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

SECTION 1. - - - - - CHEMICAL IDENTIFICATION- - - - -

CATALOG #: P1045
NAME: PENTACHLOROPHENOL

SECTION 2. - - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -

CAS #: 87-86-5
MF: C6HCL5O
EC NO: 201-778-6

SYNONYMS

AD 73 * CHEM-PENTA * CHEM-TOL * CHLON * CHLOROPHEN * CM 613 * CP 1309
* DOWICIDE 7 * DOWICIDE EC-7 * DOW PENTACHLOROPHENOL DP-2
ANTIMICROBIAL * DUROTOX * EP 30 * FUNGIFEN * GRUNDIER ARBEZOL * 1-
HYDROXYPENTACHLOROBENZENE * LAUXTOL * LAUXTOL A * LIROPREM * MB 333 *
NCI-C54933 * NCI-C55378 * NCI-C56655 * PCP (PESTICIDE) * PENCHLOROL *
PENTA * PENTACHLOORFENOL (DUTCH) * PENTACHLOROFENOL *
PENTAFLOROFENOLO (ITALIAN) * PENTACHLOROPHENOL * 2,3,4,5,6-
PENTACHLOROPHENOL * PENTACHLOROPHENOL (ACGIH:OSHA) *
PENTACHLOROPHENOL, DP-2 * PENTACHLOROPHENOL (GERMAN) * PENTACON *
PENTA-KIL * PENTA READY * PENTA WR * PENWAR * PERATOX * PERMACIDE *
PERMAGARD * PERMASAN * PERMATOX DP-2 * PERMATOX PENTA * PERMITE *
POLE TOPPER FLUID * POL NU * PREVENTOL P * RCRA WASTE NUMBER U242 *
SANTOPHEN 20 * THOMPSON'S WOOD FIX * WEEDONE * WITOPHEN P * WOODTREAT
A *

SECTION 3. - - - - - HAZARDS IDENTIFICATION - - - - -

LABEL PRECAUTIONARY STATEMENTS

HIGHLY TOXIC (USA)
TOXIC (EU)
TOXIC BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
LIMITED EVIDENCE OF CARCINOGENIC EFFECT.
POSSIBLE RISK OF HARM TO THE UNBORN CHILD.
READILY ABSORBED THROUGH SKIN.
POSSIBLE MUTAGEN.
CALIF. PROP. 65 CARCINOGEN.
TARGET ORGAN(S):
KIDNEYS
LIVER
AVOID EXPOSURE - OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.
DO NOT BREATHE DUST.
WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE
PROTECTION.
IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE
IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).

SECTION 4. - - - - - FIRST-AID MEASURES- - - - -

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH COPIOUS
AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED
CLOTHING AND SHOES.
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL
RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

SECTION 5. - - - - - FIRE FIGHTING MEASURES - - - - -

EXTINGUISHING MEDIA
CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.
SPECIAL FIREFIGHTING PROCEDURES

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS

EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6. - - - - - ACCIDENTAL RELEASE MEASURES- - - - -
EVACUATE AREA.

WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.

COVER WITH DRY LIME OR SODA ASH, PICK UP, KEEP IN A CLOSED CONTAINER AND HOLD FOR WASTE DISPOSAL.

SECTION 7. - - - - - HANDLING AND STORAGE- - - - -
REFER TO SECTION 8.

SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - -
WASH CONTAMINATED CLOTHING BEFORE REUSE.
WASH THOROUGHLY AFTER HANDLING.

PHENOL, PENTACHLORO-
IRRITATION DATA

SKN-RBT 10 MG/24H OPEN MLD
EYE-RBT 100 UL/24 MLD

AIHAAP 23,95,1962
NTIS** OTS0546023

TOXICITY DATA

ORL-MAN LDLO:401 MG/KG
ORL-RAT LD50:27 MG/KG
IHL-RAT LC50:355 MG/M3
SKN-RAT LD50:96 MG/KG
IPR-RAT LD50:56 MG/KG
ORL-MUS LD50:36 MG/KG
IHL-MUS LC50:225 MG/M3
IPR-MUS LD50:32 MG/KG
UNR-DOG LD50:70 MG/KG
UNR-GPG LD50:100 MG/KG
ORL-HAM LD50:168 MG/KG
ORL-GRB LD50:294 MG/KG
ORL-DCK LD50:380 MG/KG
UNR-FRG LD50:36 MG/KG

