

*******MATERIAL SAFETY DATA SHEET*******

Manufacturer's Name: PRECISION CONVERTING
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*******SECTION I – PRODUCT IDENTIFICATION*******

PRODUCT NAME: PC -604
SYNONYMS:
CHEMICAL FAMILY: Aromatic Diamine Mixture
FORMULA: (C₂H₅)₂ (CH₃) C₆H (NH₂)₂
DESCRIPTION: Chemical intermediate for urethane polymer production

*******SECTION II – HAZARDOUS COMPONENT DATA*******

PRODUCT COMPOSITION:
CAS or Chemical Name: Dictylenetoluenediamine Mixture
CAS Number: 68479-98-1
PERCENTAGE RANGE: 20-30%
EXPOSURE STANDARDS: None established by OSHA/ACGIH

*******SECTION III - SAFE HANDLING AND STORAGE*******

DO NOT TAKE INTERNALLY. AVOID CONTACT WITH SKIN, EYES AND CLOTHING. UPON CONTACT WITH SKIN OR EYES, WASH OFF WITH WATER.

STORAGE CONDITIONS: Do not store at temperatures above 49 C (120 F).
OTHER: Product is hygroscopic; protect with padding of dry air –40 C (-40 F) dew point or dry nitrogen. Calcium chloride drying system with silica gel on the vents can also be used.

PRODUCT STABILITY AND COMPATIBILITY:

SHELF LIFE LIMITATIONS: Minimum 1 year (closed container).
INCOMPATIBLE MATERIALS FOR PACKAGING: Use glass or vinyl lined containers. Recommend lined steel (Amercoat No. 23 vinyl coating. 5-coat system), 304SS or equivalent.
INCOMPATIBLE MATERIALS FOR STORAGE ON TRANSPORT: Strong oxidizers

*******SECTION IV – PHYSICAL DATA*******

APPEARANCE: Gray, Clear Amber, Black or Blue liquid
FREEZING POINT: No data
BOILING POINT: 586 F (308 C)
DECOMPOSITION TEMPERATURE: No data
SPECIFIC GRAVITY: 1.02
VAPOR PRESSURE @ 25 C: <.001 mm Hg @ 20 C (60 F): 10 mm Hg @ 165 C
(329 F)
SOLUBILITY IN WATER: 1.0 wt. % @ 20 C (68 F)
VOLATILES, PERCENT BY VOLUME: 0
EVAPORATION RATE: Not applicable
VAPOR DENSITY (air = 1): 6.2
ODOR: Slightly musty to odorless

*******SECTION V – PERSONAL PROTECTIVE EQUIPMENT*******

EXPOSURE LIMITS: Not established by OSHA/ACGIH
EYE PROTECTION: Chemical goggles or face shield
PROTECTIVE GLOVES: Nitrile or Neoprene Rubber
RESPIRATORY PROTECTION: NIOSH approved organic vapor respirator
when exposed to vapor from heated material.
LOCAL EXHAUST VENTILATION: At the source of vapor.
MECHANICAL VENTILATION: Recommended
OTHER: If skin contact or contamination of clothing is likely protective clothing
should be worn.

*******SECTION VI – FIRE AND EXPLOSION HAZARD*******

FLAMMABLE LIMITS: Not established
FLASH POINT: > 275 F (135 C) Test Method: TCC
EXTINGUISHING MEDIA: Dry chemical, water spray (fog), foam or carbon
dioxide
NFPA RATINGS: Not established
HMIS RATINGS: Health: 2
 Flammability: 0
 Reactivity: 0
FIRE FIGHTING TECHNIQUES AND COMMENTS: Use water to cool containers
exposed to fire (See Section XI for protective equipment for fire fighting). Avoid
breathing smoke and vapor.
OTHER: Water may cause frothing if it gets below the surface of the liquid and
turns to steam. Water fog gently applied to the surface may cause frothing
which may extinguish the fire.

*****SECTION VII – REACTIVITY INFORMATION*****

CONDITIONS UNDER WHICH THIS PRODUCT MAY BE UNSTABLE:

TEMPERATURES ABOVE: No data

MECHANICAL SHOCK OR IMPACT: No

ELECTRICAL (STATIC) DISCHARGE: No

OTHER: Excessive heat

HAZARDOUS POLYMERIZATION: Will not occur

INCOMPATIBLE MATERIALS: Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCT: Carbon monoxide, carbon dioxide and other fragments, which have not been identified.

