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SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 47620

NAME: 2,5-Dinitrophenol (wetted with ca. 20% Water) (unit weight on dry weight basis)

SYNONYMS:

24 HOUR EMERGENCY TELEPHONE: (800) 535-5053(USA)
352-323-3500 (INTERNATIONAL)

TO REQUEST AN MSDS: (800) 869-9290

CUSTOMER SERVICE: (630) 766-2112

SECTION 2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS)

FLAMMABLE SOLIDS (CATEGORY 1), H228
ACUTE TOXICITY, ORAL (CATEGORY 2), H300
ACUTE TOXICITY, INHALATION (CATEGORY 2), H330
ACUTE TOXICITY, DERMAL (CATEGORY 2), H310
SHORT-TERM (ACUTE) AQUATIC HAZARD (CATEGORY 2), H401
LONG-TERM (CHRONIC) AQUATIC HAZARD (CATEGORY 2), H411

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

PICTOGRAM



SIGNAL WORD

DANGER

HAZARD STATEMENT(S)

H228 FLAMMABLE SOLID.
H300 + H310 + H330 FATAL IF SWALLOWED, IN CONTACT WITH SKIN OR IF INHALED.
H401 TOXIC TO AQUATIC LIFE
H411 TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

PRECAUTIONARY STATEMENT(S)

P210 KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. NO SMOKING.
P240 GROUND/BOND CONTAINER AND RECEIVING EQUIPMENT.
P241 USE EXPLOSION-PROOF ELECTRICAL/ VENTILATING/ LIGHTING EQUIPMENT.
P260 DO NOT BREATHE DUST, FUME, MIST, VAPORS OR SPRAY.
P262 DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING.
P264 WASH SKIN THOROUGHLY AFTER HANDLING.
P270 DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT.
P273 AVOID RELEASE TO THE ENVIRONMENT.
P280 WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE PROTECTION/ FACE PROTECTION.
P302 + P350 + P310 IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER. IMMEDIATELY CALL A POISON CENTER OR DOCTOR.
P304 + P340 IF INHALED: REMOVE VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING.
P301 + P310 + P330 IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER OR DOCTOR. RINSE MOUTH.
P361 + P364 TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING AND WASH IT BEFORE REUSE.
P391 COLLECT SPILLAGE.
P403 + P233 STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER TIGHTLY CLOSED.
P405 STORE LOCKED UP.
P501 DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT.

HAZARDS NOT OTHERWISE

NONE.

**CLASSIFIED (HNOC)
OR NOT COVERED
BY GHS**

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF: $C_6H_4N_2O_5$
MW: 184.11
CAS-NO. 329-71-5
PURITY: $\geq 99\%$ (Assay by titration)

HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
2,5-Dinitrophenol (wetted with ca. 20% Water) (unit weight on dry weight basis)		
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FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

SECTION 4. FIRST-AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

GENERAL ADVICE CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE.MOVE OUT OF DANGEROUS AREA.

IF INHALED REMOVE VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING. IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN.

IN CASE OF SKIN CONTACT REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. GENTLY WASH WITH PLENTY OF SOAP AND WATER. IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN.

IN CASE OF EYE CONTACT RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING.IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN.

IF SWALLOWED	IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN. RINSE MOUTH.
MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED	THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE SECTION 2.2) AND/OR IN SECTION 11
INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED	NO DATA AVAILABLE

SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING MEDIA	DRY CHEMICAL, FOAM, WATER SPRAY, CARBON DIOXIDE.
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SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE	CARBON OXIDES NITROGEN OXIDES
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ADVICE FOR FIREFIGHTERS	WEAR SELF-CONTAINED BREATHING APPARATUS IF POSSIBLE. COMBAT FIRE FROM A SHELTERED POSITION.
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FURTHER INFORMATION	EXPLOSION RISK IN CASE OF FIRE. FIGHT FIRE REMOTELY DUE TO THE RISK OF EXPLOSION. TAKE CARE AS IT MAY DECOMPOSE UPON COMBUSTION OR IN HIGH TEMPERATURES TO GENERATE POISONOUS FUME. CLOSED CONTAINERS MAY EXPLODE FROM HEAT OF A FIRE.
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SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES	USE EXTRA PERSONAL PROTECTIVE EQUIPMENT (SELF-CONTAINED BREATHING APPARATUS). KEEP PEOPLE AWAY FROM AND UPWIND OF SPILL/LEAK. ENSURE ADEQUATE VENTILATION. ENTRY TO NON-INVOLVED PERSONNEL SHOULD BE CONTROLLED AROUND THE LEAKAGE AREA BY ROPING OFF, ETC.
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ENVIRONMENTAL PRECAUTIONS	BE CAREFUL NOT TO LET IT FLOW INTO RIVERS, ETC., SINCE ADVERSE EFFECTS ON THE ENVIRONMENT ARE CONCERNED.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP	SWEEP DUST TO COLLECT IT INTO AN AIRTIGHT CONTAINER, TAKING CARE NOT TO DISPERSE IT. ADHERED OR COLLECTED MATERIAL SHOULD BE PROMPTLY DISPOSED OF, IN ACCORDANCE WITH APPROPRIATE LAWS AND REGULATIONS.
REFERENCE TO OTHER SECTIONS	FOR DISPOSAL SEE SECTION 13.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	HANDLING IS PERFORMED IN A WELL VENTILATED PLACE. WEAR SUITABLE PROTECTIVE EQUIPMENT. PREVENT DISPERSION OF DUST. KEEP AWAY FROM HEAT/SPARKS/OPEN FLAME/HOT SURFACES. -NO SMOKING. TAKE MEASURES TO PREVENT THE BUILD UP OF ELECTROSTATIC CHARGE. WASH HANDS AND FACE THOROUGHLY AFTER HANDLING. USE A CLOSED SYSTEM IF POSSIBLE. USE A LOCAL EXHAUST IF DUST OR AEROSOL WILL BE GENERATED. AVOID CONTACT WITH SKIN, EYES AND CLOTHING.
CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES	KEEP CONTAINER TIGHTLY CLOSED. STORE IN A COOL, DARK AND WELL-VENTILATED PLACE. STORE LOCKED UP. BE SURE NOT TO GIVE THE CONTAINER UNEXPECTED IMPACTS, SUCH AS FALLING DOWN OR FALLING OFF. KEEP WETTED WITH WATER FOR DESENSITIZED. STORE AWAY FROM INCOMPATIBLE MATERIALS SUCH AS OXIDIZING AGENTS. Store at 2 - 8 °C
SPECIFIC END USE(S)	APART FROM THE USES MENTIONED IN SECTION 1.2 NO OTHER SPECIFIC USES ARE STIPULATED

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

CONTAINS NO SUBSTANCES WITH OCCUPATIONAL EXPOSURE LIMIT VALUES.

EXPOSURE CONTROLS

APPROPRIATE ENGINEERING CONTROLS FOLLOW SAFE INDUSTRIAL ENGINEERING/LABORATORY PRACTICES WHEN HANDLING ANY CHEMICAL. INSTALL A CLOSED SYSTEM OR LOCAL EXHAUST. ALSO INSTALL SAFETY SHOWER AND EYE BATH.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION FACE SHIELD AND SAFETY GLASSES USE EQUIPMENT FOR EYE PROTECTION TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR EN 166(EU).

SKIN PROTECTION HANDLE WITH GLOVES. GLOVES MUST BE INSPECTED PRIOR TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE (WITHOUT TOUCHING GLOVE'S OUTER SURFACE) TO AVOID SKIN CONTACT WITH THIS PRODUCT. DISPOSE OF CONTAMINATED GLOVES AFTER USE IN ACCORDANCE WITH APPLICABLE LAWS AND GOOD LABORATORY PRACTICES. WASH AND DRY HANDS.

BODY PROTECTION COMPLETE SUIT PROTECTING AGAINST CHEMICALS, FLAME RETARDANT PROTECTIVE CLOTHING, AND THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.

RESPIRATORY PROTECTION DUST RESPIRATOR, SELF-CONTAINED BREATHING APPARATUS(SCBA), SUPPLIED AIR RESPIRATOR, ETC. USE RESPIRATORS APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS AND FOLLOW LOCAL AND NATIONAL REGULATIONS.

CONTROL OF ENVIRONMENTAL EXPOSURE DO NOT LET PRODUCT ENTER DRAINS.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Yellow powder
ODOUR	NO DATA AVAILABLE
ODOUR THRESHOLD	NO DATA AVAILABLE
PH	NO DATA AVAILABLE
MELTING POINT/FREEZING POINT	105 - 109 °C
BOILING POINT	

FLASH POINT	
EVAPORATION RATE	NO DATA AVAILABLE
FLAMMABILITY (SOLID, GAS)	NO DATA AVAILABLE
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	NO DATA AVAILABLE
VAPOUR PRESSURE	NO DATA AVAILABLE
VAPOUR DENSITY	NO DATA AVAILABLE
RELATIVE DENSITY	
WATER SOLUBILITY	INSOLUBLE (0.68 G/L)
PARTITION COEFFICIENT: N- OCTANOL/WATER	NO DATA AVAILABLE
AUTO-IGNITION TEMPERATURE	NO DATA AVAILABLE
DECOMPOSITION TEMPERATURE	NO DATA AVAILABLE
VISCOSITY	NO DATA AVAILABLE
EXPLOSIVE PROPERTIES	NO DATA AVAILABLE
OXIDIZING PROPERTIES	NO DATA AVAILABLE

