

J.T.BAKER INC. 222 RED SCHOOL LANE, PHILLIPSBURG, NJ 08865
M A T E R I A L S A F E T Y D A T A S H E E T
24-HOUR EMERGENCY TELEPHONE -- (201) 859-2151
CHEMTREC # (800) 424-9300 -- NATIONAL RESPONSE CENTER # (800) 424-8802

Z7091 <02
EFFECTIVE: 05/01/89

QUATERNARY AMINE BONDED SILICA GEL (COLUMN)

PAGE: 1
ISSUED: 05/17/89

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SECTION I - PRODUCT IDENTIFICATION
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PRODUCT NAME: QUATERNARY AMINE BONDED SILICA GEL (COLUMN) *Chen*
COMMON SYNONYMS: N/A
CHEMICAL FAMILY: CHROMATOGRAPHY PRODUCTS
FORMULA: N/A
FORMULA WT.: N/A
CAS NO.: N/A
NIOSH/RTECS NO.: N/A
PRODUCT USE: LABORATORY REAGENT
PRODUCT CODES: 7091,7100

=====
PRECAUTIONARY LABELING
=====

BAKER SAF-T-DATA* SYSTEM

HEALTH	-	2	MODERATE
FLAMMABILITY	-	0	NONE
REACTIVITY	-	0	NONE
CONTACT	-	1	SLIGHT

LABORATORY PROTECTIVE EQUIPMENT

GOGGLES; LAB COAT

U.S. PRECAUTIONARY LABELING

CAUTION

HARMFUL IF INHALED. MAY CAUSE IRRITATION.
AVOID CONTACT WITH EYES, SKIN, CLOTHING. DO NOT BREATHE DUST. KEEP IN TIGHTLY
CLOSED CONTAINER. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER
HANDLING.

INTERNATIONAL LABELING

AVOID CONTACT WITH EYES. AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH
PLENTY OF WATER. KEEP CONTAINER TIGHTLY CLOSED.

SAF-T-DATA* STORAGE COLOR CODE: ORANGE (GENERAL STORAGE)

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SECTION II - COMPONENTS
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COMPONENT	CAS NO.	WEIGHT %	OSHA/PEL	ACGIH/TLV
QUATERNARYAMINE BONDED SILICA GEL	N/A	90-100	N/E	N/E

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SECTION III - PHYSICAL DATA
=====

BOILING POINT: N/A VAPOR PRESSURE (MMHG): N/A
MELTING POINT: N/A VAPOR DENSITY (AIR=1): N/A
SPECIFIC GRAVITY: N/A EVAPORATION RATE: N/A
(H2O=1)
SOLUBILITY(H2O): NEGLIGIBLE (<0.1%) % VOLATILES BY VOLUME: 0
(21 C)

PH: N/A
ODOR THRESHOLD (P.P.M.): N/A PHYSICAL STATE: SOLID
COEFFICIENT WATER/OIL DISTRIBUTION: N/A

APPEARANCE & ODOR: PREPACKED METALLIC OR PLASTIC COLUMN. ODORLESS.

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA
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FLASH POINT (CLOSED CUP): N/A
AUTOIGNITION TEMPERATURE: N/A
FLAMMABLE LIMITS: UPPER - N/A LOWER - N/A
FIRE EXTINGUISHING MEDIA
USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

SPECIAL FIRE-FIGHTING PROCEDURES
FIREFIGHTERS SHOULD WEAR PROPER PROTECTIVE EQUIPMENT AND SELF-CONTAINED
BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN POSITIVE PRESSURE
MODE.

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA (CONTINUED)
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UNUSUAL FIRE & EXPLOSION HAZARDS
NONE IDENTIFIED.

TOXIC GASES PRODUCED
OXIDES OF NITROGEN, CARBON MONOXIDE, CARBON DIOXIDE

EXPLOSION DATA-SENSITIVITY TO MECHANICAL IMPACT
NONE IDENTIFIED.