SUMMARY OF REACTIVITY:

OXIDIZER: No

PYROPHORIC: No

ORGANIC PEROXIDE: No

WATER REACTIVE: No

*****SECTION VIII – TOXICOLOGY AND HEALTH INFORMATION*****

INHALATION: Not expected to be a route of exposure due to low volatility at room temperature however heated material may give off significant vapor.

EYE CONTACT: Expect to be an eye irritant

SKIN CONTACT: Expect to be harmful.

CHRONIC EFFECTS TO OVEREXPOSURE: A two year feeding study in rats showed effects in the pancreas, liver, thyroid and eyes. An increase in the number of tumors in the liver and thyroid of male rats and in the liver and possible mammary glands of female rats was found.

OTHER HEALTH EFFECTS: In rare instances, sensation has been reported to occurred in humans.

EMERGENCY FIRST AID PROCEDURES:

INHALATION: If inhaled remove to fresh air

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention.

SKIN CONTACT: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Seek medical attention. Wash clothing before reuse.

INGESTION: Induce vomiting immediately giving two glasses of water and placing finger down throat. Never give anything by mouth to an unconscious person. Seek medical attention.

*****SECTION IX – TRANSPORTATION INFORMATION*****

This material is not regulated as a DOT hazardous material.

DOT (DOMESTIC SURFACE)

PROPER SHIPPING NAME: Chemicals N.O.I. (not regulated)
HAZARD CLASS OR DIVISION: None
UN/NA NUMBER: None
FREIGHT CLASS: 55
PACKAGING GROUP: None

*****SECTION X – SPILL AND LEAK PROCEDURES*****

For all transportation accidents, call CHEMTREC at 800-424-9300.

REPORTABLE QUANTITY: Not applicable (per 40 CFR 300.4)
SPILL MITIGATION PROCUDURES: Stop source of spill as soon as possible
and notify appropriate personnel.
AIR RELEASE: Not applicable
WATER RELEASE: This material is slightly soluble in water and may be subject
to emulsification. Divert flow of water and contain that which is contaminated.
Remove as a liquid utilizing a vacuum or pumping system as possible.
LAND SPILL: Dike spill area and begin to remove as a liquid. If unable to do so,
then absorb in clay, sand or a commercial absorbent and containerize for
disposal. Compatible absorbents: sand, clay soil.
SPILL RESIDUES: Dispose of per guidelines under Section XI, Waste Disposal.
PERSONAL PROTECITON FOR EMERGENCY SPILL AND FIRE FIGHTING
SITUATIONS: In case of fire, use normal fire fighting equipment. Additional
respiratory protection is necessary when a spill or fire involving this product
occurs. You are recommended to use a cartridge type NIOSH/MSHA
approved respirator with dust/mist cartridges. Additional protective clothing
must be worn to prevent personal contact with this material. Those items
include but are not limited to: boots, impervious gloves, hard hat, splash-proof
goggles, impervious clothing (i.e. chemically impermeable suit).

*******SECTION XI – WASTE DISPOSAL*******

If this product becomes a waste, it DOES NOT meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D.

As a non-hazardous liquid waste, it should be disposed of in accordance with local, state and federal regulations by incineration.

CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THIS MATERIAL. THE USER OF THIS MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.

*******SECTION XII – ADDITIONAL REGULATORY INFORMATION*******

TOXIC SUBSTANCES CONTROL ACT: This substance is listed on the Toxic Substances Control Act inventory.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT TITLE III: HAZARD CATEGORIES, for SARA 311312 are indicated below.

HEALTH: IMMEDIATE (acute): yes

HEALTH: DELAYED (chronic): yes

PHYSICAL: FIRE: No

PHYSICAL SUDDEN RELEASE OF PRESSURE: No

PHYSICAL REACTIVE: No

PHYSICAL NUISANCE MIST/DUST ONLY: No

The following are WHMIS classifications for this product: Class D Division 2B
EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW, PER 40 CFR.
APP.A:

EXTREMELY HAZARDOUS SUBSTANCE:

THRESHOLD PLANNING QUANTITY: None established

SUPPLIER NOTIFICATION REQUIREMENTS, PER 40 CFR 372.45: None established

(continued)

THE INFORMATION IN THIS MATERIAL SAFETY DATA SHEET SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. OLIN BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION, BUT MAKES NO WARRANTY THAT IT IS. ADDITIONALLY, IF THIS MATERIAL SAFETY DATA SHEET IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT OLIN AT THE PHONE NUMBER LISTED BELOW TO MAKE CERTAIN THAT THIS SHEET IS CURRENT.