



**Product Name: PT100 part A**

**Penntek Industrial Coatings, 21034 Heron Way, Suite 104, Lakeville, MN 55044**  
 24-hour Emergency Phone: 1-800-535-5053

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**MANUFACTURER'S NAME:** PENNTEK INDUSTRIAL COATINGS  
**ADDRESS:** 21034 HERON WAY, SUITE 104  
 LAKEVILLE, MN 55044  
**EMERGENCY PHONE:** 1-800-535-5053  
**INFORMATION PHONE:** 952-236-9305

**HMIS CODES: H F R P**  
 2 3 0 H

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Component/Exposure Limits	CAS#	% by Wt.
----- 1,6-HEXAMETHYLENE DIISOCYANATE BASED POLYISOCYANATE 0.5 MG\M3(TWA-AVERAGD OVER 8 HOURS)	28182-81-2	74.63
ISPOHORONE DIISOCYANATE BASED POLYISOCYANATE .005 PPM SKIN	4098-71-9	24.88

**3. HAZARDS IDENTIFICATION**

**Potential Health Effects**

**EYE:**  
 MAY CAUSE EYE IRRITATION. DIRECT CONTACT MAY CAUSE STINGING, TEARING AND REDNESS.

**SKIN:**  
 \*\*\*WARNING\*\*\* AVOID ALL CONTACT WITH SKIN. PENETRATES SKIN READILY. ANY CONTACT MAY RESULT IN THE ABSORPTION OF POTENTIALLY HARMFUL AMOUNTS WHICH CAN CAUSE DAMAGE TO THE KIDNEYS, LIVER, BLOOD AND/OR BONE MARROW.

**INGESTION:**  
 MODERATELY TOXIC. MAY CAUSE MOUTH, THROAT, ESOPHAGUS AND STOMACH IRRITATION, NAUSEA, VOMITING AND DIARRHEA. ASPIRATION OF MATERIAL INTO LUNGS CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.

**INHALATION:**  
 HIGH VAPOR/AEROSOL CONCENTRATIONS (GREATER THAN APPROXIMATELY 1000 PPM) ARE IRRITATING TO THE EYES AND THE RESPIRATORY TRACT, MAY CAUSE HEADACHES, DIZZINESS, ANESTHESIA, DROWSINESS, UNCONSCIOUSNESS, AND OTHER CENTRAL NERVOUS SYSTEM EFFECTS, INCLUDING DEATH.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE**  
 OVEREXPOSURE TO VAPOR, DUST OR MIST MAY AGGRAVATE EXISTING RESPIRATORY CONDITIONS, SUCH AS ASTHMA, BRONCHITIS, AND INFLAMMATORY OR FIBROTIC RESPIRATORY DISEASE.

**CHRONIC (CANCER) INFORMATION:**

**Product Name:** PT100 part A

**Penntek Industrial Coatings, 21034 Heron Way, Suite 104, Lakeville, MN 55044**  
24-hour Emergency Phone: 1-800-535-5053

---

OVEREXPOSURE MAY CAUSE NERVOUS SYSTEM DAMAGE. IARC HAS CLASSIFIED ETHYLBENZENE AS A GROUP TO BE CANCER CAUSING AGENT, (POSSIBLY CARCINOGENIC TO HUMANS). THERE IS INADEQUATE EVIDENCE FOR CANCER IN EXPOSED HUMANS. ETHYLBENZENE IS NOT CLASSIFIED AS CARCINOGENIC BY NTP OR OSHA.

**TERATOLOGY (BIRTH DEFECT) INFORMATION:**

INFORMATION NOT AVAILABLE

**REPRODUCTION INFORMATION:**

INFORMATION NOT AVAILABLE

**CARCINOGENICITY: NTP CARCINOGEN: NO**

**IARC MONOGRAPHS: NO**

**OSHA REGULATED: NO**

**4. FIRST AID MEASURES**

---

**EYES:**

FLUSH IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION.

**SKIN:**

WASH CONTAMINATED AREA WITH SOAP AND WATER. CONSULT A PHYSICIAN IF IRRITATION PERSISTS.

**INGESTION:**

IF SWALLOWED, GIVE 2 GLASSES OF WATER TO DRINK. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. SEE A PHYSICIAN.

**INHALATION:**

RESCUERS SHOULD PUT ON APPROPRIATE PROTECTIVE GEAR. REMOVE FROM AREA OF EXPOSURE. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. KEEP VICTIM WARM. GET IMMEDIATE MEDICAL ATTENTION.

