

SIGMA CHEMICAL CO -- 2,4-DINITROPHENOL, D7004 -- 6505-00N092728

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Product Identification  
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Product ID:2,4-DINITROPHENOL, D7004

MSDS Date:04/01/1999

FSC:6505

NIIN:00N092728

Status Code:A

MSDS Number: CJTMW

=== Responsible Party ===

Company Name:SIGMA CHEMICAL CO

Box:14508

City:ST LOUIS

State:MO

ZIP:63178

Country:US

Info Phone Num:314-771-5765

Emergency Phone Num:314-771-5765

CAGE:21076

=== Contractor Identification ===

Company Name:SIGMA CHEMICAL COMPANY

Address:3050 SPRUCE ST

Box:14508

City:ST LOUIS

State:MO

ZIP:63178

Country:US

Phone:314-771-5765

CAGE:21076

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Composition/Information on Ingredients  
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Ingred Name:2,4-DINITROPHENOL LD50: (ORAL, RAT) 30 MG/KG

CAS:51-28-5

RTECS #:SL2800000

= Wt:100.

EPA Rpt Qty:10 LBS

DOT Rpt Qty:10 LBS

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Hazards Identification  
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LD50 LC50 Mixture:SEE INGREDIENT AND TOXICOLOGICAL INFO

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:ACUTE EFFECTS: MAY BE FATAL IF INHALED, SWALLOWED OR ABSORBED THROUGH SKIN. CAUSES EYE AND SKIN IRRITATION. MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT. DISRUPTS OXIDATIVE P HOSPHORYLATION WHICH RESULTS IN INCREASED METABOLISM, CONSUMPTION OF OXYGEN AND PRODUCTION OF HEAT. EXPOSURE IS CHARACTERIZED BY SUDDEN ONSET OF FATIGUE, THIRST AND SWEATING. SYMPTOMS INCLUDE NAUSEA, VOMITING, ANOREXIA, WEAKNESS, DIZZINESS, VERTIGO, HEADACHE AND SWEATING. CHRONIC EFFECTS: DAMAGE TO THE LIVER. DERMATITIS. TARGET ORGANS: CENTRAL NERVOUS SYSTEM. EYES. LIVER, KIDNEYS. BLOOD, LUNGS.

Effects of Overexposure:SEE HEALTH HAZARDS.

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===== First Aid Measures =====

First Aid:EYES: IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. SKIN: IN CASE OF CONTACT, IMMEDIATELY FLUSH SKIN WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 M INUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. INHALATION: IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. INGESTION: IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN. WASH CONTAMINATED CLOTHING BEFORE REUSE.

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===== Fire Fighting Measures =====

Extinguishing Media:WATER SPRAY. CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.  
Fire Fighting Procedures:USE NIOSH APPROVED SCBA AND FULL PROTECTIVE EQUIPMENT TO PREVENT CONTACT WITH SKIN AND EYES. FLAMMABLE SOLID.  
Unusual Fire/Explosion Hazard:MAY EXPLODE WHEN HEATED. EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

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===== Accidental Release Measures =====

Spill Release Procedures:WEAR NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES. SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL. AVOID RAISING DUST. VENTILATE AREA AND WASH SPILL SI TE AFTER MATERIAL PICKUP IS COMPLETE.

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===== Handling and Storage =====

Handling and Storage Precautions:KEEP TIGHTLY CLOSED. LIGHT SENSITIVE. STORE IN A COOL, DRY PLACE. DRY MATERIAL IS AN EXPLOSIVE. MATERIAL

IS MOISTENED WITH 15% WATER.

Other Precautions:DO NOT BREATHE DUST. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE. READILY ABSORBED THROUGH SKIN. WASH THOROUGHLY AFTER HANDLING. HIGHLY TOXIC. IRRITANT.

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Exposure Controls/Personal Protection  
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Respiratory Protection:WEAR APPROPRIATE NIOSH APPROVED RESPIRATOR.  
Ventilation:USE ONLY IN A CHEMICAL FUME HOOD.  
Protective Gloves:CHEMICAL-RESISTANT GLOVES.  
Eye Protection:ANSI APPROVED CHEMICAL WORKERS GOGGLES .  
Other Protective Equipment:ANSI APPROVED EYE WASH AND DELUGE SHOWER .  
OTHER PROTECTIVE CLOTHING.  
Supplemental Safety and Health

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Physical/Chemical Properties  
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Melt/Freeze Pt:>106.C, 222.8F  
M.P/F.P Text:106-108C  
Vapor Density:6.35  
Appearance and Odor:YELLOW POWDER.

