

MALLINCKRODT BAKER, INC. (FORMERLY J.T. BAKER INC) -- SODIUM DICHROMATE (SEE SUPPL)  
-- 6810-00-262-8566

===== Product Identification =====

Product ID:SODIUM DICHROMATE (SEE SUPPL)

MSDS Date:10/15/1998

FSC:6810

NIIN:00-262-8566

Status Code:A

MSDS Number: CLQFW

=== Responsible Party ===

Company Name:MALLINCKRODT BAKER, INC. (FORMERLY J.T. BAKER INC)

Address:222 RED SCHOOL LANE

City:PHILLIPSBURG

S

tate:NJ

ZIP:08865-2219

Country:US

Info Phone Num:800-582-2537

Emergency Phone Num:908-859-2151

Resp. Party Other MSDS Num.:S3506

Chemtrec Ind/Phone:(800)424-9300

CAGE:70829

=== Contractor Identification ===

Company Name:MALLINCKRODT BAKER, INC.

Address:222 RED SCHOOL LANE

Box:City:PHILLIPSBURG

State:NJ

ZIP:08865

Country:US

Phone:800-582-2537

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===== Composition/Information on Ingredients =====

Ingred Name:SODIUM DICHROMATE

CAS:10588-01-9

RTECS #:HX7700000

Mininum %

Wt:99.  
Maxumum % Wt:100.  
OSHA PEL:SEE TABLE Z-2  
ACGIH TLV:0.05 MG/M3  
EPA Rpt Qty:10 LBS  
DOT Rpt Qty:10 LBS

===== Hazards Identification =====

LD50 LC50 Mixture:ORAL RAT LD50: 50 MG/KG  
Reports of Carcinogenicity:NTP:YES IARC:YES  
Health Hazards Acute and Chronic:INHALATION: CORROSIVE ! EXTREMELY  
DESTRUCTIVE TO TISSUES OF MUCOUS MEMBRANES AND UPPER RESPIRATORY  
TRACT. MAY CAUSE ULCERATION AND PERFORATION OF NASAL SEPTUM.  
INGESTION: CORROSIVE ! SWALL  
OWING CAN CA USE SEVERE BURNS OF MOUTH,  
THROAT, AND STOMACH, LEADING TO DEATH.CAN CAUSE LIVER DAMAGE, ACUTE  
RENAL FAILURE. SKIN CONTACT: CORROSIVE ! DUSTS AND STRONG SOLUTIONS  
MAY CAUSE SEVERE IRRITATION. CONTACT WITH BROKEN SKIN MAY CAUSE  
ULCERS (CHROME SORES) AND ABSORPTION, WHICH MAY CAUSE SYSTEMIC  
POISONING, AFFECTING KIDNEYS AND LIVER FUNCTIONS. MAY CAUSE SKIN  
SENSITIZATION. EYE CONTACT: CORROSIVE ! MAY C AUSE CORNEAL INJURY  
OR BLINDNESS.

Explanation of Carcinog  
enicity:PRODUCT KNOWN TO BE A CARCINOGEN. SODIUM  
DICHROMATE (10588-01-9); KNOWN NTP CARCINOGEN. IARC CATEGORY: 1  
("THE AGENT IS CARCINOGENIC TO HUMANS". DEGREE OF EVIDENCE:  
"INADEQUATE EVIDENCE").

Effects of Overexposure:INHALATION: SORE THROAT, COUGHING, SHORTNESS OF  
BREATH, LABORED BREATHING, PULMONARY SENSITIZATION OR ALLERGIC  
ASTHMA, PULMONARY EDEMA. INGESTION: BURNS OF MOUTH, THROAT,  
STOMACH, SORE THROAT, VOMITIN G, DIARRHEA, VIOLENT GASTROENTERITIS,  
PERIPHERAL V

ASCULAR COLLAPSE, DIZZINESS, INTENSE THIRST, MUSCLE  
CRAMPS, SHOCK COMA, ABNORMAL BLEEDING, FEVER, SKIN: REDNESS, PAIN,  
SEVERE BURN, IRRITATION, ULCER S (CHROME SORES) AND ABSORPTION,  
SYSTEMIC POISONING, AFFECTING KIDNEY AND LIVER FUNCTIONS, SKIN  
SENSITIZATION. EYE CONTACT: BLURRED VISION, REDNESS, PAIN, AND  
SEVERE TISSUE BURNS. MAY CAUSE CORNEAL IN JURY OR BLINDNESS.

Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING SKIN  
DISORDERS, ASTHMA, ALLERGIES OR KNOWN

SENSITIZATION TO CHROMIC ACID  
OR CHROMATES MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THIS  
MATERIAL.

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

First Aid:INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE  
ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET  
MEDICAL ATTENTION. INGESTION: DO NOT INDUCE VOMITING. GIVE LARGE  
QUANTITIES OF WATER. NEVER GIVE ANYTHING BY MOUTH TO AN  
UNCONSCIOUS PERSON. GET MEDICAL ATTENTION. SKIN CO  
NTACT: FLUSH  
WITH WATER FOR 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND  
SHOES. GET MEDICAL ATTE NTION. WASH CLOTHING BEFORE REUSE.  
THOROUGHLY CLEAN SHOES BEFORE REUSE. EYE CONTACT: FLUSH WITH WATER  
FOR 15 MINUTES, LIFTING LOWER AND UPPER EYELIDS OCASIONALLY. GET  
MEDICAL ATTENTION.

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

Flash Point:NOT COMBUSTIBLE  
Extinguishing Media:USE MEANS SUITABLE FOR EXTINGUISHING SURROUNDING  
FIRE. USE WATER  
SPRAY TO KEEP FIRE EXPOSED CONTAINERS COOL.  
Fire Fighting Procedures:IN THE EVENT OF A FIRE, WEAR FULL PROTECTIVE  
CLOTHING AND NIOSH APPROVED SELF CONTAINED BREATHING APPARATUS WITH  
FULL FACEPIECE OPERATED IN PRESSURE DEMAND OR OTHER POSITIVE  
PRESSURE MODE. PRODUCT IS NOT COMBUSTIBLE, IS A STRONG OXIDIZER.  
ITS HEAT OF REACTION WITH REDUCING AGENTS OR COMBUSTIBLES MAY CAUSE  
IGNITION.  
Unusual Fire/Explosion Hazard:STRONG OXIDANTS MAY EXPLODE WHEN SHOCKED,  
OR IF EXPOSED TO  
HEAT, FLAME, OR FRICTION. ALSO MAY REACT AS  
INITIATION SOURCE FOR DUST OR VAPOR EXPLOSIONS.

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

Spill Release Procedures:VENTILATE AREA OF LEAK OR SPILL. WEAR  
APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT. SWEEP UP AND  
CONTAINERIZE FOR RECLAMATION OR DISPOSAL. VACUUMING OR WET SWEEPING  
MAY BE USED TO AVOID DUST DISPERSAL. US REGULATIONS (CERCLA)  
REQUIRE REPORTING SPILLS AND RELEASES TO SOIL, WATER AND AIR IN

EXCESS OF REPORTABLE QUANTITIES. TOLL FREE NUMBER FOR US COAST  
GUARD NATIONAL RESPONSE CENTER IS (800)424-8802.

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

Handling and Storage Precautions:PROTECT AGAINST PHYSICAL DAMAGE. STORE  
IN DRY LOCATION AWAY FROM COMBUSTIBLE, ORGANIC, OR OTHER OXIDIZABLE  
MATERIAL. AVOID STORAGE ON WOOD FLOORS. REMOVE AND DISPOSE OF ANY  
SPILLED DICHROMATES; DO NOT RETURN TO ORIGINAL CONTAINERS. WEAR  
SPECIAL PROTECTIVE EQUIPMENT

FOR MAINTENANCE (CONTD. SEE BELOW)

Other Precautions:(CONTD. FROM ABOVE) BREAK-IN OR WHERE EXPOSURE MAY  
EXCEED ESTABLISHED EXPOSURE LEVELS. WASH HANDS, FACE, FOREARMS AND  
NECK WHEN EXITING RESTRICTED AREAS. SHOWER, DISPOSE OF OUTER  
CLOTHING, CHANGE TO CLEAN GARMENTS AT END OF DAY. AVOID  
CROSS-CONTAMINATION OF STREET CLOTHES.WASH HANDS BEFORE (CONTD.  
SEE "OTHER INFO")

