



POST OFFICE BOX 14508
SAINT LOUIS, MISSOURI 63178, USA

FAX: USA/CANADA 1-800-325-5052 OUTSIDE USA/CANADA 314-771-5757
TELEX: 910-761-0593 or 434475 ANSWERBACK "SIG OK COLLECT"

TELEPHONE: USA/CANADA 1-800-325-3010
OUTSIDE USA/CANADA call COLLECT 314-771-5750

THE WORLD'S FOREMOST MANUFACTURER OF RESEARCH
BIOCHEMICALS AND DIAGNOSTIC REAGENTS

EMERGENCY PHONE 1-314-771-5765

DATE 06/04/96
CUST#: 2-097-94804
PO#: UNF-64248

ATTN: SAFETY DIRECTOR
UNIVERSITY OF WISCONSIN
WHITEWATER
ACCOUNTS PAYABLE
PO BOX 296
WHITEWATER WI 53190-0296

MATERIAL SAFETY DATA SHEET PAGE 1

THIS MSDS IS FOR A COMPONENT OF CATALOG #: 505-2

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: D2630
NAME: 2-4-DINITROPHENYLHYDRAZINE

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: 119-26-6
MF: C6H6N4O4
EC NO: 204-309-3

SECTION 3. HAZARDS IDENTIFICATION

LABEL PRECAUTIONARY STATEMENTS

FLAMMABLE (USA DEFINITION)
HIGHLY FLAMMABLE (EUROPEAN DEFINITION)
HARMFUL
HEATING MAY CAUSE AN EXPLOSION.
HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
MAY CAUSE SENSITIZATION BY SKIN CONTACT.
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
POSSIBLE MUTAGEN.
TARGET ORGAN(S):
BLOOD
KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.

SECTION 4. FIRST-AID MEASURES

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF
WATER FOR AT LEAST 15 MINUTES.
IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS
AMOUNTS OF WATER.
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL
RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
CALL A PHYSICIAN.
DISCARD CONTAMINATED CLOTHING AND SHOES.

SECTION 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

WATER SPRAY.
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.
FLAMMABLE SOLID.

CONTINUED ON NEXT PAGE

BRANCH OFFICES AT:

Table listing branch offices for SIGMA-ALDRICH in various countries including USA, Canada, Europe, and Asia.



POST OFFICE BOX 14508
SAINT LOUIS, MISSOURI 63178, USA

FAX: USA/CANADA 1-800-325-5052 OUTSIDE USA/CANADA 314-771-5757
TELEX: 910-761-0593 or 434475 ANSWERBACK "SIG OK COLLECT"

TELEPHONE: USA/CANADA 1-800-325-3010
OUTSIDE USA/CANADA call COLLECT 314-771-5750

THE WORLD'S FOREMOST MANUFACTURER OF RESEARCH
BIOCHEMICALS AND DIAGNOSTIC REAGENTS

CUST#: 2-097-94804
PO#: UNF-64248

MATERIAL SAFETY DATA SHEET PAGE 2

THIS MSDS IS FOR A COMPONENT OF CATALOG #: 505-2

CATALOG #: D2630
NAME: 2-4-DINITROPHENYLHYDRAZINE

UNUSUAL FIRE AND EXPLOSION HAZARDS
MAY EXPLODE WHEN HEATED.

SECTION 6. ACCIDENTAL RELEASE MEASURES

EVACUATE AREA.
SHUT OFF ALL SOURCES OF IGNITION.
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.
SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.
AVOID RAISING DUST.

SECTION 7. HANDLING AND STORAGE

REFER TO SECTION 8.

ADDITIONAL INFORMATION

WARNING: THIS MATERIAL IS CLASSIFIED AS AN EXPLOSIVE WHEN DRY. FIRE FIGHTING SHOULD BE DONE FROM A REMOTE POSITION. MOIST SOLID CONTAINING 30% WATER. UNSTABLE ABOVE 160 DEGREES C.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
USE ONLY IN A CHEMICAL FUME HOOD.
SAFETY SHOWER AND EYE BATH.
USE NONSPARKING TOOLS.
DO NOT BREATHE DUST.
AVOID PROLONGED OR REPEATED EXPOSURE.
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
WASH THOROUGHLY AFTER HANDLING.
POSSIBLE MUTAGEN.
SENSITIZER.
HARMFUL SOLID.
KEEP TIGHTLY CLOSED.
KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME.
STORE IN A COOL DRY PLACE.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR
MOIST ORANGE TO BRICK-RED POWDER

SECTION 10. STABILITY AND REACTIVITY

INCOMPATIBILITIES
OXIDIZING AGENTS
HEAT

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

CONTINUED ON NEXT PAGE

BRANCH OFFICES AT:

Table listing branch offices for SIGMA-ALDRICH in various countries including USA, Canada, Europe, and Asia.



