| TM        | Title:      | V520 Product Specification |              |            |  |
|-----------|-------------|----------------------------|--------------|------------|--|
| synerzine | Document #: | 02-1006                    | Rev #:       | 001        |  |
|           | Status:     | ACTIVE                     | Date Issued: | 07/12/2021 |  |

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| Product Name: 2-KETOBUTYRIC ACID* |
|-----------------------------------|
|-----------------------------------|

| Synerzine Item # | V520 |  | CAS# | 600-18-0 |  | FEMA# | 3723 |
|------------------|------|--|------|----------|--|-------|------|
|------------------|------|--|------|----------|--|-------|------|

## **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.  |
| Handling Precautions  | Avoid contact of eyes and skin. In case of contact, flush copiously with water.<br>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, cre |             |
| Chemical Purity   | Gas Chromatography       | %    | 95.0%                      | 100.0%      |
| Density           | Density Density Analysis |      | N/A                        | N/A         |
|                   |                          | nD20 | N/A                        | N/A         |

## Notes

\*Also named: 2-oxobutyric acid.

As a liquid color range: Colorless to Pale Yellow

This specification was generated electronically, and is therefore unsigned.

**Synerzine** 

**Quality Control Dept.** Date Printed: 7/12/2021