



SCape®

Chemical Performance



**NIOSH TESTING: SYSTEM LEVEL AGENT (SMARTMAN)**

TEST AGENT	CHALLENGE CONCENTRATION	SERVICE TIME
Mustard (HD)	Vapor — 50 mg/m <sup>3</sup>	>30
Mustard (HD)	Liquid — 0.43–0.86 ml	>30
Sarin (GB)	Vapor — 210 mg/m <sup>3</sup>	>30

**NIOSH TESTING: CHEMICAL TEST AGENTS (FILTER GAS LIFE)**

TEST AGENT	CHALLENGE CONCENTRATION, ppm <small>(64 L/min AT 25% AND 80% RH)</small>	ALLOWABLE BREAKTHROUGH, ppm	SERVICE TIME, min
Ammonia (NH <sub>3</sub> )	1,250	25	>30
Cyanogen Chloride (CK)	150	2	>30
Cyclohexane (C <sub>6</sub> H <sub>12</sub> )	1,300	10	>30
Formaldehyde (CH <sub>2</sub> O)	250	10	>30
Hydrogen Cyanide (HCN)	470	10	>30
Hydrogen Sulfide (H <sub>2</sub> S)	500/1,500*	30	>30
Nitrogen Dioxide (NO <sub>2</sub> )	100	1	>30
Phosgene (COCl <sub>2</sub> )	125	1.25	>30
Phosphine (PH <sub>3</sub> )	150	0.5	>30
Sulfur Dioxide (SO <sub>2</sub> )	750	5	>30

\*1,500 ppm supplemental testing conducted on SCape® CO/CBRN30 at AT labs

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## SUPPLEMENTAL CHEMICAL TESTING

TEST AGENT	CHALLENGE CONCENTRATION, ppm	ALLOWABLE BREAKTHROUGH, ppm	SERVICE TIME, min
Acetic Acid	1,000	5	>30
Acrolein*	100	1	>30
Acrylonitrile	1,000	10	>30
Benzene	1,000	1	>30
Boron Trifluoride	100	5	>30
Chlorine	1,000	5	>30
Chlorine Dioxide	1,000	2	>30
Fluorine	100	5	>30
Hexane	2,000	10	>30
Hydrogen Chloride	500	5	>30
Hydrogen Fluoride	70	3	>30
Nitric Acid	100	2	>30
Toluene	1,000	10	>30

\*Testing only conducted for SCape CO/CBRN<sup>30</sup> / Testing conducted by AJE Testing and Research, Boalsburg, PA and AT Labs, Livermore, CA

## SCAPE® CO/CBRN30 CARBON MONOXIDE (CO) PENETRATION PERFORMANCE

CO CHALLENGE CONCENTRATION	MAXIMUM ALLOWABLE PEAK EXCURSION (DETECTED CO LEVELS IN PARTS PER MILLION) AT 30 MINUTE IDENTIFIED SERVICE LIFE DURATION	RESULTING MAXIMUM PEAK EXCURSION (DETECTED CO LEVELS IN PPM)
3600 ppm	500 ppm	<200ppm
CO CHALLENGE CONCENTRATION	MAXIMUM ALLOWABLE CONCENTRATION TIME (CT) (PPM-MINUTES) FOR 30 MINUTE IDENTIFIED SERVICE LIFE DURATION**	RESULTING CONCENTRATION TIME (CT) (PPM-MINUTES) AT 30 MINUTES
3600 ppm	12,075	<2000



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