Stepan Company Antimicrobial End-Use Formulations

Stepan offers a variety of U.S. EPA FIFRA-registered end-use formulations with broad claims. Noted below is a listing of our EUPs by family type. The formulation numbers highlighted in red are disinfectants with sanitizer claims. For a complete listing of all approved applications, use sites, and pathogens, please consult the product label for each EUP. Please contact your Stepan Sales Representative or Stepan U.S. Technical Service Department at 1-800-745-7837 or techserv@stepan.com for additional information.

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<td>No. 104, 105</td>
<td>• MUP: BTC® 2125M</td>
<td>• MUP: BTC® 2125M</td>
<td>No. 166-169*</td>
<td>• MUP: BTC® 885</td>
<td>885-NDC Series</td>
<td>• No. 214, 215, 216*</td>
<td>• MUP: BTC® 1210</td>
<td>No. 79-81*, 94-97*</td>
<td>• MUP: BTC® 2125M</td>
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<td>• MUP: BTC® 2125M-P40</td>
<td>No. 173</td>
<td>• MUP: BTC® 885</td>
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**Stepan’s Antimicrobial Product Development & Regulatory Efforts**

**Historic**
- Only quaternary-based (non-alcohol) disinfectant effective against Tuberculosis (1839-83), Stepan Patent No. 5,444,094
- Quaternary-based disinfectant wipes and food contact surface wipes (1839-174 and 190)
- Two-minute kill quaternary-based disinfectant with 99.9% bacteria reduced in 5 seconds Sanitizer claim (1839-220)
- Quaternary-based disinfectant with hydrogen peroxide (1839-224)
- Successfully raised ADEBAC quaternary tolerance to 400 ppm for food contact surface sanitization
- Powdered food contact surface sanitizer for use in public eating establishments, dairies and food processing plants (1839-142)
- First to have disinfectants with claims against Community Associated Methicillin Resistant *Staphylococcus aureus* (CA-MRSA) and *Klebsiella pneumoniae* New Delhi Metallo-Beta Lactamase (NDM-1) Carbapenem Resistant (CRE).

CA-MRSA: 1839-83, 166, 167, 168, 169, 211, 212, 213, 224, and 225
NDM-1: 1839-95, 220, and 190

**Recent**
- New claims against blood borne pathogens (Hepatitis B & C Virus, Human Immunodeficiency Virus Type 1 (HIV-1) ) added to Stepan Disinfectant Wipe (1839-190) and SC-RTU Disinfectant Cleaner (1839-220)
- *Klebsiella pneumoniae* New Delhi Metallo-Beta Lactamase (NDM-1) Carbapenem Resistant (CRE) antibiotic resistance claim added to SC-RTU (1839-220) and will be added to NP 4.5 (1839-95) and Stepan Disinfectant Wipe (1839-190)
- New disinfectant claims to be submitted to the U.S. EPA for 1839-83 and 95 against antibiotic resistant ESKAPE pathogens (*Enterococcus faecium*, *Staphylococcus aureus*, *Klebsiella pneumoniae*, *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, and *Enterobacter* species)
- Wipe formulation modified to allow use of higher natural content (wood pulp) substrates for Stepan Disinfectant Wipe (1839-190)
- Member of EPAs OECD Protocol company collaborative for evaluating new Bacteria and TB quantitative carrier disinfectant tests

**Legend**
- **MUP** – Manufacturing-Use Product. This is the active ingredient used in an end-use antimicrobial product, which Stepan markets and sells under the BTC®, SO/SAN®, and ONYXIDE® trade names.
- **EUP** – End-Use Product. This is the EPA-registered end-use formulation developed by Stepan and available through sublicensing. Stepan does not manufacture the EUP. An approved formulator, under sublicensing, would manufacture the final product. This is also referred to as End Product (EP).
- **U.S. EPA Registration No.** – This is the number that uniquely identifies an antimicrobial end-use formulation (as shown on Page 1). Stepan’s company number is 1839.

**U.S. EPA Registration No.**

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<th>Formulation</th>
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