air release .....	13
12	Examination of new fluid .....	14
12.1	General .....	14
12.2	Acceptance tests for new fluid .....	14
12.3	Acceptance requirements after installation of a new fluid charge .....	15
13	Examination of used fluid .....	15
13.1	General .....	15
13.2	Trend analysis .....	17
	Bibliography .....	18