**NOTE TO PHYSICIANS:**

INFORMATION NOT AVAILABLE

**5. FIRE FIGHTING MEASURES**

---

**FLAMMABLE PROPERTIES:**

**FLASH POINT: 91F**

INFORMATION NOT AVAILABLE

**Method: SETA**

**FLAMMABLE LIMITS:**

**Lower flammable limit: 1.0**

**Upper flammable limit: 13.1**

**AUTOIGNITION TEMPERATURE:**

INFORMATION NOT AVAILABLE

**Product Name: PT100 part A**

**Penntek Industrial Coatings, 21034 Heron Way, Suite 104, Lakeville, MN 55044**  
24-hour Emergency Phone: 1-800-535-5053

**HAZARDOUS COMBUSTION PRODUCTS:**

VAPORS CAN TRAVEL TO A SOURCE OF IGNITION AND FLASH BACK. COMBUSTIBLE LIQUID. CAN FORM EXPLOSIVE MIXTURES AT TEMPERATURES AT OR ABOVE THE FLASHPOINT. "EMPTY" CONTAINERS RETAIN PRODUCT RESIDUE (LIQUID AND/OR VAPOR) AND CAN BE DANGEROUS. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. EMPTY DRUMS SHOULD BE COMPLETELY DRAINED, PROPERLY BUNGED AND PROMPTLY RETURNED TO A DRUM RECONDITIONER, OR PROPERLY DISPOSED OF. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND OR MAY BE MOVED BY VENTILATION AND MAY BE IGNITED BY PILOT LIGHTS, OTHER FLAMES, SPARKS HEATERS, SMOKING, ELECTRIC MOTORS, STATIC DISCHARGE, OR OTHER IGNITION SOURCES AT LOCATIONS DISTANT FROM MATERIAL HANDLING POINT. ELIMINATE OR SHUT OFF ALL IGNITION SOURCES PRIOR TO USAGE.

**EXTINGUISHING MEDIA:**

FOAM, CARBON DIOXIDE, DRY CHEMICAL, WATER FOG

**FIREFIGHTING INSTRUCTIONS:**

THE USE OF SELF-CONTAINED BREATHING APPARATUS IS RECOMMENDED FOR FIRE FIGHTERS. WATER SPRAY MAY BE USED FOR COOLING CONTAINERS TO PREVENT POSSIBLE PRESSURE BUILD-UP AND AUTOIGNITION OR EXPLOSION WHEN EXPOSED TO EXTREME HEAT. AVOID SPREADING BURNING LIQUID WITH WATER USED FOR COOLING.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

VAPORS MAY CAUSE FLASH FIRE. KEEP CONTAINERS TIGHTLY CLOSED AND ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS AND FLAME. NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY.

**6. ACCIDENTAL RELEASE MEASURES**

---

**SMALL SPILL:**

REMOVE ALL SOURCES OF IGNITION (FLAMES, HOT SURFACES, AND ELECTRICAL, STATIC, OR FRICTIONAL SPARKS). AVOID BREATHING VAPORS. VENTILATE AREA. CONTAIN AND REMOVE WITH VERMICULITE OR OTHER INERT MATERIAL. PLACE IN A CONTAINER FOR CHEMICAL WASTE. IF LARGE SPILL, FLUSH SPILL AREA WITH WATER SPRAY AND PREVENT RUNOFF FROM ENTERING DRAINS, SEWERS, OR STREAMS.

**LARGE SPILL:**

IF LARGE SPILL, FLUSH SPILL AREA WITH WATER SPRAY AND PREVENT RUNOFF FROM ENTERING DRAINS, SEWERS, OR STREAMS.