EXPLOSION DATA-SENSITIVITY TO STATIC DISCHARGE
NONE IDENTIFIED.

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SECTION V - HEALTH HAZARD DATA
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THE MOST SEVERE HEALTH HAZARDS ASSOCIATED WITH SILICA GEL ARE LISTED SINCE THE EXACT FORM OF SILICA CONTAINED IN THIS PRODUCT IS UNKNOWN.

THRESHOLD LIMIT VALUE (TLV/TWA): 10 MG/M3

SHORT-TERM EXPOSURE LIMIT (STEL): NOT ESTABLISHED

PERMISSIBLE EXPOSURE LIMIT (PEL): NOT ESTABLISHED

TOXICITY OF COMPONENTS

NO INFORMATION IS AVAILABLE
CARCINOGENICITY: NTP: NO IARC: NO Z LIST: NO OSHA REG: NO

CARCINOGENICITY
NONE IDENTIFIED.

REPRODUCTIVE EFFECTS
NONE IDENTIFIED.

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SECTION V - HEALTH HAZARD DATA (CONTINUED)
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EFFECTS OF OVEREXPOSURE

INHALATION: IRRITATION OF UPPER RESPIRATORY TRACT, EXCESSIVE
INHALATION MAY CAUSE LUNG DAMAGE, PNEUMOCONIOSIS,
SILICOSIS, CYANOSIS, COUGHING, DIFFICULT BREATHING

SKIN CONTACT: IRRITATION

EYE CONTACT: IRRITATION

SKIN ABSORPTION: NONE IDENTIFIED

INGESTION: NONE IDENTIFIED

CHRONIC EFFECTS: LUNG DAMAGE, CONGESTION OF HEART, LIVER, KIDNEYS, AND
SPLEEN, ALTER BLOOD COMPOSITION

TARGET ORGANS
LUNGS, RESPIRATORY SYSTEM

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE
RESPIRATORY SYSTEM DISEASE

PRIMARY ROUTES OF ENTRY
INHALATION, SKIN CONTACT, EYE CONTACT

EMERGENCY AND FIRST AID PROCEDURES

INGESTION: IF SWALLOWED AND THE PERSON IS CONSCIOUS, IMMEDIATELY GIVE
LARGE AMOUNTS OF WATER. GET MEDICAL ATTENTION.

INHALATION: IF A PERSON BREATHES IN LARGE AMOUNTS, MOVE THE EXPOSED
PERSON TO FRESH AIR.

SKIN CONTACT: IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH PLENTY OF
SOAP AND WATER FOR AT LEAST 15 MINUTES.

EYE CONTACT: IN CASE OF EYE CONTACT, IMMEDIATELY FLUSH WITH PLENTY OF
WATER FOR AT LEAST 15 MINUTES.

NOTE: THE HAZARD INFORMATION LISTED IS FOR THE CHROMATOGRAPHY PACKING
CONTAINED WITHIN THE PRE-PACKED CHROMATOGRAPHY COLUMN.

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SECTION V - HEALTH HAZARD DATA (CONTINUED)
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SARA/TITLE III HAZARD CATEGORIES AND LISTS

ACUTE: YES CHRONIC: YES FLAMMABILITY: NO PRESSURE: NO REACTIVITY: NO

EXTREMELY HAZARDOUS SUBSTANCE: NO
CERCLA HAZARDOUS SUBSTANCE: NO
TOXIC CHEMICALS: NO
TSCA INVENTORY: YES

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SECTION VI - REACTIVITY DATA
=====

STABILITY: STABLE HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: MOISTURE

INCOMPATIBLES: HYDROGEN FLUORIDE

DECOMPOSITION PRODUCTS: OXIDES OF SILICON, OXIDES OF NITROGEN, CARBON
MONOXIDE, CARBON DIOXIDE

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SECTION VII - SPILL & DISPOSAL PROCEDURES
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STEPS TO BE TAKEN IN THE EVENT OF A SPILL OR DISCHARGE
WEAR SUITABLE PROTECTIVE CLOTHING. CAREFULLY SWEEP UP AND REMOVE.

