

Chevron Phillips Chemical Company **Issued Sales Specification**

Name of Product T-BUTYL MERCAPTAN

Revision Date

3/28/2012

Chevron Phillips Chemical Company LP 10001 Six Pines Drive

The Woodlands, TX 77380 800-858-4327

Technical Service: 832-813-4862

Chevron Phillips Chemical International N.V. Chevron Phillips Chemicals Asia PTE Ltd. Airport Plaza - Stockholm Building Leonardo Da Vincilaan 19 1831 Diegem, Belgium +32 2 689 1211

1 Harbour Front Avenue #09-01 Keppel Bay Tower Singapore, 098632 +65 6517 3100

| Took | Linito | Mathad | Tunical | Minimum | Maximum | Ovalitativa | Note |
|--|--------|-----------------|---|---------|---------|----------------------------------|------|
| Test | Units | Method | Typical | Minimum | Maximum | Qualitative | Note |
| Appearance | | Visual | Clear with no particulate matter | | | Clear with no particulate matter | |
| Distillation - 95% | CEL | ASTM D-1078 | 64.1 | | 68 | | |
| Distillation - IBP | CEL | ASTM D-1078 | 63.5 | 60 | | | |
| Ethyl Mercaptan | WT% | Chromatography | | | 0.05 | | |
| Half Doctor Test | | ASTM D-235 | Pass | | | Pass | |
| t-Butyl Mercaptan | WT% | Chromatography | 99.8 | 99.0 | | | |
| Other | Units | Method | Typical | Minimum | Maximum | Qualitative | Note |
| Coefficient of Expansion, 1/deg C (Literature Value) | | | 0.00103 | | | | |
| Density @ 60 F | LB/GAL | ASTM D-4052 | 6.71 | | | | |
| Flash Point, FAH (Estimated) | | | -15 | | | | |
| Freezing Point | FAH | ASTM D-5972 | 34 | | | | |
| Mercaptan Sulfur | WT% | CPChem SLP-1204 | 35.5 | | | | |
| Specific Gravity 60/60F | | ASTM D-4052 | 0.806 | | | | |
| Vapor Pressure @ 100.4 F, PSI | PSI | ASTM D-5191 | 5.9 | | | | |
| Viscosity @ 68F, cP (Literature Value) | | | 0.638 | | | | |

Printed Versions of this document are uncontrolled

Notice: Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user's specific application. Chevron Phillips Chemical Company LP does not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing in connection with the use of the information contained herein or the product itself. The user expressly assumes all risk and liability, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Further, information contained herein is given without reference to any intellectual property issues, as well as federal, state or local laws which may be encountered in the use thereof. Such questions should be investigated by the user. Additional information on the health and safety aspects of our product is listed in the SDS of the product.