

TECHNICAL DATA SHEET

<u>SALES SPECIFICATION</u>			<u>NOTES</u>																																																																											
<p>Top!Blue AdBlue® conforms to ISO22241</p> <table border="1"> <thead> <tr> <th>Test Item</th><th>Unit</th><th>Limits</th></tr> </thead> <tbody> <tr> <td>Urea content</td><td>weight-%</td><td>31.8 – 33.2</td></tr> <tr> <td>pH-value (10% HS-solution)</td><td></td><td>10 max.</td></tr> <tr> <td>Alkalinity as NH₃</td><td>%</td><td>0.2 max.</td></tr> <tr> <td>Carbonate as CO₂</td><td>%</td><td>0.2 max.</td></tr> <tr> <td>Biuret</td><td>%</td><td>0.3 max.</td></tr> <tr> <td>Formaldehyde</td><td>mg/kg</td><td>5 max.</td></tr> <tr> <td>Insolubles</td><td>mg/kg</td><td>20 max.</td></tr> <tr> <td>Phosphate (PO₄)</td><td>mg/kg</td><td>0.5 max.</td></tr> <tr> <td>Calcium</td><td>mg/kg</td><td>0.5 max.</td></tr> <tr> <td>Iron</td><td>mg/kg</td><td>0.5 max.</td></tr> <tr> <td>Copper</td><td>mg/kg</td><td>0.2 max.</td></tr> <tr> <td>Zink</td><td>mg/kg</td><td>0.2 max.</td></tr> <tr> <td>Chromium</td><td>mg/kg</td><td>0.2 max.</td></tr> <tr> <td>Nickel</td><td>mg/kg</td><td>0.2 max.</td></tr> <tr> <td>Aluminium</td><td>mg/kg</td><td>0.5 max.</td></tr> <tr> <td>Magnesium</td><td>mg/kg</td><td>0.5 max.</td></tr> <tr> <td>Sodium</td><td>mg/kg</td><td>0.5 max.</td></tr> <tr> <td>Potassium</td><td>mg/kg</td><td>0.5 max.</td></tr> <tr> <td>Density at 20°C</td><td>g/cm³</td><td>1.0870 – 1.0930</td></tr> <tr> <td>Refractive index at 20°C</td><td></td><td>1.3817 – 1.3840</td></tr> </tbody> </table> <ul style="list-style-type: none"> Top Blue Limited, a fully controlled subsidiary of Sichuan Meifeng Chemical Industry Co., Ltd, operating under AdBlue VDA license no. 0002246 			Test Item	Unit	Limits	Urea content	weight-%	31.8 – 33.2	pH-value (10% HS-solution)		10 max.	Alkalinity as NH ₃	%	0.2 max.	Carbonate as CO ₂	%	0.2 max.	Biuret	%	0.3 max.	Formaldehyde	mg/kg	5 max.	Insolubles	mg/kg	20 max.	Phosphate (PO ₄)	mg/kg	0.5 max.	Calcium	mg/kg	0.5 max.	Iron	mg/kg	0.5 max.	Copper	mg/kg	0.2 max.	Zink	mg/kg	0.2 max.	Chromium	mg/kg	0.2 max.	Nickel	mg/kg	0.2 max.	Aluminium	mg/kg	0.5 max.	Magnesium	mg/kg	0.5 max.	Sodium	mg/kg	0.5 max.	Potassium	mg/kg	0.5 max.	Density at 20°C	g/cm ³	1.0870 – 1.0930	Refractive index at 20°C		1.3817 – 1.3840	<p>1. STORAGE</p> <p>To maintain the product quality it is recommended that AdBlue is stored below 25°C and out of direct sunlight.</p> <p>2. SHELF LIFE (in accordance with ISO 22241-3)</p> <table border="1"> <thead> <tr> <th>Constant storage temp. °C</th><th>Minimum shelf life</th></tr> </thead> <tbody> <tr> <td>≤10</td><td>36 months</td></tr> <tr> <td>≤25</td><td>18 months</td></tr> <tr> <td>≤30</td><td>12 months</td></tr> <tr> <td>≤35</td><td>6 months</td></tr> <tr> <td>≥35</td><td>Significant decomposition test before use</td></tr> </tbody> </table> <p>3. FREEZING</p> <p>AdBlue will begin to freeze at -11.5°C; this does not affect the product quality or strength. The liquid phase of a partially frozen solution will still be at the required concentration and may continue to be used. The remaining frozen portion may be used after allowing to thaw.</p> <p>4. EXCLUSION OF LIABILITY</p> <p>Information contained in this document is accurate to the best of knowledge and beliefs of Top Blue Limited. Any information or advice obtained from Top Blue Limited is given in good faith. However, it remains at all times the responsibility of the customer to the end user that our products are suitable for the particular purpose intended. Top Blue Limited accepts no liability (except as otherwise provided by law) arising out of the use of information supplied, the application, adaptation or processing of the products described herein.</p> <p>5. HEALTH AND SAFETY</p> <p>A Material Safety Data Sheet has been issued containing information on the potential hazards (health, fire, reactivity and environmental) and how to work safely with this product. This must be consulted before handling, storage and use. Please contact us to obtain one.</p>	Constant storage temp. °C	Minimum shelf life	≤10	36 months	≤25	18 months	≤30	12 months	≤35	6 months	≥35	Significant decomposition test before use
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