**7. HANDLING AND STORAGE**

---

**HANDLING:**

AS A RESULT OF PREVIOUS REPEATED OVEREXPOSURES OR A SINGLE LARGE DOSE, CERTAIN INDIVIDUALS WILL DEVELOP ISOCYANATE SENSITIZATION (CHEMICAL ASTHMA) WHICH WILL CAUSE THEM TO REACT TO A LATER EXPOSURE TO ISOCYANATE AT LEVELS WELL BELOW THE TLV OR MGL. THESE SYMPTOMS, WHICH INCLUDE: CHEST TIGHTNESS, WHEEZING, COUGH, SHORTNESS OF BREATH OR ASTHMATIC ATTACK, COULD BE IMMEDIATE OR DELAYED UP TO SEVERAL HOURS AFTER EXPOSURE. SIMILAR TO MANY NON-SPECIFIC ASTHMATIC RESPONSES, THERE ARE REPORTS THAT ONCE SENSITIZED AN INDIVIDUAL CAN EXPERIENCE THESE SYMPTOMS UPON EXPOSURE TO DUST, COLD AIR OR OTHER IRRITANTS. THIS INCREASED LUNG SENSITIVITY CAN PERSIST FOR WEEKS AND IN SEVERE CASES FOR SEVERAL

**Product Name:** PT100 part A

**Penntek Industrial Coatings, 21034 Heron Way, Suite 104, Lakeville, MN 55044**  
24-hour Emergency Phone: 1-800-535-5053

YEARS. CHRONIC OVEREXPOSURE TO ISOCYANATES HAS ALSO BEEN REPORTED TO CAUSE LUNG DAMAGE, INCLUDING DECREASE IN LUNG FUNCTION, WHICH MAY BE PERMANENT. SENSITIZATION MAY BE EITHER TEMPORARY OR PERMANENT.

**STORAGE:**

DO NOT STORE ABOVE 120 DEG.F. STORE LARGE QUANTITIES IN BUILDINGS DESIGNED TO COMPLY WITH OSHA 1910.106. KEEP AWAY FROM HEAT, SPARKS AND FLAME. KEEP CONTAINERS CLOSED WHEN NOT IN USE AND UPRIGHT TO PREVENT LEAKAGE.

**OTHER PRECAUTIONS:**

AVOID CONTACT WITH SKIN OR EYES. WASH THOROUGHLY AFTER HANDLING.

HOT ORGANIC CHEMICAL VAPORS OR MISTS ARE SUSCEPTIBLE TO SUDDEN SPONTANEOUS COMBUSTION WHEN MIXED WITH AIR. IGNITION MAY OCCUR AT TEMPERATURES BELOW THOSE PUBLISHED IN THE LITERATURE AS "AUTOIGNITION" OR "IGNITION" TEMPERATURES. IGNITION TEMPERATURES DECREASE WITH INCREASING VAPOR VOLUME AND VAPOR/AIR CONTACT TIME, AND ARE INFLUENCED BY PRESSURE CHANGES.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**ENGINEERING CONTROLS:**

USE LOCAL EXHAUST VENTILATION WITH A MINIMUM CAPTURE VELOCITY OF 100 FT/MIN. (0.5 M/SEC.) AT THE POINT OF VAPOR EVOLUTION. REFER TO THE CURRENT EDITION OF INDUSTRIAL VENTILATION: A MANUAL OF RECOMMENDED PRACTICE PUBLISHED BY THE AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS FOR INFORMATION ON THE DESIGN, INSTALLATION, USE, AND MAINTENANCE OF EXHAUST SYSTEMS.

**RESPIRATORY PROTECTION:**

DO NOT BREATHE VAPORS. WHEN CONCENTRATIONS EXCEED THE ESTABLISHED EXPOSURE LIMITS, WEAR AN APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) UNTIL VAPORS ARE EXHAUSTED. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE. OBSERVE OSHA STANDARD 29CFR 1910.134.

**VENTILATION:**

PROVIDE GENERAL CLEAN AIR DILUTION OR LOCAL EXHAUST VENTILATION IN VOLUME AND PATTERN TO KEEP THE AIR CONTAMINANT CONCENTRATION BELOW THE LOWER EXPLOSION LIMIT AND BELOW CURRENT APPLICABLE EXPOSURE LIMITS. REFER TO OSHA STANDARD 1910.94.

**SKIN PROTECTION:**

USE SOLVENT IMPERMEABLE GLOVES TO AVOID CONTACT WITH PRODUCT.

**EYE PROTECTION:**

DO NOT GET IN EYES. USE SAFETY EYEWEAR WITH SPLASH GUARDS OR SIDE SHIELDS, CHEMICAL GOGGLES, FACE SHIELDS.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT**

AVOID CONTACT WITH SKIN. USE PROTECTIVE CLOTHING. PREVENT CONTACT WITH CONTAMINATED CLOTHING. WASH CONTAMINATED CLOTHING, INCLUDING SHOES, BEFORE REUSE.

