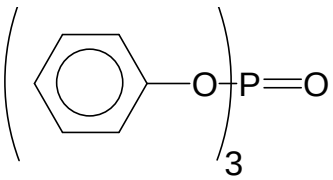
Human Health and Environmental Fact Sheet

Disclaimer: The information presented in this fact sheet was compiled from information from flame retardants manufacturers and public data sources. The authors cannot be held liable for factual errors. For latest information on substance testing, classification and labelling as well as regulatory status please contact the individual manufacturers and refer to their latest safety data sheet applicable in your country or region.

Product name	**Triphenyl phosphate**	
Synonyms	Disflamoll® TP; Phosphoric acid, triphenyl ester	
CAS no.	115-86-6	
Molecular Structure		
Mw	326,29 g/mole	
Mf	$C_{18}H_{15}0_4P$	
Physical form	White pellets	
Use	Flame retardant for PC / ABS blends and PF resins	
PBT/vPvB EVALUATION		
	Conclusion	**Comments**
Persistent or very Persistent	Yes No X	
Bioaccumulative or very bioaccumulative	Yes No X	
Ecotoxicity	Yes No X	
HUMAN HEALTH		
	Result	**Comments**
Acute toxcity		
Acute toxicity (LD_{50})	>2000 mg/kg	Oral (rats)
Eye irritation	Yes No X	(Rabbit)
Skin irritation	Yes No X	(Rabbit)
Sensitization / Potentially allergenic	Yes No X	
Potentially mutagenic	Yes No X	
Chronic toxicity		
Carcinogenicity (NOAEL)	no carcinogenic potential	Mouse (six week study)
Reprotoxicity (NOAEL)	No data	
Genotoxicity	Yes No X	Ames test
Endocrine disruption		

ENVIRONMENT		
Degradation		
Half life in water (fresh or marine)	19 days	$t_{1/2}$ at 25°C and pH = 7
Half life in sediment (fresh or marine)		
Half life in soil		
Readily biodegradable	Yes X No	83 – 94 % (28 d)
Inherently biodegradable	Yes No X	
Sewage treatment removal	No data	
Bioaccumulation		
BCF	110 - 144	Fish
Log K_{ow}	4,6	Experimental determined
Eco-toxicity		
Chronic toxicity for fish, NOEC	LC_{50} = 0,4 mg/l	96 h
Chronic toxicity for invertebrate, NOEC	EC_{50} = 1,0 mg/l	48 h
Reprotox, invertebrate, NOEC		
Chronic toxicity for algae, NOEC	0,25 – 2,5 mg/l	
Physical properties		
Vapour pressure at 25 °C	< 0,01 hPa at 20 °C	
Solubility in water at 25 °C	approx. 1 ppm	
Soil Adsorption coefficient, K_{oc}		
Henry's law constant (Pa-m^3/mole)		
Hydrolysis (half life) in water		
RISK PHRASES		
	Applies following Directive EC/67/548	Comments
R40	Yes No X	
R42	Yes No X	
R43	Yes No X	
R45	Yes No X	
R49	Yes No X	
R50	Yes X No	R 50 / 53
R53	Yes X No	R 50 / 53

More information:
www.phosphorous-chemicals.com (LANXESS website)