



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 |  | 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 |  | 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 |

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



Northwest Welding & Gases
www.nwweldingandgases.com