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===== Exposure Controls/Personal Protection =====

Respiratory Protection:IF THE EXPOSURE LIMIT IS EXCEEDED, A FULL-FACE  
PIECE DUST/MIST RESPIRATOR MAY BE WORN UP TO 50 TIMES EXPOSURE  
LIMIT. FOR EMERGENCIES OR INSTANCES WHERE EXPOSURE LEVELS ARE NOT  
KNOWN, USE A FULL-FACE PIECE POSITIVE-PRESSURE, AIR-SUPPLIED  
RESPIRATOR. WARNING ! AIR-PURIFYING RESPIRATORS DO NOT PROTECT  
WORKERS IN OXYGEN-DEFICIENT ATMOSPHERES.

Ventilation:LOCAL AND/OR GENERAL EXHAUST IS RECOMMENDED TO KEEP  
EMPLOYEE EXPOSURES BELOW LIMITS.LOCAL EXHAUST IS GENERALLY  
PREFERRED.

Protective

Gloves:WEAR IMPERVIOUS GLOVES TO PREVENT SKIN CONTACT.

Eye Protection:USE CHEMICAL SAFETY GOGGLES AND/OR FULL FACE SHIELD FOR  
DUSTING AND SPLASHING.

Other Protective Equipment:WEAR IMPERVIOUS CLOTHING, INCLUDING BOOTS,  
GLOVES, LAB COAT, APRON, COVERALLS, TOPREVENT SKIN CONTACT. PROVIDE  
QUICK DRENCH FACILITIES AND EYE WASH FOUNTAIN IN WORK AREA.

Work Hygienic Practices:SHOWER, DISPOSE OF OUTER CLOTHING, CHANGE TO  
CLEAN GARMENTS AT THE END OF THE DAY. AVOID CROSS-CONTAMINATION OF

OF

STREET CLOTHES. WASH HANDS BEFORE EATING, DO NOT DRINK, EAT OR  
SMOKE IN WORKPLACE.

Supplemental Safety and Health

CONTD FROM PRODUCT ID: PRODUCT CODES: BAKER: 3672, 3674. MALLINCKRODT:  
7420, 7424. SYNONYMS: SODIUM DICHROMATE; SODIUM BICHROMATE  
DIHYDRATE; CHROMIC ACID; DISODIUM SALT, DIHYDRATE; SODIUM  
DICHROMATE, DIHYDRATE.

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===== Physical/Chemical Properties =====

HCC:D2

Boiling Pt:=400.C, 752.F

Melt/Freeze Pt:=357.C, 674.6F

Vapor Pres:0 MM HG,

@ 20C

Vapor Density:10 (AIR=1)

Spec Gravity:2.35 @ 25C

pH:3.5 (1% SOLN)

Evaporation Rate & Reference:NO INFORMATION FOUND.

Solubility in Water:SOLUBLE 73% IN WATER.

Appearance and Odor:ORANGE-RED CRYSTALS OR GRANULES; ODORLESS.

Percent Volatiles by Volume:0

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

HYDRAZINE, ACETIC ANHYDRIDE, ETHANOL, TRINITROTOLUENE, HYDROXYLAMINE,  
STRONG ACIDS, OXIDIZABLE MATERIALS ESPECIALLY IN P  
RESENCE OF STRONG

ACID SOLUTIONS. COMBUSTIBLE, ORGANIC, OTHER READILY OXIDIZABLE  
MATERIAL (PAPER, WOOD,

Stability Condition to Avoid:HEAT, INCOMPATIBLES. STABLE UNDER ORDINARY  
CONDITIONS OF USE AND STORAGE.

