Legend
Open = O
Fully open = FO
Close = C
Stop = S
Running = R

Interlock	Cause	Detection	Setpoint	Effect: Alarm	Relevant Tag: Description	SOV-201: Toluene in propanol feed to P201	FIC-202: Liquid feed pump P201 to R201	SOV-202: Hydrogen feed to F201	FIC-207: Hydrogen purge	PIC-201: Gas fan F201 to R201	SOV-204: Reactor R201 gas bleed	SOV-203: Reactor R201 liquid bleed	FIC-209: Reactor R201 outlet	TIC-214: Electrical power H201	FCV-201: Cooling water to R201	TIC-212: Electrical power H202	PIC-207: Pressure reduction valve	FIC-208: Cooling water to H203	PIC-206: Vapour distillate S204	LIC-203: Liquid distillate from S204	TIC-207: Saturated steam to H204	LIC-202: Bottom stream from H204	SOV-205: Cooled steam from H204	SOV-206: Distillation column S203 gas bleed	SOV-207: Distillation column S203 liquid bleed	SOV-209: Reflux drum S204 gas bleed	SOV-208: Reflux drum S204 liquid bleed
1	Cooling water flowrate to reactor LL	Cooling water flowrate to reactor R201 extremely low, FSLL-204	1411.6 L/h	FZALL-204		C	S	C	O	S	O	O	C	S	O	S	C	O	O	O	C	C	O	O	O	O	O
1	Cooling water temperature HH	Cooling water temperature to reactor R201 extremely high, TSHH-205	36°C	TZAHH-205		C	S	C	O	S	O	O	C	S	O	S	C	O	O	O	C	C	O	O	O	O	O
2	Pump temperature HH	Pump P201 temperature extremely high, TSHH-206	64°C	TZAHH-206		C	S	C	O	S	C	C	O	S	O	S	O	O	O	O	O	O	O	C	C	C	C
2	Liquid flowrate to pump LL	Liquid flowrate to pump P201 extremely low, FSLL-205	89 L/h	FZALL-205		C	S	C	O	S	C	C	O	S	O	S	O	O	O	O	O	O	O	C	C	C	C
1	Reactor temperature HH	Reactor R201 temperature extremely high, TSHH-204	80°C	TZAHH-204		C	S	C	O	S	O	O	C	S	O	S	C	O	O	O	C	C	O	O	O	O	O
1	Reactor pressure HH	Reactor R201 pressure extremely high, PSHH-204	7 atm	PZAHH-204		C	S	C	O	S	O	O	C	S	O	S	C	O	O	O	C	C	O	O	O	O	O
3	Reactor level HH	Reactor R201 level extremely high, LSHH-201	10cm	LZAHH-201		C	S	C	O	S	C	O	O	S	O	S	O	O	O	O	O	O	O	C	C	C	C
4	Gas pressure to reactor HH	Gas pressure to reactor R201 extremely high, PSHH-205	7 atm	PZAHH-205		C	S	C	O	S	O	C	O	S	O	S	O	O	O	O	O	O	O	C	C	C	C
4	Gas flowrate to reactor HH	Gas flowrate to reactor R201 extremely high, FSHH-206	28456 L/h	FZAHH-206		C	S	C	O	S	O	C	O	S	O	S	O	O	O	O	O	O	O	C	C	C	C
1	Cooling water flowrate to condenser LL	Cooling water flowrate to condenser H203 extremely low, FSLL-210	2808 L/h	FZALL-210		C	S	C	O	S	O	O	C	S	O	S	C	O	O	O	C	C	O	O	O	O	O
1	Temperature in cooling water HH	Cooling water temperature to condenser H203 extremely high, TSHH-210	41°C	TZAHH-210		C	S	C	O	S	O	O	C	S	O	S	C	O	O	O	C	C	O	O	O	O	O
5	Level in reflux drum HH	Tank S204 level extremely high, LSHH 204	40% above designed level	LZAHH-204		O	R	O	O	R	C	C	O	R	O	O	O	O	O	FO	FO	FO	O	C	C	C	O
1	Pressure in distillation column HH	Distillation column S203 pressure extremely high, PSHH-208	3 atm	PZAHH-208		C	S	C	O	S	O	O	C	S	O	S	C	O	O	O	C	C	O	O	O	O	O
1	Temperature in distillation column HH	Distillation column S203 temperature extremely high, TSHH-209	212°C	TZAHH-209		C	S	C	O	S	O	O	C	S	O	S	C	O	O	O	C	C	O	O	O	O	O
6	Level in reboiler HH	Reboiler H204 level extremely high, LSHH-206	40% above designed level	LZAHH-206		O	R	O	O	R	C	C	O	R	O	O	O	O	O	O	FO	FO	O	O	C	C	O
7	Level in reboiler LL	Reboiler H204 level extremely low, LSLL-207	40% below designed level	LZALL-207		O	R	O	O	R	C	C	O	R	O	O	O	O	O	O	O	C	O	C	C	C	C