EESADV 1,343,1977
JPETAB 76,104,1942
GTPZAB 13(9),58,1969
GTPZAB 13(9),58,1969
BJPCAL 13,20,1958
ARTODN 40,63,1978
GTPZAB 13(9),58,1969
ARTODN 40,63,1978
PHPHA6 1,3,1953
PHPHA6 1,3,1953
TXAPA9 48,A192,1979
ARTODN 40,63,1978
DOEAAH 35,25,1979
PHPHA6 1,3,1953

TARGET ORGAN DATA

BEHAVIORAL (CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD)
BEHAVIORAL (EXCITEMENT)
BEHAVIORAL (CHANGE IN MOTOR ACTIVITY)
BEHAVIORAL (MUSCLE WEAKNESS)
BEHAVIORAL (MUSCLE CONTRACTION OR SPASTICITY)
VASCULAR (BP ELEVATION NOT CHARACTERIZED IN AUTONOMIC SECTION)
LUNGS, THORAX OR RESPIRATION (DYSPPNAE)
LUNGS, THORAX OR RESPIRATION (TUMORS)
LIVER (TUMORS)
KIDNEY, URETER, BLADDER (URINE VOLUME INCREASED)
ENDOCRINE (HYPERGLYCEMIA)
SKIN AND APPENDAGES (SWEATING)
EFFECTS ON EMBRYO OR FETUS (FETOTOXICITY)
EFFECTS ON EMBRYO OR FETUS (FETAL DEATH)
SPECIFIC DEVELOPMENTAL ABNORMALITIES (MUSCULOSKELETAL SYSTEM)
SPECIFIC DEVELOPMENTAL ABNORMALITIES (HOMEOSTASIS)
EFFECTS ON NEWBORN (DELAYED EFFECTS)
NUTRITIONAL AND GROSS METABOLIC (BODY TEMPERATURE INCREASE)
TUMORIGENIC (EQUIVOCAL TUMORIGENIC AGENT BY RTECS CRITERIA)
ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES
(RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR
COMPLETE INFORMATION.

SECTION 12. - - - - - ECOLOGICAL INFORMATION - - - - -
DATA NOT YET AVAILABLE.

SECTION 13. - - - - - DISPOSAL CONSIDERATIONS - - - - -
DATA NOT AVAILABLE

SECTION 14. - - - - - TRANSPORT INFORMATION - - - - -
CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. - - - - - REGULATORY INFORMATION - - - - -

EUROPEAN INFORMATION

EC INDEX NO: 604-002-00-8

TOXIC

R 24/25

TOXIC IN CONTACT WITH SKIN AND IF SWALLOWED.

R 26

VERY TOXIC BY INHALATION.

R 36/37/38

IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

R 40

LIMITED EVIDENCE OF CARCINOGENIC EFFECT.

R 50/53

VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE
EFFECTS IN THE AQUATIC ENVIRONMENT.

S 22

DO NOT BREATHE DUST.

S 36/37

WEAR SUITABLE PROTECTIVE CLOTHING AND GLOVES.

S 45

IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).

S 52

NOT RECOMMENDED FOR INTERIOR USE ON LARGE SURFACE AREAS.

S 60

THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF AS HAZARDOUS WASTE.

S 61

AVOID RELEASE TO THE ENVIRONMENT. REFER TO SPECIAL INSTRUCTIONS/SAFETY DATA SHEETS.

REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK

ACGIH TLV-CONFIRMED ANIMAL CARCINOGEN DTLVS* TLV/BEI,1999
ACGIH TLV-TWA 0.5 MG/M3 (SKIN) DTLVS* TLV/BEI,1999
IARC CANCER REVIEW:HUMAN LIMITED EVIDENCE IMEMDT 41,319,1986
IARC CANCER REVIEW:ANIMAL SUFFICIENT EVIDENCE IMEMDT 53,371,1991
IARC CANCER REVIEW:ANIMAL SUFFICIENT EVIDENCE IMEMDT 71,769,1999
IARC CANCER REVIEW:ANIMAL INADEQUATE EVIDENCE IMEMDT 20,303,1979
IARC CANCER REVIEW:HUMAN INADEQUATE EVIDENCE IMEMDT 53,371,1991
IARC CANCER REVIEW:GROUP 2B IMEMDT 53,371,1991
EPA FIFRA 1988 PESTICIDE SUBJECT TO REGISTRATION OR RE-REGISTRATION
FEREAC 54,7740,1989

MSHA STANDARD-AIR:TWA 0.5 MG/M3 (SKIN)

DTLVS* 3,198,1971

OSHA PEL (GEN INDU):8H TWA 0.5 MG/M3 (SKIN)

CFRGBR 29,1910.1000,1994

OSHA PEL (CONSTRUC):8H TWA 0.5 MG/M3 (SKIN)

