## Gojira Fine Chemicals, LLC

Quality Products \& Services Meeting Customer Needs
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## Specification

## Lactose Monohydrate USP-NF/EP/JP

Catalog Number:
CAS Number:
Molecular Formula:
Molecular Weight:
Storage:
Retest Period:

LM1001
64044-51-5
$\mathrm{C}_{12} \mathrm{H}_{22} \mathrm{O}_{11} \cdot \mathrm{H}_{2} \mathrm{O}$
360.32
$15^{\circ} \mathrm{C}-30^{\circ} \mathrm{C}$
Three years from the date of manufacture

| Test | Specification |
| :---: | :---: |
| Appearance | White powder |
| Identification A (FTIR) ${ }^{1}$ | To match reference spectra |
| Identification B (TLC) ${ }^{1}$ | To meet requirements |
| Specific Rotation ${ }^{1}$ | $+54.4{ }^{\circ}$ to $+55.9^{\circ}$ |
| Clarity \& Color of Solution ${ }^{1}$ | Clear \& nearly colorless |
| Absorbance (400nm) ${ }^{1}$ | $\leq 0.04$ |
| Appearance of Solution ${ }^{2}$ | To meet requirements |
| $\begin{aligned} & \text { PLAI Absorbance }{ }^{1} \\ & 210-220 \mathrm{~nm} \\ & 270-300 \mathrm{~nm} \\ & \hline \end{aligned}$ | $\begin{aligned} & \leq 0.25 \\ & \leq 0.07 \end{aligned}$ |
| Acidity/Alkalinity ${ }^{1}$ | $\leq 0.4 \mathrm{~mL}$ |
| Acidity/Alkalinity Color ${ }^{1}$ | Solution is colorless |
| Moisture (LOD) ${ }^{1}$ | $\leq 0.5 \%$ |
| Water Determination ${ }^{1}$ | 4.5-5.5\% |
| Residue on Ignition ${ }^{1}$ | $\leq 0.1 \%$ |
| Heavy Metals ${ }^{1}$ | To meet requirements |
| Heavy Metals ${ }^{3}$ | To meet requirements |
| Particle Size \#100 (non-cumulative) ${ }^{1}$ \#200 (non-cumulative) ${ }^{1}$ \#80 (non-cumulative) ${ }^{1}$ | $\begin{aligned} & 0.0-10.0 \% \\ & 10.0-30.0 \% \\ & 0.0-5.0 \% \end{aligned}$ |
| Total Aerobic Count ${ }^{1}$ | $\leq 100 \mathrm{cfu} / \mathrm{g}$ |
| Total Mold \& Yeast ${ }^{1}$ | $\leq 50 \mathrm{cfu} / \mathrm{g}$ |
| E. coli ${ }^{1}$ | Negative |
| Salmonella ${ }^{1}$ | Negative |
| ${ }^{1}$ Meets USP-NF specifications, ${ }^{2}$ Meets EP specification, ${ }^{3}$ Meets JP specification. |  |

## Approved:

Date: March 15, 2018

John Grubb, PhD
Gojira Fine Chemicals

For research or further manufacturing. Not for drug, clinical or a food use in humans or animals.

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