POST OFFICE BOX 14508
SAINT LOUIS, MISSOURI 63178, USA

FAX: USA/CANADA 1-800-325-5052 OUTSIDE USA/CANADA 314-771-5757
TELEX: 910-761-0593 or 434475 ANSWERBACK "SIG OK COLLECT"

TELEPHONE: USA/CANADA 1-800-325-3010
OUTSIDE USA/CANADA call COLLECT 314-771-5750

THE WORLD'S FOREMOST MANUFACTURER OF RESEARCH
BIOCHEMICALS AND DIAGNOSTIC REAGENTS

CUST#: 2-097-94804
PO#: UNF-64248

MATERIAL SAFETY DATA SHEET PAGE 3

THIS MSDS IS FOR A COMPONENT OF CATALOG #: 505-2

CATALOG #: D2630
NAME: 2-4-DINITROPHENYLHYDRAZINE

THERMAL DECOMPOSITION MAY PRODUCE CARBON MONOXIDE, CARBON DIOXIDE,
AND NITROGEN OXIDES.

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS

HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.
CAUSES EYE AND SKIN IRRITATION.
MAY CAUSE ALLERGIC SKIN REACTION.
ABSORPTION INTO THE BODY LEADS TO THE FORMATION OF METHEMOGLOBIN
WHICH IN SUFFICIENT CONCENTRATION CAUSES CYANOSIS. ONSET MAY BE
DELAYED 2 TO 4 HOURS OR LONGER.

CHRONIC EFFECTS

LABORATORY EXPERIMENTS HAVE SHOWN MUTAGENIC EFFECTS.
TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND
TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

RTECS #: MV3325000

SECTION 12. ECOLOGICAL INFORMATION

DATA NOT YET AVAILABLE.

SECTION 13. DISPOSAL CONSIDERATIONS

CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF
THIS MATERIAL.
OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. TRANSPORT INFORMATION

CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. REGULATORY INFORMATION

EUROPEAN INFORMATION

HIGHLY FLAMMABLE
HARMFUL
R 5
HEATING MAY CAUSE AN EXPLOSION.
R 20/21/22
HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
R 43
MAY CAUSE SENSITIZATION BY SKIN CONTACT.
R 36/37/38
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
HIGHLY FLAMMABLE
S 16
KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.

SECTION 16. OTHER INFORMATION

CONTINUED ON NEXT PAGE

BRANCH OFFICES AT:

Table listing branch offices for SIGMA-ALDRICH in various countries including USA, Canada, Europe, and Asia.