DISPOSAL PROCEDURE
DISPOSE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL
ENVIRONMENTAL REGULATIONS.

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SECTION VIII - INDUSTRIAL PROTECTIVE EQUIPMENT
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EYE/SKIN PROTECTION: THIS IS A LABORATORY-USE PRODUCT FOR WHICH NO
INDUSTRIAL PROTECTIVE EQUIPMENT HAS BEEN DESIGNATED.

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SECTION IX - STORAGE AND HANDLING PRECAUTIONS
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SAF-T-DATA* STORAGE COLOR CODE: ORANGE (GENERAL STORAGE)

STORAGE REQUIREMENTS

KEEP CONTAINER TIGHTLY CLOSED. SUITABLE FOR ANY GENERAL CHEMICAL STORAGE AREA.

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SECTION X - TRANSPORTATION DATA AND ADDITIONAL INFORMATION
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DOMESTIC (D.O.T.)

PROPER SHIPPING NAME: CHEMICALS, N.O.S. (NON-REGULATED)

INTERNATIONAL (I.M.O.)

PROPER SHIPPING NAME: CHEMICALS, N.O.S. (NON-REGULATED)
MARINE POLLUTANTS: NO

AIR (I.C.A.O.)

PROPER SHIPPING NAME: CHEMICALS, N.O.S. (NON-REGULATED)

U.S. CUSTOMS HARMONIZATION NUMBER: 39269090105

=====
N/A = NOT APPLICABLE OR NOT AVAILABLE
N/E = NOT ESTABLISHED

THE INFORMATION IN THIS MATERIAL SAFETY DATA SHEET MEETS THE REQUIREMENTS OF THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ACT AND REGULATIONS PROMULGATED THEREUNDER (29 CFR 1910.1200 ET. SEQ.) AND THE CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM. THIS DOCUMENT IS INTENDED ONLY AS A GUIDE TO THE APPROPRIATE PRECAUTIONARY HANDLING OF THE MATERIAL BY A PERSON TRAINED IN, OR SUPERVISED BY A PERSON TRAINED IN, CHEMICAL HANDLING. THE USER IS RESPONSIBLE FOR DETERMINING THE PRECAUTIONS AND DANGERS OF THIS CHEMICAL FOR HIS OR HER PARTICULAR APPLICATION. DEPENDING ON USAGE, PROTECTIVE CLOTHING INCLUDING EYE AND FACE GUARDS AND RESPIRATORS MUST BE USED TO AVOID CONTACT WITH MATERIAL OR BREATHING CHEMICAL VAPORS/FUMES.

EXPOSURE TO THIS PRODUCT MAY HAVE SERIOUS ADVERSE HEALTH EFFECTS. THIS CHEMICAL MAY INTERACT WITH OTHER SUBSTANCES. SINCE THE POTENTIAL USES ARE SO VARIED, BAKER CANNOT WARN OF ALL OF THE POTENTIAL DANGERS OF USE

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OR INTERACTION WITH OTHER CHEMICALS OR MATERIALS. BAKER WARRANTS THAT THE CHEMICAL MEETS THE SPECIFICATIONS SET FORTH ON THE LABEL. BAKER DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR PURPOSE.

THE USER SHOULD RECOGNIZE THAT THIS PRODUCT CAN CAUSE SEVERE INJURY AND EVEN DEATH, ESPECIALLY IF IMPROPERLY HANDLED OR THE KNOWN DANGERS OF USE ARE NOT HEEDED. READ ALL PRECAUTIONARY INFORMATION. AS NEW DOCUMENTED GENERAL SAFETY INFORMATION BECOMES AVAILABLE, BAKER WILL PERIODICALLY REVISE THIS MATERIAL SAFETY DATA SHEET. IF YOU HAVE ANY QUESTIONS, PLEASE CALL CUSTOMER SERVICE (1-800-JTBAKER) FOR ASSISTANCE.

