

 <b>synerzine</b> <sup>TM</sup>	<b>Title:</b>	V520 Product Specification		
	<b>Document #:</b>	02-1006	<b>Rev #:</b>	000
	<b>Status:</b>	ACTIVE	<b>Date Issued:</b>	06/21/2013

**Product Identifiers**

Product Name:	2-KETOBUTYRIC ACID*
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Synerzine Item #	<b>V520</b>	CAS #	600-18-0	FEMA #	3723
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**Material Properties**

Molecular Formula	C4H6O3	Flash Point (°F, CC)	179
Molecular Weight	102.09	Boiling Point	80-82°C @ 16mmHg
Shelf Life (days)	730	Physical State	Solid

Solubility	Soluble in water; soluble in organic solvents.
Storage and Stability	Store in fully closed container in cool (~20°C) dry place. Stable for years, with slight development of discoloration.
Handling Precautions	Avoid contact of eyes and skin. In case of contact, flush copiously with water. Keep away from heat and flame.

**Specified Critical Limits**

Critical Property	Test Method	UOM	Lower Limit	Upper Limit
Color	Visual Analysis	None	White	Pale Yellow
Odor	Organoleptic Analysis	None	Sweet, brown, caramel, creamy	
Chemical Purity	Gas Chromatography	%	98.0%	100.0%
Density	Density Analysis	g/cm <sup>3</sup> @ 20°C	N/A	N/A
Refractive Index	Refractometric Analysis	nD20	N/A	N/A

**Notes**

\*Also named: 2-oxobutyric acid  
 Melting Point: 30-34°C  
 As a liquid color range: Colorless to Pale Yellow

*This specification was generated electronically, and is therefore unsigned.*