

TraceTek Chemical Response



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Group	Chemical	TT3000	TT5000	TT5001	TT7000	Notes
Acid	Acetic Acid 25% / CH ₃ CO-OH	Yes			Yes	
	Acetic acid 50%~99.4% / CH ₃ COOH	Yes			Yes	
	Ferric Chloride / FeCl ₃	Yes				
	Hydrochloric acid 9.5~37% / HCl	Yes			Yes	
	Hydrofluoric acid 49% / HF	Yes				
	Nitric acid 15~65%	Yes			Yes	
	Sulfuric acid 25~98% / H ₂ SO ₄	Yes			Yes	
Alcohol	Ethanol (95% in H ₂ O) / CH ₃ -CH ₂ -OH	Yes		60 min		
	Ethanol 100% / CH ₃ -CH ₂ -OH			60 min		<i>aka Ethyl Alcohol; fit for human consumption, not likely to be considered an environmental hazard</i>
	isopropanol	Yes		90 min		
	Isopropyl Alcohol (IPA) / (CH ₃) ₂ CHOH			90 min		
	Methanol (100%) / CH ₄ O			45 min		<i>a.k.a. wood spirit, wood alcohol, methyl alcohol</i>
	Methanol (up to 95% in H ₂ O)	Yes				<i>Up to 150 mm of TT3000 must be wetted for detection at 95% concentration. Sensitivity increases (less cable must be wet) for lower concentrations.</i>
Caustic	Sodium hydroxide (concentrated) / NaOH	Yes				<i>Also known as Caustic Soda</i>
	Sodium Hypochlorite / NaOCl	Yes				
Fuel	Diesel #1		60 min			
	Diesel #2		120 min			
	Fuel oil #6		*			<i>* no response @ 20 C, 41~64 hrs @ 40 C, 9~11 hrs @ 60 C</i>
	gasoline		9~20 min*	48 min		<i>* depends on grade and type of gasoline</i>
	gasoline vapor		3 days	5 days		
	Jet A		50 min	4~11 hrs		
	Jet B		Yes	Yes		
	JP-10		40 min			
	JP-4		15 min	<5 hrs		
	JP-5		70 min	<4 hrs		
	JP-7		25 min	10 hrs		

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Fuel	kerosene		47 min			
	Light Sweet Crude		3 hrs			
Hydraulic fluid	Automotive transmission fluid		4~8 hrs			Dextron II brand ~8.3 hrs Ford brand 4.1 hrs Response time may vary considerably by brand and type.
	brake fluid (DOT 3)			~30 hrs*		
	hydraulic oil		3~8 days*			* depends on type
Lubricant	SAE 20 motor oil		<1 day			
	SAE 30 motor oil		2 days			
Other	Aliphatic hydrocarbon (generic)		Varies			Fuels and oils are typically aliphatic (long chain) HC's, with some aromatics blended in. Length of chain translates into viscosity (longer = heavier) and hence into longer response times.
	Ammonium Hydroxide / NH4OH	Yes				must be in solution; will not detect dry form
	anisole	Yes	1.7 hrs	33 min		
	carbon disulfide			3 min		
	chloroform		12 min	10 min		
	dimethylformamide	Yes		2 hrs		
	Dowtherm A		10 hrs	90 min		Dowtherm A = diphenyl oxide / biphenyl blend Dowtherm J = alkylated aromatic
	ethyle acetate			20 min		
	ethylene glycol	Yes				
	Formaldehyde					See Formalin. Formaldehyde is a gas at room temperature. (Boiling Point -21C) When it is dissolved in water (remember the frogs in your biology class) it is called formalin. Usually the commercial concentration is 40% in H2O.
	Formalin	Yes				This is the typical liquid form of Formaldehyde (dissolved in H2O, typically 40% solution).
	Freon TF		22 min	42 min		
	gum turpentine		10 min	20 min		
	heptane		10 min	60 min		
	Hydrogen Peroxide / H2O2	Yes				
	mineral spirits		20 min			
	Mobiltherm 603		<9 hrs	<4 hrs		
	Naptha		15 min			
	PCB		<9 hrs			

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Other	Prestone antifreeze	Yes				
	Shell Diala X transformer oil		13 hrs			<i>Transformer oils vary considerably.</i>
	styrene monomer		20 min	8 min		
	tetrahydrothiophene		25 min	27 min		
Solvent	50/50 methylene chloride /methanol			< 10 min		<i>Blend of methylene chloride and methanol</i>
	acetone			10 min		
	Acetone (30% in H2O)	Yes				
	Acetone (50% in H2O)	Yes		80 min		
	butyl acetate			20 min		
	carbon tetrachloride		20 min	20 min		
	chlorobenzene		21 min	10 min		
	cyclohexane			32 min		
	dichloromethane		13 min	5 min		
	Ethyl benzene		Yes			
	Methyl Ethyle Ketone (MEK)			10 min		<i>Avoid exposure to TT1000 or TT3000</i>
	Methylene Chloride			~5 min		
	N-methyl pyrrolodone			60 min		<i>Will damage TT3000 / TT1000 (dissolves kynar)</i>
	toluene		18 min	10 min		
	trichloroethane			20 min		
	trichloroethylene			8 min		
	xylene		20 min	35 min		