

# Sustainability Agenda at QAFCO

## Developing Our Products



<b>QAFCO Ammonia product specifications</b>	<b>QAFCO urea product specification</b>	<b>Product Specification UFC: 85</b>	<b>Melamine Process Technology</b>
<p>Fully Refrigerated Anhydrous Ammonia (Fertilizer Grade)</p> <p>Ammonia: 99.5% By Wt Min                      Nitrogen: 81.9% By Wt Min                      Moisture: 0.5% By Wt Max                      Oil Content: 10 PPM Max                      Impurities: Negligible                      Temperature: Minus 33 degrees Celsius or below.</p>	<p>Prilled Urea                      Nitrogen: 46 % Minimum                      Biuret: 1 % Maximum                      Moisture: 0.5 % Maximum                      Particle Size: 1-2.8 mm: 90 % Min.                      White, Prilled, Free Flowing and Free from harmful substances at time of loading.</p> <p>Granular Urea                      Nitrogen: 46 % Minimum                      Biuret: 1 % Maximum                      Moisture: 0.5 % Maximum                      Particle Size: 2-4mm: 90 % Min.                      White, Granular, Free Flowing and Free from harmful substances at time of loading.</p>	<p>Formaldehyde Concentrate: <math>60 \pm 0.5</math> % by Weight</p> <p>Urea: <math>25 \pm 0.5</math> % by Weight</p> <p>F / U Molar Ratio: <math>4.8 \pm 0.2</math></p> <p>Methanol Content: 0.21 % by Weight, Max.</p> <p>Formic Acid Content: 0.005% by Weight, Max.</p>	<p>Melamine is produced using Eurotecnica's High Pressure (HP) Melamine Technology. Urea is heated in a high pressure reactor, which is similar to a heat exchanger. Melamine is produced through a single-stage, liquid phase reaction.</p> <p>The process produces melamine by using the chemical's intrinsic properties without adding any other chemicals or catalysts. It does not use any recycle loops, compressors or fluid beds.</p> <p>High pressure in the reactor is maintained in the downstream equipment and in the off gases produced as a result of the reaction.</p> <p>By-products and co-products of the process are converted either into melamine or back into ammonia and carbon dioxide. The ammonia obtained is mixed with the off gases and returned to the urea plant. The process completely recovers all the products and thus causes zero discharge. It means no raw materials are wasted and no solid, liquid and gaseous products are released into the environment.</p>