Valeric Acid Pro
Valeric Acid with 20% renewable content

Product Description
Valeric Acid Pro is a Pro-Environment Carboxylic Acid ready to be dropped into existing formulations. Based on mass balance concept, it is a partly renewable Valeric Acid designed to reduce the carbon footprint and supports sustainable sourcing of renewable raw material. Valeric Acid Pro is third party certified according to the ISCC system which means we have both traceability back to the country of origin ensuring the biomass was sourced in a sustainable way as well as a certified mass balance and greenhouse gas (GHG) calculation.

Perstorp offers Valeric Acid Pro based on 20% renewable resources.

Segment Applications
Aviation lubricants, Refrigeration lubricants and other esters for synthetic lubricants.

Delivery Forms
Liquid in bulk containers.

Valeric Acid Pro is a next generation high purity carboxylic acid designed to reduce the carbon footprint and supports sustainable sourcing of renewable raw material. We want Valeric Acid Pro to be a Pro-Environment Acid that benefits us all.
Valeric Acid Pro
Valeric Acid with 20% renewable content

Sales Specification

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Unit</th>
<th>Specification</th>
<th>Analytical Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Valeric Acid (water free)</td>
<td>%</td>
<td>Min. 98.5</td>
<td>ISO 2718</td>
</tr>
<tr>
<td>Aldehydes</td>
<td>%</td>
<td>Max. 0.3</td>
<td>ISO 2718</td>
</tr>
<tr>
<td>Water</td>
<td>wt %</td>
<td>Max. 0.1</td>
<td>ASTM E 1064</td>
</tr>
<tr>
<td>Color</td>
<td>Hazen</td>
<td>Max. 25</td>
<td>ISO 2211 / ASTM D1209</td>
</tr>
</tbody>
</table>

Pro-Environment Information
Renewable content is 20% based on mass balance concept.
Calculated GHG values:
Cradle to Gate: 1.4 kg CO2 eq/kg Valeric Acid Pro
Cradle to Grave: 3.1 kg CO2 eq/kg Valeric Acid Pro
Cradle to Grave is calculated as Cradle to Perstorp gate + end of life assuming all carbon is converted to CO2.
ISCC PLUS certified product.

Handling and Storage
Handle as close as possible to strictly controlled conditions (meaning no exposure). Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Do not smoke. Vapors may form explosive mixture with air.

For safe storage, keep containers tightly closed in a cool, well-ventilated place. Store segregated from: Acids, Bases.

CAS No.: 109-52-4
HS No.: 2915 60
EC (EINECS) No.: 203-677-2

Effective date: August 19, 2020

Users are advised to make their own independent determination of the suitability of the product for the intended use. Except for what is stated in Perstorp’s general conditions of sale or separately in a written contract with Perstorp, no information provided in this data sheet constitutes a warranty (express or implied) by Perstorp, including, without limitation, any implied warranty of merchantability or fitness for a particular purpose.