

# The Acetylene alternative that's CLEANER ~ SAFER ~ CHEAPER

#### **CLEANER...**

- Calcium carbide, a principle ingredient of Acetylene, leaves toxic residues or that can contaminate the ground, water, and water tables.
- Igniting an acetylene torch creates smoke/soot that contaminates the workplace.

#### SAFER...

- Acetylene in cylinders is rated "unstable" and presents dangers in all phases of manufacturing.
- Acetone, a chemical condemned by the EPA, is used to 'stabilize' acetylene cylinders, presenting additional hazards and costs.

### CHEAPER...

- Costs of calcium carbide, the main ingredient of acetylene, increases annually. This represents increases to cost that will continue.
- In addition to the cheaper cost of Chemtane 2, are the savings related to waste disposal and cylinder usage.

## **Characteristics**

As a Gas	CHEMTANE	Acetylene	Propylene	Propane	Natural Gas
Flame Temperature in Oxygen - Degrees F	*5800+	5589	5295	4579	4600
Heating Values: BTU's per cu. ft.	2810	1470	2371	2510	1050
BTU's per pound	24,812	21,315	21,864	21,636	24,780
Cu. Ft. per pound of gas (or liquid)	8.83	14.5	8.89	8.62	23.6
Wt. Compared to air	1.5	0.91	1.47	1.52	0.55
Limits of Flammability in air - %	2.3-9.4	2.5-80.0	2.0-11.1	2.4-9.6	5.3-14.0
Toxicity	None	Low	Low	Low	Low
Reactivity	Low	Copper & Silver Alloys	Low	Low	Low
Backfire Tendency	Low	High	Slight	Low	Low
Max. Pressure	Cylinder	15 psi	Cylinder	Cylinder	Supply
Shock Sensitivity	Stable	Unstable	Stable	Stable	Stable
As a Liquid	CHEMTANE	Acetylene	Propylene	Propane	Natural Gas
Wt. Per Gallon-lbs.	4.24	-	4.35	4.23	-
Boiling Point - Degrees F	-43.6	-81	-47	-44	-250
At 70 Degrees F generates vapor pressure of	120 psi	-	130 psi	120 psi	-
Shock Sensitivity	Stable	Unstable	Stable	Stable	Stable

<sup>\*</sup>By Computer Image Testing & Comparison with other gases. Chemtane 2 - a trademark of Chemtane Energy, LLC.

**Contact our Gas Specialists for additional information!** 



