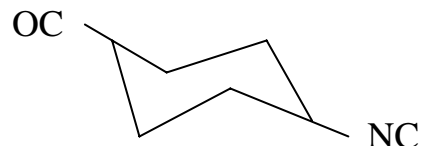




DuPont Chemical Solutions Enterprise

## Trans-Cyclohexanediisocyanate (CHDI)



### Product Description

DuPont CHDI is a specialty isocyanate which offers outstanding dynamic properties and high temperature stability in cast and thermoplastic elastomers. Due to its small size and molecular symmetry, this aliphatic diisocyanate provides a compact hard segment in polyurethane formulations.

CHDI-based elastomers show:

- Superior high temperature dynamic properties
- Light and color stability
- Excellent solvent and abrasion resistance
- Hydrolytic stability

In addition to CHDI, DuPont's specialty isocyanates also include DuPont Para-Phenylenediisocyanate (PPDI).

Contact DuPont for information on this and other specialty products.

### Uses

CHDI is especially suitable for applications in these demanding environments:

- Hot moist environments
- Oily environments
- Tear- and abrasion-prone applications

DuPont CHDI is a specialty material, used primarily in demanding applications including medical elastomers, where dynamic performance and biological stability are required. Other uses may include seals, belts, flexible tubing, coatings and films, serving markets in automotive, mining, industrial and medical devices.

### Product Specifications

<u>Property, units</u>	<u>Specification</u>	<u>Typical Analysis</u>
Purity, wt. %	99.0 min	99.8
cis-CHDI, %	0.5 max.	
Chloromonoisocyanate, ppm	1000 max.	< 50
Residual solvent, ppm	300 max.	<100
p-Phenylenediisocyanate, ppm	50 max.	< 50
Acidity, meq/g	0.0001 max.	
Toluene insolubles, %	0.5 max.	
Hydrolyzable chlorides, ppm	200 max.	

### Packages and Shipping

DuPont CHDI is available in cast solid form in 400 lb (181.4 kg) net drums.

DOT Shipping name

Toxic solid, corrosive, organic, NOS  
(trans-1,4-cyclohexane diisocyanate)

DOT Hazard Classification Poison, Corrosive

UN/NA No. UN 2928

Packing Group I

Packages Drums 181.8 kg (400 lb) net



## Product Storage

DuPont CHDI may be stored indefinitely at temperatures below 40°C (104°F). Store CHDI in a well-ventilated area. Do not open the drums until ready to use. If the contents of a drum are only partially consumed, the drum should be purged with dry nitrogen and tightly resealed. Reaction with water vapor in the air will cause degradation of the product into carbon dioxide and a "urea compound." Avoid exposure of CHDI to moisture

## Materials of Construction

Stainless steel construction is recommended for all process equipment handling CHDI. Storage containers should be stainless steel or coated with a baked phenolic resin. Avoid contact with metals such as zinc, copper, tin, and cadmium.

## Regulatory

CHDI is TSCA-listed. It is not listed in the Japan registry, but a low volume exemption is filed; small quantities (< 1,000 kg/year) are allowed.

## Order Placement and Product Information

Please contact us to place an order, request a sample, or obtain additional information on DuPont CHDI and related products. DuPont is available worldwide to serve your needs:

### United States

Phone (800) 441-9504 (within the US)  
302-992-2397 (outside the US)  
Fax 302-355-3908  
Mail DuPont Chemical Solutions Enterprise  
Customer Service Center, BMP 23  
Wilmington, DE 19899 USA

**DuPont Subsidiaries** - Contact the office nearest you:

Asia Pacific	Phone
DuPont Kabushiki Kaisha (Japan)	81 3 5521 8670
DuPont China Holding Co Ltd	0086-65058000-1010
DuPont India	22 67515000 Ext. 5060
DuPont (Korea) Inc	82 2 2222 5309
DuPont Asia Pacific Ltd (Hong Kong)	852 2 734 5345
DuPont Company (Singapore) Pte Ltd	65 6586 3626
DuPont Australia Ltd	61 2 9923 6111
<b>Europe/Mideast/Africa</b>	
DuPont de Nemours DCSE@fra.dupont.com	+49 6102 18 2757
<b>North/South America</b>	
DuPont Canada, Inc	905 821 5912
DuPont do Brasil	55 11 4166-8337

**Webpage:** [www.polymerspecialties.dupont.com](http://www.polymerspecialties.dupont.com)

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