OTHER SAFETY INFORMATION

OTHER SOLVENTS SOLUBLE: ETHER, BENZENE, ETHANOL

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY	NO DATA AVAILABLE
CHEMICAL STABILITY	STABLE UNDER RECOMMENDED STORAGE CONDITIONS.
POSSIBILITY OF HAZARDOUS REACTIONS	DUST EXPLOSION POSSIBLE IF IN POWDER OR GRANULAR FORM, MIXED WITH AIR. MAY EXPLOSIVELY DECOMPOSE ON HEATING, SHOCK, FRICTION, ETC.
CONDITIONS TO AVOID	HEAT, SPARK, OPEN FLAME, STATIC DISCHARGE, SHOCK, FRICTION
INCOMPATIBLE MATERIALS	OXIDIZING AGENTS, STRONG BASES, METALS
HAZARDOUS DECOMPOSITION PRODUCTS	CARBON DIOXIDE, CARBON MONOXIDE, NITROGEN OXIDES (NOX)

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY	NO DATA AVAILABLE IPR-DOG LDLO:100 MG/KG IPR-MUS LD50:273 MG/KG IPR-RAT LD50:150 MG/KG DERMAL: NO DATA AVAILABLE NO DATA AVAILABLE
SKIN CORROSION/IRRITATION	NO DATA AVAILABLE
SERIOUS EYE DAMAGE/EYE IRRITATION	NO DATA AVAILABLE
RESPIRATORY OR SKIN SENSITISATION	NO DATA AVAILABLE
GERM CELL MUTAGENICITY	MMO-SAT 100 UG/PLATE (+/-S9)
CARCINOGENICITY	
IARC:	NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS PROBABLE, POSSIBLE OR CONFIRMED HUMAN CARCINOGEN BY IARC.
NTP:	NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A KNOWN OR ANTICIPATED CARCINOGEN BY NTP.
OSHA:	NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS ON OSHA S LIST OF REGULATED CARCINOGENS.
REPRODUCTIVE TOXICITY	NO DATA AVAILABLE
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	NO DATA AVAILABLE
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	NO DATA AVAILABLE
ASPIRATION HAZARD	NO DATA AVAILABLE
ADDITIONAL INFORMATION	RTECS: SL2900000 TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY	NO DATA AVAILABLE
PERSISTENCE AND DEGRADABILITY	NO DATA AVAILABLE
BIOACCUMULATIVE POTENTIAL	13 (BCF)
MOBILITY IN SOIL	
LOG POW:	1.75
SOIL ADSORPTION (KOC):	210
HENRY'S LAW (PAM 3/MOL):	2.8×10^{-3}
RESULTS OF PBT AND VPVB ASSESSMENT	NO DATA AVAILABLE
OTHER ADVERSE EFFECTS	NO DATA AVAILABLE

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

PRODUCT	OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS TO A LICENSED DISPOSAL COMPANY. CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL. DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER.
CONTAMINATED PACKAGING	DISPOSE OF AS UNUSED PRODUCT.

SECTION 14. TRANSPORT INFORMATION

DOT (US)	
PROPER SHIPPING NAME:	DINITROPHENOL, WETTED
UN NUMBER:	1320

CLASS: 4.1 (6.1)
PACKING GROUP: I
REPORTABLE QUANTITY: 10 POUNDS (4.54 KILOGRAMS)

IMDG

PROPER SHIPPING NAME: DINITROPHENOL, WETTED
UN NUMBER: 1320
CLASS: 4.1 (6.1)
PACKING GROUP: I
EMS-NO: F-B, S-J
MARINE POLLUTANT: YES

IATA

PROPER SHIPPING NAME: DINITROPHENOL, WETTED
UN NUMBER: 1320
CLASS: 4.1 (6.1)
PACKING GROUP: I

SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III, SECTION 302.

SARA 313 COMPONENTS THIS MATERIAL DOES NOT CONTAIN ANY CHEMICAL COMPONENTS WITH KNOWN CAS NUMBERS THAT EXCEED THE THRESHOLD (DE MINIMIS) REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313.

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

	CAS-NO.	REVISION DATE
2,5-Dinitrophenol (wetted with ca. 20% Water) (unit weight on dry weight basis)	329-71-5	

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

	CAS-NO.	REVISION DATE
2,5-Dinitrophenol (wetted with ca. 20% Water) (unit weight on dry weight basis)	329-71-5	

NEW JERSEY RIGHT TO KNOW COMPONENTS

	CAS-NO.	REVISION DATE
2,5-Dinitrophenol (wetted with ca. 20% Water) (unit weight on dry weight basis)	329-71-5	

SECTION 16. OTHER INFORMATION

FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.

H228	FLAMMABLE SOLID.
H300 + H310 + H330	FATAL IF SWALLOWED, IN CONTACT WITH SKIN OR IF INHALED.
H401	TOXIC TO AQUATIC LIFE
H411	TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

MSDS LEGEND

MW:	MOLECULAR WEIGHT
MF:	MOLECULAR FORMULA
VOC:	VOLATILE ORGANIC COMPOUNDS
ACGIH:	AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGINISTS
CAS:	CHEMICAL ABSTRACTS SERIVE REGISTRY NUMBER
OSHA:	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PEL:	PERMISSIBLE EXPOSURE LIMIT (OSHA)
TLV:	THRESHOLD LIMIT VALUE (ACGIH)

IMPORTANT:

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VERSION: 3.2

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