**WORK/HYGIENIC PRACTICES**

Product Name: PT100 part A

Penntek Industrial Coatings, 21034 Heron Way, Suite 104, Lakeville, MN 55044  
24-hour Emergency Phone: 1-800-535-5053

WASH AT THE END OF EACH WORKSHIFT AND BEFORE EATING, SMOKING, OR USING THE TOILET. USE APPROPRIATE HAND AND SKIN LOTIONS TO PROTECT THE SKIN.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: 284F  
MELTING POINT: INFORMATION NOT AVAILABLE  
VAPOR PRESSURE: INFORMATION NOT AVAILABLE  
VAPOR DENSITY: HEAVIER THAN AIR  
SOLUBILITY IN WATER: INSOLUBLE  
SPECIFIC GRAVITY: 1.07  
EVAPORATION RATE: SLOWER THAN BUTYL ACETATE  
pH: INFORMATION NOT AVAILABLE  
ODOR: ORGANIC SOLVENT  
APPEARANCE: INFORMATION NOT AVAILABLE

## 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY (CONDITIONS TO AVOID):  
STABLE

INCOMPATIBILITY:  
STRONG ACIDS AND STRONG OXIDIZING AGENTS.

CONDITIONS TO AVOID:  
ELEVATED TEMPERATURES

SOURCES OF IGNITION

STRONG OXIDIZING OR REDUCING AGENTS

HAZARDOUS DECOMPOSITION PRODUCTS:  
THERMAL DECOMPOSITION OR COMBUSTION CAN PRODUCE FUMES CONTAINING ORGANIC ACIDS, CARBON DIOXIDE AND CARBON MONOXIDE.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

## 11. TOXICOLOGICAL INFORMATION

EYE:  
INFORMATION NOT AVAILABLE

SKIN:  
INFORMATION NOT AVAILABLE

INGESTION:  
INFORMATION NOT AVAILABLE

INHALATION:

**Product Name:** PT100 part A

**Penntek Industrial Coatings, 21034 Heron Way, Suite 104, Lakeville, MN 55044**  
24-hour Emergency Phone: 1-800-535-5053

---

INFORMATION NOT AVAILABLE

**SUBCHRONIC: INFORMATION NOT AVAILABLE**

**CHRONIC/CARCINOGENICITY: INFORMATION NOT AVAILABLE**

**TERATOLOGY: OCCUPATIONAL EXPOSURE TO ORGANIC SOLVENTS DURING PREGNANCY IS**  
WOMEN REPORTING SYMPTOMS ASSOCIATED WITH EXPOSURE APPEAR TO HAVE AN EVEN GREATER RISK COMPARED TO ASYMPTOMATIC  
EXPOSURES.

**REPRODUCTION: INFORMATION NOT AVAILABLE**

**MUTAGENICITY: INFORMATION NOT AVAILABLE**

**12. ECOLOGICAL INFORMATION**

---

**ECOTOXICOLOGICAL INFORMATION: INFORMATION NOT AVAILABLE**

**CHEMICAL FATE INFORMATION:**

**13. DISPOSAL CONSIDERATIONS**

---

DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS. INCINERATE IN  
APPROVED FACILITY.

**14. TRANSPORT INFORMATION(Not meant to be all inclusive)**

---

US DOT HAZARD CLASS: 3 UN1263 FLAMMABLE

**15. REGULATORY INFORMATION**

---

(Not meant to be all inclusive - selected regulations represented)

**U.S. FEDERAL REGULATIONS:**

INFORMATION NOT AVAILABLE

**OSHA:**

THIS PRODUCT IS CONSIDERED HAZARDOUS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29CFR 1910.1200).

**CERCLA: SARA HAZARD CATEGORY:**

THIS MATERIAL IS REGULATED UNDER THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA) AND  
THE SUPERFUND AMENDMENTS AND REAUTHORIZAION ACT (SARA)TITLE III SECTION 302. THIS MATERIAL IS OR CONTAINS CHEMICAL(S)  
LISTED IN 40 CFR TABLE 302.4 OR NONDESIGNATED RCRA ICR SUBSTANCE(S). (NONDESIGNATED ICR SUBSTANCES APPLY TO MATERIALS  
THAT WILL NOT BE REUSED.) RELEASE IN EXCESS OF ITS REPORTABLE QUANTITY MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER  
(1-800-424-8802) AND TO THE APPROPRIATE STATE AND LOCAL EMERGENCY RESPONSE ORGANIZATIONS.

