What is claimed:

1. A process for producing an ozonide from an ethylenically unsaturated compound having between 8 and 30 carbon atoms and one or more unsaturated carbon to carbon double bonds, comprising the steps of

contacting an ozone enriched gas with an ethylenically unsaturated compound in an absorber having separate stages to form an ozonide; and

operating a safety system comprising:

monitoring an operating condition wherein the operating condition includes at least one of an operating temperature, a flow of ozone enriched gas, a pressure of ozone enriched gas, the flow of a liquid reactant, and the flow of a product in the absorber column and assigning a value to the monitored operating condition; ~~and wherein each operating condition is independently monitored at the top, at the bottom and at each stage of the absorber;~~

comparing the operating condition value with a threshold value for the at least one condition;

affecting the formation of the product in response to the operating condition reaching the threshold value, wherein the operating condition value is a temperature in the absorber column and the threshold value is a first threshold temperature between 100°F (37°C) and 140°F (60°C) ~~and wherein the first temperature threshold is monitored at the top, bottom, and at each stage of the absorber~~ and wherein the formation of product in response to the temperature reaching the first threshold value is affected by stopping the introduction of the ozone enriched gas to the absorber column and wherein the threshold value further includes a second threshold temperature that is greater than the first threshold temperature, and the second threshold temperature is between 110°F (43°C) and 150°F (66°C), and wherein the formation of the product in response to the temperature reaching the second threshold value is affected by direct addition of water into the absorber column.

2. The process of claim 1 wherein the operating condition value is a pressure of ozone enriched gas and the threshold value is an ozone enriched gas pressure threshold having a value between 0 psig and 15 psig; and wherein the operating