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APPROVED BY QUALITY ASSURANCE DEPARTMENT.

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VWR SCIENTIFIC
3745 BAYSHORE BLVD.
BRISBANE, CA. 94005
TELEPHONE: (415) 468-7150

FEB 11 1991

01 071837924
UW WHITEWATER
CENTRAL RECEIVING-STORES
NORTH FREEMONT ST
WHITEWATER WI 53190
ATTENTION: SAFETY OFFICER

02/02/91

DEAR CUSTOMER:

ENCLOSED ARE THE MATERIAL SAFETY DATA SHEETS (MSDS'S) FOR THE PRODUCT(S) THAT YOUR COMPANY RECENTLY PURCHASED FROM VWR SCIENTIFIC. PLEASE FORWARD THESE MSDS(S) TO YOUR SAFETY OFFICER OR OTHER INDIVIDUAL IN YOUR ORGANIZATION RESPONSIBLE FOR IMPLEMENTING THESE REGULATIONS.

"ALL DATA OR INFORMATION REGARDING THE PARTICULAR PRODUCT YOU HAVE PURCHASED FROM VWR SCIENTIFIC, WHICH IS PROVIDED IN THE ENCLOSED MATERIAL SAFETY DATA SHEET, IS OFFERED GRATUITOUSLY AND IN GOOD FAITH AS ACCURATE, BUT IS FURNISHED WITHOUT GUARANTY. VWR SCIENTIFIC MAKES NO REPRESENTATION AS TO THE ACCURACY OF THE INFORMATION IN THE MSDS. WHILE THE INFORMATION IS BELIEVED TO BE CORRECT, YOU SHOULD PERFORM YOUR OWN INVESTIGATION AND INDEPENDENT VERIFICATION. THE CONDITIONS OF THE USE OF THE PRODUCT, AND THE SUITABILITY OF THE PRODUCT FOR YOUR PARTICULAR PURPOSES, ARE BEYOND THE CONTROL OF VWR SCIENTIFIC. THUS, ALL RISKS OF THE USE OF THE PRODUCT ARE THEREFORE ASSUMED BY YOU, THE USER, EXCEPT AS TO SUCH WARRANTIES AS MAY BE PUBLISHED BY VWR SCIENTIFIC, WITH RESPECT TO A PARTICULAR PRODUCT. VWR SCIENTIFIC EXPRESSLY DISCLAIMS ALL WARRANTIES OF EVERY KIND, AND NATURE, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. VWR SCIENTIFIC SHALL IN NO EVENT BE RESPONSIBLE FOR ANY DAMAGES OF WHATEVER NATURE, DIRECTLY OR INDIRECTLY, RESULTING FROM USE OF THE PRODUCT, OR FROM THE PUBLICATION OF USE OF OR RELIANCE UPON DATA CONTAINED IN THE ENCLOSED MSDS. NOTHING IN THE MSDS IS INTENDED AS A RECOMMENDATION FOR USES WHICH INFRINGE VALID PATENTS, OR WHICH EXTEND LICENSES UNDER VALID PATENTS. IF YOU RESELL THE PRODUCT, YOU ARE RESPONSIBLE TO PASS ON TO YOUR CUSTOMER THE INFORMATION CONTAINED IN THE MSDS, AND GIVE TO THEM APPROPRIATE WARNINGS AND SAFE HANDLING INSTRUCTIONS AS NECESSARY TO MAKE THE PRODUCT SAFE FOR THE INTENDED USES BY YOUR CUSTOMER.

THANK YOU,

VWR SCIENTIFIC

02/02/91

P.O. NUMBER	INVOICE NUMBER	SALE DATE	JT	CATALOG NUMBER	MSDS FORM/DOC NUMBER
----- UNA-12152	----- 1653956	----- 01/31/91		----- 7091-3	----- Z7091