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|-----------------------------|---------------|
| Version | 00 |
| Molecular weight | 132.07 |
| Quality Test / Release Date | 07/05/2018 |
| Molecular Formula | C4 H4 O5 |
| CAS No | 328-42-7 |
| Linear Formula | HOOCCH2COCOOH |
| Flash Point (°C) | |

Certificate of Analysis

This is to certify that units of the above mentioned lot number were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Acros Organics expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Unless otherwise stated, these products are not intended for dialysis, parenteral, or injectable use without further processing. The following are the actual analytical results obtained:

| | | |
|------------------------------|----------------------|---|
| Catalog Number | 41660 | Quality Test / Release Date 07/05/2018 |
| Lot Number | A0398272 | |
| Description | Oxalacetic acid, 98% | |
| Country of Origin | HUNGARY | |
| Declaration of Origin | synthetic | |

| | |
|------------------------|--|
| BSE/TSE comment | |
|------------------------|--|

| | |
|-------------------------|--|
| Chemical Comment | |
|-------------------------|--|

| Result name | Units | Specifications | Test Value |
|---------------------|-------|--------------------|--------------------|
| Appearance (Color) | | White to off-white | off-white |
| Appearance (Form) | | Crystalline powder | Crystalline powder |
| Infrared spectrum | | Authentic | Authentic |
| Titration with NaOH | | >=97.5 % | 99.0 % |



A handwritten signature in black ink, which appears to read "L. Van den Broek".

L. Van den Broek, QA Manager

Issued: 07-06-2018

Acros Organics
 ENA23, zone1, nr 1350, Janssen Pharmaceuticaaan 3a, B-2440 Geel, Belgium
 Tel +32 14/57.52.11 - Fax +32 14/59.34.34 Internet: <http://www.acros.com>
 1 Regent Lane, Fair Lawn, NJ 07410, USA Fax 201-796-1329