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Stability and Reactivity Data  
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STRONG OXIDIZING AGENTS. STRONG BASES. ACID CHLORIDES. ACID ANHYDRIDES.  
SENSITIVE TO LIGHT.  
Hazardous Decomposition Products:TOXIC FUMES OF CARBON MONOXIDE, CARBON DIOXIDE, NITROGEN OXIDES.

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Toxicological Information  
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Toxicological Information:RTECS 3: SL2800000 PHENOL, 2,4-DINITRO-.  
IRRIT DATA: SKN-RBT 300 MG/4W-I MLD JIHTAB 30,10,1948. TOXICITY  
DATA: ORL-HMN LDLO: 36 MG/KG JAMAAP 101,1333,1933. ORL-RAT LD50: 30  
MG/KG TXAPA9 21,315,1972. I PR-RAT LD50: 20 MG/KG JPPMAB  
17,814,1965. SCU-RAT LD50: 25 MG/KG JPETAB 49,187,1933. IVN-RAT  
LD50: 72 MG/KG TXAPA9 6,232,1964. ORL-MUS LD50: 45 MG/KG FATOAO  
28,493,1965. IPR-MUS LD50: 26 MG/KG BCPCA6 18,1389,1969. SCU-MUS  
LD50: 58 MG/KG TXAPA9 6,232,1964. IVN-MUS LD50: 56 MG/KG TXAPA9  
6,232,1964. ORL-CAT DL50: 75 MG/KG 85 GMAT -,62,1982. ORL-RBT DL50:  
30 MG/KG FATOAO 28,493,1965. ORL-GPG LD50: 81 MG/KG FATOAO  
(ECOLOGICAL INFO)

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Ecological Information  
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Ecological:DATA NOT YET AVAILABLE.--TOXICOLOGICAL INFO: 28,493,1965.  
IPR-GPG LD50: 28 MG/KG ARZNAD 8,381,1958. IMS-PGN LD50: 6500 UG/KG  
JPETAB 53,58,1935. UNR-MAM LD50: 40 MG/KG 30ZDA9 -,97,1971. ORL-BWD  
LD50: 1 3 MG/KG TXAPA9 21,315,1972. TARGET ORGAN DATA: BEHAVIORAL  
(ALTERED SLEEP TIME; CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD;  
CHANGE IN MOTOR ACTIVITY; ATAXIA; TETANY; COMA). CARDIAC (CHANGE IN  
RATE). LU NGS, THORAX OR RESPIRATION (RESPIRATORY STIMULATION).  
EFFECTS ON EMBRYO OR FETUS (FETOTOXICITY). NUTRITIONAL AND GROSS  
METABOLIC (BODY TEMPERATURE INCREASE). (TRANSPORT INFO)

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Disposal Considerations  
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Waste Disposal Methods:DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE  
SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN  
AFTERBURNER AND SCRUBBER. OBSERVE ALL FEDERAL, STATE AND LOCAL  
ENVIRONMENTAL REGULATIONS.

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MSDS Transport Information  
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Transport Information:CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION  
INFORMATION. --ECOLOGICAL INFO: ONLY SELECTED REGISTRY OF TOXIC  
EFFECTS OF CHEMICAL SUBSTANCES (RTECS) DATA IS PRESENTED HERE. SEE  
ACTUAL ENTRY IN RTE CS FOR COMPLETE INFO.

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Regulatory Information  
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SARA Title III Information:THIS PRODUCT IS SUBJECT TO SARA SECTION 313  
REPORTING REQUIREMENTS.

Federal Regulatory Information:EUROPEAN INFORMATION - HIGHLY FLAMMABLE.  
TOXIC. R 23/24/25 TOXIC BY INHALATION, IN CONTACT W/SKIN & IF  
SWALLOWED. R 33 DANGER OF CUMULATIVE EFFECTS. S 28 AFTER CONTACT  
W/SKIN, WASH IMMEDIATELY W/PLENT Y OF WATER. S 37 WEAR SUITABLE  
GLOVES. S 45 IN CASE OF ACCIDENT OF IF YOU FEEL UNWELL, SEE MEDICAL  
ADVICE IMMEDIATELY (SHOW LABEL WHERE POSSIBLE). REVIEWS, STANDARDS  
& REGULATIONS: OEL=MAK. EPA FIFRA 1988 PESTICIDE SUBJECT TO  
REGISTRATION OR RE-REGISTRATION FEREAC 54, 7740, 1989. NOHS 1974:  
HZD 2711 0; NIS 1; TNF 19; NOS 1; TNE 38. NOES 1983: HZD 27110; NIS  
1; TNF 7; NOS 3; TNE 130; TFE 14. (STATE REG INFO)

State Regulatory Information:N/P. --FED REG INFO: 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, JUNE 1998.

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Other Information  
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