



ENVIRONMENTAL ASSESSMENT FOR TEREPHTHALOYL DICHLORIDE

1. July 10, 2000
2. Huntsman Polyurethanes
3. 286 Mantua Grove Road, West Deptford, NJ 08066-1732
4. Description of the Proposed Action

It is proposed that terephthaloyl dichloride (TDPC) be approved for use as an indirect food additive through the premanufacture process utilizing the FDA Form 3480 "Notification for New Use of a Food Contact Substance." Terephthaloyl dichloride (TDPC) is used to acidify or stabilize diphenylmethane-4,4'-diisocyanate (MDI) to prevent gellation problems during prepolymer reactions. The prepolymers will then be used to produce polyurethanes at Huntsman facilities for use in adhesives as described under 21CFR §175.105. The adhesive thickness is 5 mg/m² and the concentration of TDPC, as an impurity in the adhesive, will not exceed 9 ppm.

TDPC is manufactured by _____ a Fisher Scientific Worldwide Company (www.fisher.co.uk/products/acros/intro.htm). _____ was produced from the merging of _____ and _____ is responsible for all effluent and airborne discharges from this facility. The types of environments present at and adjacent to this location probably include water sources. Liquid and solid production wastes and airborne discharges are regulated under local or regulations.

TDPC will be added to diphenylmethane-4,4'-diisocyanate (MDI) at Rubicon, Inc. in _____, where the polyurethanes also will be manufactured. This company is responsible for all effluent and airborne discharges from this facility. This facility has been operational since 1972, producing polyurethanes for Huntsman Polyurethanes. This site is a secure production facility situated on the edge of a small/medium town in a largely industrial area. The types of environments present at and adjacent to this location include water sources. Liquid production wastes are regulated under NPDES Permit #0000892. Airborne discharges are regulated under Permit #814(M-1) for the Aniline Operation, Permit #2261 (M-1) for the Aniline Boiler and Permit #2391 for MDI. There will be no solid by-products formed from production. The polyurethanes will then be incorporated into adhesives (with TDPC as an impurity at levels not to exceed 9 ppm) at adhesive manufacturing plants. These adhesives will then be incorporated into articles intended for use in packaging, transporting, or holding food (as described under 21CFR §175.105) at food packaging plants.

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5. Identification of the Chemical Substance

a. Chemical Name

Terephthaloyl dichloride (TDPC)

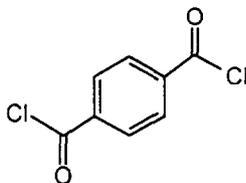
b. Experimental or Common Name(s)

TCI; 1,4-benzenedicarbonyl dichloride; terephthaloyl chloride; 1,4-benzenedicarbonyl chloride; benzene-1,4-dicarboxylic acid dichloride; p-phenylenedicarbonyl dichloride, p-phthaloyl chloride; p-phthaloyl dichloride; terephthalic acid chloride; terephthalic acid dichloride; terephthalic dichloride.

c. CAS Registry Number and Properties

CAS No.	100-20-9; also: 106158-15-0 & 108454-76-8
Molecular Formula	C ₈ H ₄ Cl ₂ O ₂
Molecular Weight	203.02
Purity	99+%
Physical Description	White solid, flakes

Structural Formula:



6. Environmental Consequences of the Proposed Action

a. Production of the Food Contact Substance

The substance is manufactured by

a Fisher Scientific Worldwide Company.

TO THE BEST OF OUR KNOWLEDGE, NO EXTRAORDINARY CIRCUMSTANCES APPLY TO THE MANUFACTURE OF THE FOOD CONTACT SUBSTANCE.

b. Use and Disposal of the Food Contact Substance

This action involves TDPC which is a minor component of finished food-packaging materials present at 0.09% (9 ppm) by weight of the finished packaging material and which remains with the packaging through its use by consumers. The

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principal routes of environmental introduction of TDPC follow from the disposal of food packaging material containing it in municipal solid waste combustors or in landfills. These disposal routes are governed by the Environmental Protection Agency's (EPA) regulations in 40 CFR Part 60 (for combustors) and Part 258 (for landfills). Based on the low levels of the food contact substance in the packaging material, the introduction of combustion products or introductions at landfill sites are not environmentally significant. Therefore, we do not expect that any limited increase in environmental introductions resulting from the proposed action will threaten a violation of EPA's regulations governing combustors and landfills or have any other adverse environmental effect.

7. Alternatives to the Proposed Action

Alternatives to the proposed action need not be considered because no potential adverse effects have been identified.

8. List of Preparers

Susan D. Phillips, Senior Associate Scientist at Environ. M.S. in Pharmacology and Toxicology. Consultant in chemical, toxicological and pharmacological sciences.

9. Certification

The undersigned official certifies that the information presented is true, accurate and complete to the best of the knowledge of Huntsman Polyurethanes.

11 July 2000
Date



Signature of Responsible Official

Patrick F. O'Brien SR. Regulatory Specialist
Name and Title of Responsible Official (Printed)

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