**SECTION 313:**

**M A T E R I A L   S A F E T Y   D A T A   S H E E T**

Date Printed: 12/3/2013

Page: 7

**Product Name: PT100 part A**

**Penntek Industrial Coatings, 21034 Heron Way, Suite 104, Lakeville, MN 55044**  
24-hour Emergency Phone: 1-800-535-5053

THIS PRODUCT CONTAINS A CHEMICAL WHICH IS LISTED IN SECTION 313 AT OR ABOVE DE MINIMIS CONCENTRATIONS.

Component/Exposure Limits CAS# % by Wt.

\*\*\* NO REPORTABLE QUANTITIES OF HAZARDOUS INGREDIENTS ARE PRESENT \*\*\*

**TOXIC SUBSTANCES CONTROL ACT: INFORMATION NOT AVAILABLE**

Component/Exposure Limits CAS# % by Wt.

\*\*\* NO REPORTABLE QUANTITIES OF HAZARDOUS INGREDIENTS ARE PRESENT \*\*\*

**INTERNATIONAL REGULATIONS:**

**CANADIAN WHMIS:**

THIS MSDS HAS BEEN PREPARED IN COMPLIANCE WITH CONTROLLED PRODUCT REGULATIONS EXCEPT FOR USE OF THE 16 HEADINGS.

**CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA): INFORMATION NOT AVAILABLE**

**EINECS: INFORMATION NOT AVAILABLE**

**STATE REGULATIONS:**

**NEW JERSEY**

THE FOLLOWING MATERIALS ARE NON-HAZARDOUS, BUT ARE AMONG THE TOP FIVE COMPONENTS IN THIS PRODUCT:

Component/Exposure Limits CAS# % by Wt.

\*\*\* NO REPORTABLE QUANTITIES OF HAZARDOUS INGREDIENTS ARE PRESENT \*\*\*

**PENNSYLVANIA**

ANY MATERIAL LISTED AS "NON HAZARDOUS" IN THE CAS REG NO. COLUMN OF SECTION 2, COMPOSITION/INFORMATION ON INGREDIENTS, OF THIS MSDS IS A TRADE SECRET UNDER THE PROVISIONS OF THE PENNSYLVANIA WORKER AND COMMUNITY RIGHT TO KNOW ACT.

THE FOLLOWING NON-HAZARDOUS INGREDIENTS ARE PRESENT IN THE PRODUCT AT GREATER THAN 3%:

Component/Exposure Limits CAS# % by Wt.

\*\*\* NO REPORTABLE QUANTITIES OF HAZARDOUS INGREDIENTS ARE PRESENT \*\*\*

**CALIFORNIA**

THE CHEMICAL(S) NOTED BELOW AND CONTAINED IN THIS PRODUCT, ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER:

Component/Exposure Limits CAS# % by Wt.

\*\*\* NO REPORTABLE QUANTITIES OF HAZARDOUS INGREDIENTS ARE PRESENT \*\*\*

**VOLATILE ORGANIC COMPOUNDS: 1.66 lb/g1**

**16. OTHER INFORMATION**

**MSDS Status: INFORMATION NOT AVAILABLE**

M A T E R I A L   S A F E T Y   D A T A   S H E E T

Date Printed: 12/3/2013

Page: 8

---

**Product Name: PT100 part A**

**Penntek Industrial Coatings, 21034 Heron Way, Suite 104, Lakeville, MN 55044**  
24-hour Emergency Phone: 1-800-535-5053

---

THIS DOCUMENT HAS BEEN PREPARED USING DATA FROM SOURCES CONSIDERED TECHNICALLY RELIABLE. IT DOES NOT CONSTITUTE A WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY OF THE INFORMATION CONTAINED HEREIN. ACTUAL CONDITIONS OF USE AND HANDLING ARE BEYOND SELLER'S CONTROL. USER IS RESPONSIBLE TO EVALUATE ALL AVAILABLE INFORMATION WHEN USING PRODUCT FOR ANY PARTICULAR USE AND TO COMPLY WITH ALL FEDERAL, STATE, PROVINCIAL AND LOCAL LAWS AND REGULATIONS.

\*\*\*\*\*

The following boilerplate keys do not have matching boilerplate key prefixes in the MSDS Master Format file:

- EF01
- NP02