THE WORLD'S FOREMOST MANUFACTURER OF RESEARCH
BIOCHEMICALS AND DIAGNOSTIC REAGENTS

CUST#: 2-097-94804
PO#: UNF-64248

M A T E R I A L S A F E T Y D A T A S H E E T P A G E 4

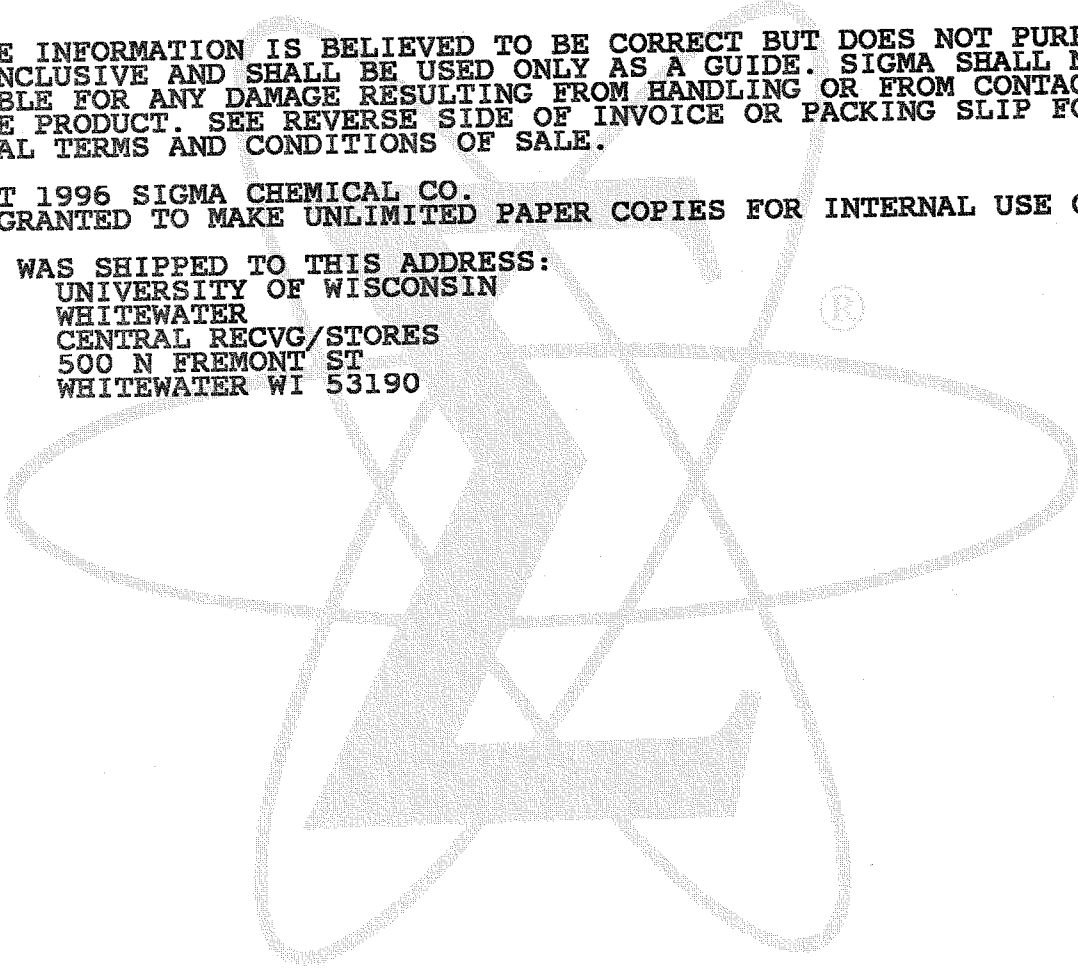
THIS MSDS IS FOR A COMPONENT OF CATALOG #: 505-2

CATALOG #: D2630
NAME: 2-4-DINITROPHENYLHYDRAZINE

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SIGMA SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. SEE REVERSE SIDE OF INVOICE OR PACKING SLIP FOR ADDITIONAL TERMS AND CONDITIONS OF SALE.

COPYRIGHT 1996 SIGMA CHEMICAL CO.
LICENSE GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.

MATERIAL WAS SHIPPED TO THIS ADDRESS:
UNIVERSITY OF WISCONSIN
WHITEWATER
CENTRAL RECVG/STORES
500 N FREMONT ST
WHITEWATER WI 53190



BRANCH OFFICES AT:

SIGMA-ALDRICH VERTRIEBS GmbH Grünwalder Weg 30 82041 Deisenhofen Deutschland	SIGMA-ALDRICH QUIMICA, S.A. Apt. Correos 161 28100 Alcobendas (Madrid) España	SIGMA-ALDRICH s.r.o. Krizikova 27 186 00 Praha 8 Česká Republika	SIGMA CHEMIE K. Cardijnplein, 8 B-2890 Bornem België/Belgique	SIGMA CHEMIE P.O. Box 260 CH-9470 Buchs Switzerland	SIGMA-ALDRICH QUIMICA, S.A. de C.V. Avenida Picacho Ajusco No. 130-303 Fraccionamiento Jardines en la Montaña 14210 Mexico, D.F.	SIGMA-ALDRICH CORPORATION 10448 New Delhi Location B-4/158, Satdarjung Enclave New Delhi - 110 029 India
SIGMA CHIMIE L'ISLE D'Abeau Chesnes B.P. 701 35297 St. Quentin Fallavier Cedex	SIGMA-ALDRICH S.r.l. Via Gallarate 154 20151 Milano Italia	SIGMA-ALDRICH PTY., LIMITED Unit 2, 10 Anella Ave. Castle Hill NSW 2154 Australia	SIGMA-ALDRICH CHEMICAL REPRESENTACOES LTDA Rua Sabará, 566 - Corf. 53 01239-010 Sao Paulo, SP Brasil	SIGMA CHEMICAL CO. LTD. Fancy Road, Poole Dorset BH17 7NH England	SIGMA-ALDRICH Kft Teréz krt. 39 1067 Budapest Hungary	SIGMA-ALDRICH 206 Samhan Campus Building 17-3 Yoido-dong Yungdeungpo-ku Seoul South Korea