CFRGBR 29,1926.55,1994

OSHA PEL (SHIPYARD):8H TWA 0.5 MG/M3 (SKIN)

CFRGBR 29,1915.1000,1993

OSHA PEL (FED CONT):8H TWA 0.5 MG/M3 (SKIN)

CFRGBR 41,50-204.50,1994

OEL-AUSTRALIA: TWA 0.5 MG/M3, SKIN, JAN1993

OEL-AUSTRIA: SKIN, CARCINOGEN, JAN1999

OEL-BELGIUM: TWA 0.5 MG/M3, SKIN, JAN1993

OEL-DENMARK: TWA 0.005 PPM (0.05 MG/M3), SKIN, JAN1999

OEL-FINLAND: TWA 0.5 MG/M3, STEL 1.5 MG/M3, SKIN, JAN1999

OEL-FRANCE: VME 0.5 MG/M3, SKIN, C3 CARCINOGEN, JAN1999

OEL-GERMANY: SKIN, CARCINOGEN, JAN1999

OEL-HUNGARY: TWA 0.2 MG/M3, STEL 0.4 MG/M3, SKIN, JAN1993

OEL-JAPAN: OEL 0.5 MG/M3, SKIN, JAN1999

OEL-THE NETHERLANDS: MAC-TGG 0.06 MG/M3, SKIN, JAN1999

OEL-NORWAY: TWA 0.05 PPM (0.5 MG/M3), JAN1999

OEL-POLAND: MAC(TWA) 0.5 MG/M3, MAC(STEL) 1.5 MG/M3, JAN1999

OEL-RUSSIA: STEL 0.1 MG/M3, SKIN, JAN1993

OEL-SWEDEN: NGV 0.5 MG/M3, KTV 1.5 MG/M3, SKIN, JAN1999

OEL-SWITZERLAND: MAK-W 0.05 PPM (0.5 MG/M3), STEL 0.1 PPM, SKIN, JAN1999

OEL-TURKEY: TWA 0.5 MG/M3, SKIN, JAN1993

OEL-UNITED KINGDOM: TWA 0.5 MG/M3, STEL 1.5 MG/M3, SKIN, SEP2000

OEL IN ARGENTINA, BULGARIA, COLOMBIA, JORDAN, KOREA CHECK ACGIH TLV;

OEL IN NEW ZEALAND, SINGAPORE, VIETNAM CHECK ACGIH TLV

NIOSH REL TO PENTACHLOROPHENOL-AIR:10H TWA 0.5 MG/M3 (SK)

NIOSH* DHHS #92-100,1992

NOHS 1974: HZD 54160; NIS 47; TNF 3548; NOS 42; TNE 29154

NOES 1983: HZD 54160; NIS 29; TNF 2248; NOS 38; TNE 26806; TFE 4191

ATSDR TOXICOLOGY PROFILE (NTIS** PB/90/182163/AS)

EPA GENETOX PROGRAM 1988, POSITIVE: CELL TRANSFORM.-SA7/SHE; S
CEREVISIAE GENE CONVERSION

EPA GENETOX PROGRAM 1988, POSITIVE: S CEREVISIAE-FORWARD MUTATION

EPA GENETOX PROGRAM 1988, NEGATIVE: HOST-MEDIATED ASSAY; MOUSE SPOT
TEST

EPA GENETOX PROGRAM 1988, NEGATIVE: HISTIDINE REVERSION-AMES TEST; S
CEREVISIAE-HOMOZYGOSIS
EPA TSCA SECTION 8(B) CHEMICAL INVENTORY
EPA TSCA SECTION 8(D) UNPUBLISHED HEALTH/SAFETY STUDIES
ON EPA IRIS DATABASE
EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, JANUARY 2001
NIOSH ANALYTICAL METHOD, 1994: PENTACHLOROPHENOL, 5512; IN BLOOD, 8001;
IN URINE, 8303
NTP CARCINOGENESIS STUDIES (FEED);CLEAR EVIDENCE;MOUSE
NTPTR* NTP-TR-349,1989
OSHA ANALYTICAL METHOD #39

U.S. INFORMATION

THIS PRODUCT IS SUBJECT TO SARA SECTION 313 REPORTING REQUIREMENTS.
CALIFORNIA PROPOSITION 65:
THIS PRODUCT IS OR CONTAINS CHEMICAL(S) KNOWN TO THE STATE OF
CALIFORNIA TO CAUSE CANCER.

SECTION 16. - - - - - OTHER INFORMATION- - - - -
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