Texas Weather Modification Association

Innovation and ingenuity led developers to produce flares with results that are predictably accurate. After extensive testing in the laboratory and field, Texas Weather Modification relies on the RS#3 flare for its operations. These flares, produced in Texas, compare at the top with any flare manufactured world-wide, and their reliability is second to none.

Our flares can be used with a wing mount or ejectable mount, as shown, to accommodate your cloud seeding operations.

Through the efforts of Dr. Bill Finnegan, we are always striving for better and faster pyros. Dr. Finnegan served twenty eight years as the Navy's top pyro chemist, designing weather modification pyros. After retiring from the Navy, Dr. Finnegan headed the cloud chamber facilities at Colorado State University for seven years; since retiring from CSU, he has been active at the Desert Research Institute in Nevada.

Review the yield results below from experiments conducted by our team. For more information on this data or on ordering our flares, please contact us.

Yield Results (all at 1.5 gm m^{-3} LWC)

Pyro type	Temp (°C)	LWC ($g\ m^{-3}$)	Raw Yield (g^{-1} pyro)	Corr. Yield (g^{-1} pyro)	Corr. Yield (pyro s^{-1})	63% time (min)	90% time (min)
#3	-6.0	1.5	$1.49x10^{10}$	$1.77x10^{-9}$	$4.88x10^{11}$	N/A	N/A
#2	-6.0	1.5	$5.72x10^{9}$	$6.63x10^{-8}$	$1.93x10^{11}$	N/A	N/A
#1	-6.0	1.5	$9.26x10^{9}$	$1.03x10^{-9}$	$2.57x10^{11}$	N/A	N/A
#RS3	-6.0	1.5	$2.20x10^{11}$	$2.63x10^{-}$	$1.05x10^{13}$	0.96	7.61
#RS3	-6.0	1.5	$1.20x10^{11}$	$2.41x10^{-}$	$9.63x10^{12}$	0.96	7.61
#3, wet*	-6.0	1.5	$2.08x10^{10}$	$2.26x10^{-9}$	$5.73x10^{11}$	N/A	N/A
#2, wet*	-6.0	1.5	$1.20x10^{10}$	$1.30x10^{-9}$	$3.58x10^{11}$	N/A	N/A
#1, wet*	-6.0	1.5	$4.13x10^{9}$	$4.58x10^{-8}$	$1.24x10^{11}$	N/A	N/A
#RS3, wet*	-6.0	1.5	$1.28x10^{10}$	$1.53x10^{-9}$	$6.13x10^{11}$	1.3	8.84
#RS3, wet*	-6.0	1.5	$3.57x10^{10}$	$4.27x10^{-9}$	$1.71x10^{12}$	1.3	8.84
#3	-8.0	1.5	$4.57x10^{10}$	$6.71x10^{-9}$	$1.65x10^{12}$	9.8	22.56
#3	-8.0	1.5	$4.01x10^{11}$	$5.89x10^{-}$	$1.47x10^{13}$	9.8	22.56
#2	-8.0	1.5	$9.05x10^{10}$	$1.60x10^{-}$	$4.35x10^{12}$	16.11	37.09
#2	-8.0	1.5	$2.84x10^{11}$	$5.03x10^{-}$	$1.38x10^{13}$	16.11	37.09
#1	-8.0	1.5	$9.48x10^{11}$	$1.29x10^{-2}$	$3.41x10^{13}$	9.06	20.85
#1	-8.0	1.5	$6.77x10^{11}$	$9.20x10^{-}$	$2.30x10^{13}$	9.06	20.85
#RS3	-8.0	1.5	$1.57x10^{12}$	$1.65x10^{-2}$	$6.62x10^{13}$	0.74	1.71
#3	-10.0	1.5	$2.97x10^{12}$	$3.32x10^{-2}$	$8.19x10^{13}$	1.12	4.62
#3	-10.0	1.5	$1.75x10^{12}$	$1.95x10^{-2}$	$4.75x10^{13}$	1.12	4.62
#2	-10.0	1.5	$1.69x10^{12}$	$2.02x10^{-2}$	$5.59x10^{13}$	2.29	5.27
#2	-10.0	1.5	$1.08x10^{12}$	$1.29x10^{-2}$	$3.59x10^{13}$	2.29	5.27
#1	-10.0	1.5	$3.49x10^{12}$	$3.82x10^{-2}$	$9.56x10^{13}$	0.92	3.95
#1	-10.0	1.5	$4.26x10^{12}$	$4.67x10^{-2}$	$1.17x10^{14}$	0.92	3.95

N/A: insufficient data to determine
*: single dilution with air saturated at 30°C