Hazardous Decomposition Products:BURNING MAY PRODUCE CHROME OXIDES.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

===== Toxicological Information =====

Toxicological Information:HEALTH: CHRONIC EXPOSURE CAN CAUSE ULCERATION  
AND PERFORATION O

F NASAL SEPTUM, RESPIRATORY IRRITATION, LIVER AND  
KIDNEY DAMAGE, ULCERATION OF SKIN. ULCERATIONS AT FIRST MAY BE  
PAINLESS, MAY PENETRATE TO BONE PRODUCING "CHROME HOLES". KNOWN TO  
BE A HUMAN CARCINOGEN. J.T. BAKER SAF-T-DATA RATINGS: HEALTH: 4,  
EXTREME (CANCER CAUSING); FLAMMABILITY: 0, NONE; REACTIVITY: 3,  
SEVERE (OXIDIZER); CONTACT: 3, SEVERE (CORROSIVE); LAB PROTECTIVE  
EQUIP.: GOGGLES AND SHIELD; LAB COAT AND APRON; VENT HOOD; PROPER  
GLOVES. ORAL, RAT, LD50: 50 M

G/KG. INVESTIGATED AS A TUMORIGEN,  
MUTAGEN, REPRODUCTIVE EFFECTOR.

===== Ecological Information =====

Ecological:ENVIRONMENTAL FATE: WHEN RELEASED INTO SOIL, PRODUCT MAY  
LEACH INTO GROUNDWATER. WHEN RELEASED INTO WATER, PRODUCT IS NOT  
EXPECTED TO EVAPORATE SIGNIFICANTLY. THIS MATERIAL MAY  
BIOACCUMULATE TO SOME E XTENT. WHEN RELEASED INTO THE AIR, PRODUCT  
MAY BE REMOVED FROM THE ATMOSPHERE TO A MODERATE EXTENT BY WET  
DEPOSITION. ENVIRONM

ENTAL TOXICITY: THIS PRODUCT IS EXPECTED TO BE  
TOXIC TO AQUATIC LIFE.

===== Disposal Considerations =====

Waste Disposal Methods:WHAT IS NOT SAVED FOR RECOVERY, RECYCLING,  
HANDLE AS HAZARDOUS WASTE. SEND TO RCRA APPROVED WASTE FACILITY.  
PROCESSING, USE, CONTAMINATION MAY CHANGE WASTE MANAGEMENT  
OPTIONS. STATE AND LOCAL REGULATIONS MAY DIFFER FROM FEDERAL  
REGULATIONS. DISPOSE OF CONTAINER AND UNUSED CONTENTS IN ACCORDANCE  
WITH FEDERAL,  
STATE, AND LOCAL REQUIREMENTS.

===== MSDS Transport Information =====

Transport Information:DOMESTIC (LAND, D.O.T.): PROPER SHIPPING NAME:  
RQ, OXIDIZING SOLID, CORROSIVE, N.O.S. (SODIUM DICHROMATE); HAZARD  
CLASS: 5.1, 8, 6.1; UN 3085; PKG: I I; INFORMATION REPORTED FOR  
PRODUCT/ SIZE: 100 LBS . INTERNATIONAL (WATER, I.M.O.): PROPER  
SHIPPING NAME: OXIDIZING SOLID, CORROSIVE, N.O.S. (SODIUM  
DICHROMATE); CLASS: 5.1, 8, 6.1; UN 3083; PKG: I I; INFO  
RMATION  
REPORTED FOR PRODUCT/SIZE: 100 LBS. SO DIUM DICHROMATE RQ= 10  
POUNDS.

===== Regulatory Information =====

SARA Title III Information:FEDERAL, STATE AND INTERNATIONAL REGULATIONS  
- PART 1: SODIUM DICHROMATE (10588-01-9): SARA 302: NO; TPQ: NO.  
SARA 313: LIST: NO; CHEMICAL CATG: CHROMIUM COM. -PART 2: CERCLA:  
10; RCRA 261.33: NO; TSC A 8(D): NO. SARA 311/312: ACUTE: YES;  
CHRONIC: YES; FIRE: YES; PRESSURE: NO; REACTIVITY: NO; (PURE  
/  
SOLID).

Federal Regulatory Information:CHEMICAL INVENTORY STATUS - PART1:  
SODIUM DICHROMATE (10588-01-9): TSCA: YES; EC: YES; JAPAN: YES;  
AUSTRALIA: YES. - PART 2: KOREA: YES; CANADA DSL: YES; CANADA NDSL:  
NO; PHIL.: YES. CHEMICAL WEAPONS CONVENTION: NO; TSCA 12(B): YES;  
CDTA: NO.

State Regulatory Information:WARNING ! THIS PRODUCT CONTAINS A CHEMICAL  
KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

===== Other Information =====

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