

Montreal Protocol



Process Agents Task Force

Case Study #22

Use of CTC in manufacture of phenyl glycine

May 2001

Notice

The United Nations Environment Program (UNEP), the UNEP Process Agents Task Force chairs and members and the companies and organisations that employ UNEP Process Agents Task Force chairs and members do not endorse the performance, worker safety, or environmental acceptability of any of the technical options discussed. Every industrial operation requires consideration of worker safety and proper disposal of contaminants and waste products. Moreover, as work continues -- including additional toxicity testing and evaluation -- more information on health, environmental and safety effects of alternatives and replacements will become available for use in selecting among the options discussed in this document.

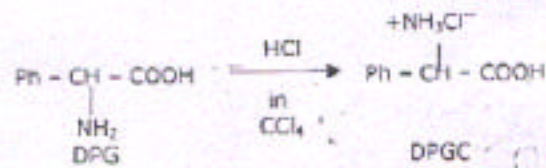
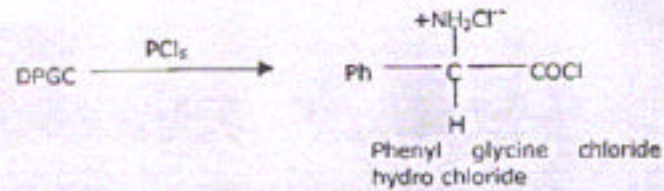
UNEP and the UNEP Process Agents Task Force chairs and members, in furnishing or distributing this information, do not make any warranty or representation, either express or implied, with respect to the accuracy, completeness, or utility; nor does UNEP or members and chairs of the UNEP Process Agents Task Force assume liability of any kind whatsoever resulting from the use, reliance upon, any information, material, or procedure contained herein, including but not limited to any claims regarding health, safety, environmental effects or fate, efficacy, or performance, made by the source of information.

Mention of any company, association, or product in this document is for information purposes only and does not constitute a recommendation of any such company, association, or product, either express or implied by UNEP, the UNEP Process Agents Task Force chairs or members and the companies or organisations that employ the UNEP Process Agents Task Force chairs and members.

**This Report of the
Process Agents Task Force
is available on the Internet
in Portable Document Format (PDF)
at:
<http://www.teap.org>**

Process of Phenyl Glycine hydrochloride followed by Alpha Drugs beforeStep 1

D(-) α - Phenyl glycine (DPG) is hydrochlorinated with dry HCl in CTC solution to give D(-) α - Phenyl glycine chloride (DPGC)

Step 2

Separated by Centrifugation and washing with CTC + EDC then dried at 30-35°C.

In the project CTC has been replaced by CHCl_3

Thanking you,