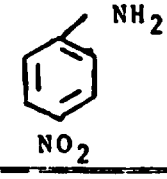
164603

Figure 17

PHYSICAL CONSTANTS DATA

SUBSTANCE	STRUCTURAL FORMULA
para-NITROANILINE	

COMPILED BY	Revised by:	DATE
R.A. Simone/3/56	M.A. Terpstra	1/70

NAME		SOURCE & DATE
Formula	$C_6H_6N_2O_2$	Langes 7th Ed.
Molecular Weight	138.12	"
Appearance	Yellow Crystals	"
Boiling Point at 760 mm	331.7°C.	"
Boiling Point at 100 mm	260°C.	JACS 1925 (2354)
Boiling Point at mm		
Boiling Point at mm		
Crystallizing Point		
Melting Point	148°C.	ICT Vol. 5, 1933
Solution Point		
Specific Gravity @ 14°C.	1.437	Langes, 7th Ed.
Specific Gravity @ 150°C.	1.20 lb.	Ref. 1
Pounds per Gal. @ 150°C	10.01	"
Coefficient of Expansion		
Refractive Index @ n_D^t		
Infra Red Spectrum *(Reference)*		
Ultra Violet Spectrum *(Reference)*		
Viscosity @ 150°C.	1.506 cp	"
Viscosity @ 170°C.	1.200 cp	"
Surface Tension		
Solubility in Water at 18.5	0.08/100 parts	ICT Vol. 3, 1933
Solubility in 95% Ethanol at 20°C.	5.8/100 parts	Langes 7th Ed.
Solubility in Ether at 20°C.	6.1/100 parts	"
Flash Point °F *(Method)* Open Cup	165°C.	WGK Anal. Lab
Fire Point °C	180°C.	WGK " "
Heat of Combustion		
Heat of Formation (225°C)	43.8K cal/cm Mole NCB	D.R.0361040 12/69 (calc)
Thermal Stability (cal./kg/min.) 0.2 cal/min/Kg	218°C	D.R.Job # 0561040 12/69
Latent Heat of Fusion	152 Joules/g (65.4 BTU/lb)	ICT Vol. 5, 1933
Latent Heat of Vap.		
Specific Heat Solid	1.15 at -160°C to MP	ICT Vol. 5, 1933
Critical Temperature		
Critical Pressure		
Dissociation Constant		
Stability	Decomposes at 260°C.	JACS 1925 (2354)
Other Constants: * Final Report No. 3618 (Org. Res.)		
Ref. 1) Tentative Process Description for PNA 12/29/71		Report Pg. 1656.
Toxicity *(Give Reference)*		Sax. I.N.P. 270. 290

TRADE SECRETS

NOTE: *These data should not be released outside of Monsanto Chemical Company. Use additional sheets if necessary.*