

Chemical Warfare Agents – Awareness Information

AGENT	SYMBOL	HAZARD	SIGNS/SYMPTOMS	ONSET	PERSISTENCY	PHYS.PROP	ODOR
NERVE							
TABUN	GA	Inhalation	Runny nose, localized sweating, dimness of vision, pinpoint pupils, lightness in chest, difficulty breathing, drooling, cramping, frontal headaches, involuntary jerking and twitching, drowsiness, coma, convulsions, cessation of breathing, death.	Very rapid Vapor-secs Liquid-mins to hours	1-2 days if heavy concentratn	Colorless brn liq	None when pure; fruity
SARIN	GB	Inhalation			1-2 days will evap <= water	Colorless liquid	None when pure; fruity
SOMAN	GD	Inhalation			1-2 days – Moderate (Non)	Colorless liq/vap	
THICKEDED SOMAN	TGD	Inhalation		Over 1 week when thickened		Camphor when pure, fruity	
	GF	Inh/Abs/Ing		Very rapid		Colorless liquid	Swt, musty, peaches, shellac
VAGANT	VX	Inhal/Absor		Very rapid Death 15 min	1 week if heavy concentratn As volatile as motor oil. High	Amber oily liq.	None
VESICANTS							
SULFUR MUSTARD	H	Inh/Abs/Ing	Acts first as a cell irritant, later as a cell poison. Local conjunctivitis, reddening of skin, formation of blisters, inflammation of nose, throat, brachi, bronchi, & lung tissue	Delayed 4-6 hrs to 24 hrs	Days to weeks – Very high	Oily, colorless to amber liquid	Garlic, onion
DISTILLED MUSTARD	HD	Inh/Abs/Ing			Delayed-12h		Days to weeks – Very high
NITROGEN MUSTARD	HN1,3	Inh/Abs/Ing		Delayed-12h	High/Very high	Dark liquid	Fishy, musty
LEWISITE (ARSENICAL)	L	Inhal/Absor	Immediate pain with blisters forming later	Rapid	Days-High humid=rap hydrol	Dark liquid	Fruity-high concn/soapy-low
PHOSGENE OXIME (URTICANT/IRRITANT)	CX	Inhal/Absor	Immediate pain with blisters forming later	Immediate	2 hrs in soil, nonpersis-Low	Oily/colrls-brwn	Geraniums or none if pure
						Colorless prismatic crystals Solid, 95 F /liq.	Disagreeably penetrating and severely irritating.
BLOOD							
HYDROGEN CYANIDE	AC	Inhalation	Lips and skin-reddish color. People appear to be gasping for air, this may cause nausea and tearing. Convulsions pre-death. Effect like asphyxiation, but more sudden	Very rapid	1-2 days/extremely volatile	Colorless liq./gas	AC – Bitter/burnt almonds or peach kernel/CK – Tearing makes odor unnoticeable
CYANOGEN CHLORIDE	CK	Inhalation		Very rapid	Liq. Rapidly vaps & disperse	Colorless liq./gas	
ARSINE	SA	Inhalation		Delayed 2hrs to 11 days	Low	Colorless gas	SA – Mild garlic
CHOKING							
CHLORINE	CL	Inhalation	Tearing, dry throat, apparent choking, painful coughing, tightness in chest, head-ache, nausea, vomiting, dyspnea, 2-6 hrs until pulmonary edema. Severe pneumonia	Immediate if high concntr 3hrs if low	Short. Vapor may persist in low-lying or enclosed areas	Gas-norm temp	Bleach
PHOSGENE	CG	Inhalation				Colorless gas	Newly mown hay or freshly cut grass or green corn
DIPHOSGENE	DP	Inhalation		Death 6-8 min	Dissipates & is broken down fast in water, fog, rain	Colorless gas Rapid evap. liq	
RIOT CONTROL							
TEAR GAS	CS	Inhal/Absor	Immediate tearing, possibly involuntary closing of the eyes, choking. Effects can occur within seconds, but seldom persist more than a few minutes after exposure.	20-60 secs	Low - High	Colrls-sol/pdr/liq	Hair spray or pepper due to the variety of propellants
TEAR GAS	CR	Inhal/Absor		Very rapid	60 days= on porous material	Yel pwdr in sol.	
MACE	CN	Inhal/Absor		Immediate	Low/short	Solid powder	Apple Blossoms
PEPPER SPRAY	OC	Inhal/Absor		Immediate		(See “Notes”)	
CHLOROPICRIN	PS	Inhal/Absor	Throat irritation, coughing, and vomiting. Causes severe burns on the skin (lesions).	6 hrs outside	Approx 6 hrs in vegetn. fields	Colorless oily liq.	Stinging pungent.
VOMITING							
ADAMSITE	DA, DC, DX	Inhal/Absor	Like cold symptoms + violent, uncontrolled sneezing, coughing, nausea, and vomiting	30 seconds to 2 minutes	Low/Short	Solids vaporize when heated	DA-none DC-garlic/almonds
	DM	Inhalation			Short:aerosolized dissemin.		None, but irritating
INCAPACITATING	BZ/LSD	Inhal/Ingstn	Giddiness, confusion, stumbling, vomiting	Delay 1-4 hrs	High-soil, water & surfaces	White crystals	None