

Fuel Gas Regulators: Safety Update & Regulations

OSHA - Fuel Gas Regulators [OSHA 1910.253\(e\)\(6\)\(i\)](#) – Oxygen-fuel gas welding and cutting :

Pressure-reducing regulators shall be used only for the gas and pressures for which they are intended. The regulator inlet connections shall comply with Regulator Connection Standards, 1958, Compressed Gas Association.



Propylene Regulator



Acetylene Regulator

Propylene Vs Acetylene Regulators... What is the difference?

The two regulators are basically the same; however, the key difference is the delivery pressure. Acetylene is limited to only 15 psi because above 15 psi Acetylene becomes very unstable. Propylene regulators can deliver up to 40 psi. This becomes very noticeable when doing heating applications with rosebuds or heating heads. When using propylene heating heads, the Propylene pressure settings for the heads start at 15 to 20 psi and therefore a fuel gas regulator is required. Unfortunately when using Acetylene heating heads and because you can only withdraw 1/7 the capacity of an Acetylene cylinder, the tendency is to starve the heating head which becomes very hot as the flame is looking for more Acetylene and a flashback will occur. There are also many more advantages of using Propylene in the Oxy/Fuel process.

Also, the chemistry of propylene results in better heat transfer properties than acetylene which means you can increase productivity by producing faster cuts. When considering which fuel gas should be used, safety is at the top of the list. Propylene is generally considered safer because it is a more stable gas.

Regulators for Propylene.

Visit Gas Innovations Web-Site for more information about regulators in our equipment catalog Page 11. Click on Link to download the catalog:

<https://gasinnovations.com/wp-content/uploads/Gas-Innovations-Cutting-Heating-Equipment-Catalog-web-07.2015.pdf>

“The safety information included in the Gas Innovations Safety Bulletin references publications by **the National Fire Protection Agency (NFPA)**, **The Compressed Gas Association (CGA)** and **The Occupational Safety and Health Administration (OSHA)** Due to the volume of this information, Gas Innovations has not included all safety precautions in these bulletins, and suggests the user consults the aforementioned sources.”