

Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Virginia B. Wetherell, Secretary

February 8, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Donald M. DeHart
Senior Environmental Engineer
Environmental Affairs Department
Anheuser-Busch Companies
St. Louis, MO 63118-1852

Dear Mr. DeHart:

Re: Anheuser-Busch; Jacksonville Brewery
Permit Exemption Request

The Department has received your December 14, 1992, letter requesting that the new Alternate Chill Proofing Process at the Jacksonville brewery be exempt from the permitting requirements of Chapter 17-4, F.A.C., of the Florida Department of Environmental Regulation. Our findings are:

1. This is a batch operation with slurry mix (silica and water) being generated approximately 14 times per week. Each batch takes 15-20 minutes.
2. Airborne particulate matter (PM) emissions from the air pallet unloader and the slurry mix tank will be vented to a 200 SCFM dust collector.
3. Uncontrolled emissions of PM are expected to be 0.107 tons per year. PM emissions are controlled by a 99.95% efficiency dust collector. Potential PM emissions are estimated to be **0.001 tons per year.**
4. A maximum throughput of 395 tons per year of silica gel will be utilized. Silica gel is not one of the 189 EPA Hazardous Air Pollutants and there is no evidence of it being a carcinogen to humans or animals.
5. Title V of the Clean Air Act requires that an operating permit for a facility include all of the facility's obligations under the Act (ranging from emissions limits to monitoring, recordkeeping and reporting requirements). This source will be permitted under the operating permit program, as part of the Anheuser-Busch facility, at a later date.

6. There is a potential operation equipment failure that would produce emissions higher than the estimated emissions. To reduce this potential, after this source is constructed and operating, the Duval County Air Program office will periodically conduct evaluation inspections on the proper operation of this source. An air pollution permit will be requested if found to be necessary.
7. Pursuant to F.A.C. Rule 17-210.300 (3), Permit Exemptions, any source exempted from permitting is not exempted from compliance with any applicable emission limiting standards specified in Rules 17-252.300 and 17-296, F.A.C.; other than Best Available Control Technology (BACT) or Lowest Achievable Emission Rate (LAER) requirements.

Based on the above findings, the Department has decided to exempt the new Alternate Chill Proofing process from the air permitting requirements in accordance with F.A.C. Rule 17-4.040(1)(b) until a Title V permit is required pursuant to Chapter 17-213, F.A.C., because the affected air pollutant (PM) will not be emitted in significant quantities to affect the state's air quality. As a condition of this exemption, the permittee shall notify the Department and the Duval County Air Program, of any changes in this process that may increase PM emissions above the requested limit. An inspection will be conducted after this source is constructed and operating. At the time of the inspection, an air pollution permit will be requested, if deemed necessary.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

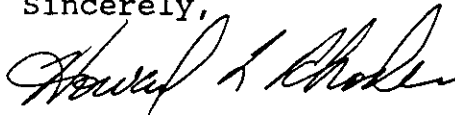
Mr. Donald M. DeHart
Permit Exemption Request
Page 3

- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Any questions on this matter should be directed to Mr. John Brown, Air Permitting Administrator, Bureau of Air Regulation, at (904) 488-1344.

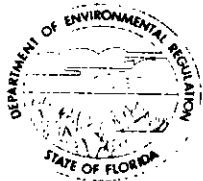
Sincerely,



Howard L. Rhodes
Director
Division of Air Resources
Management

HLR/TH/plm


cc: J. Cole, NED
R. Roberson, Duval Co.



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To _____	Location _____
To _____	Location _____
To _____	Location _____
From _____	Date _____

Interoffice Memorandum

TO: Howard L. Rhodes
FROM: C. H. Fancy 
DATE: February 3, 1993
SUBJ: Permit Exemption Request for an Alternate Chill Proofing Process
Anheuser-Busch; Jacksonville Brewery

Attached for your approval and signature is a letter exempting the above source from permitting requirements.

Based on findings, the Bureau has decided to "temporarily exempt" the new Alternate Chill Proofing process from the air permitting requirements in accordance with F.A.C. Rule 17-4.040(1)(b) because the affected air pollutant (PM) will not be emitted in significant quantities to affect the state's air quality.

The Bureau recommends approval of this amendment.

CHF/TH/plm

Attachment

*Howard,
changes that we discussed
on Monday will be made -
Clair*



ANHEUSER-BUSCH COMPANIES

December 14, 1992

RECEIVED

Mr. Clair Fancy, PE
Bureau Chief
Florida Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

DEC 18 1992

Division of Air
Resources Management

Dear Mr. Fancy,

I am writing to you as requested by Preston Louis of your department. Anheuser-Busch, Inc. would like to modify their brewery at Jacksonville by adding a new Alternate Chill Proofing (ACP) process. The estimated emissions from this modification will be of minor significance and we ask to be exempt from the permitting process.

The ACP process will consist of adding an air pallet unloader, a slurry mix tank, two injection tanks, a dust collector and the necessary piping and instrumentation. A process flow chart is included showing the equipment to be installed. The capital cost for this addition will be approximately \$132,500. Anheuser-Busch would like to begin construction on February 1, 1993 and start operations by March 15, 1993.

In batch operation, an 1100 pound air pallet containing amorphous silica gel (MSDS attached) will be pneumatically unloaded into a slurry mix tank. During the unloading process, carbon dioxide will be pumped into the unloading pallet to fluidize the silica. Both the air pallet unloader and the slurry mix tank will be vented through a dust collector (specifications attached) with an operating efficiency of 99.95 percent, for a particle size of 0.2 microns and larger. Airborne particulate matter will be removed and returned to the slurry mix tank.

The slurry mix tank will contain water in the proper proportions to create the desired slurry of silica gel. Batches of this slurry mixture will be generated approximately 14 times per week. Each batching operation will take 15-20 minutes. The final slurry of silica gel will be piped into an injection tank where it will be stored until it is ultimately added to unfinished beer to remove unwanted proteins which can cause a condition known as "chill haze" in

the finished beer. There will not be any particulate emissions from the injection tanks. The spent silica will be removed from the beer by a wet filtering process.

The estimated particulate emissions from the ACP process (the air pallet unloader and the slurry mix tank) are based upon an uncontrolled emission factor of 0.27 pounds per ton of material for pneumatically unloaded cement from AP-42 section 8.10. The maximum throughput of silica at the Jacksonville brewery will be 395 tons per year resulting in an estimated uncontrolled emission of 0.107 tons per year and an estimated controlled emission of 0.001 tons per year.

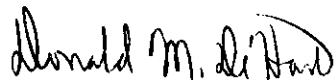
The existing air operating permits at the Jacksonville brewery include the following:

A016-140099	A016-146836	A016-147102
AC16-119129	AC16-119133	A016-154453
A016-154543	A016-154455	A016-186369
A016-154454	A016-153684	A016-186367
A016-186371	A016-186370	A016-186372
A016-186368	A016-143419	A016-193742
A016-193741	AC16-204993	AC16-170994
AC16-170993	AC16-170995	

If you require additional information please contact me at 314-577-4158 or Bob Kaempfe at 314-577-4374. We look forward to hearing from you as soon as possible and would appreciate a letter of exemption.

Sincerely,

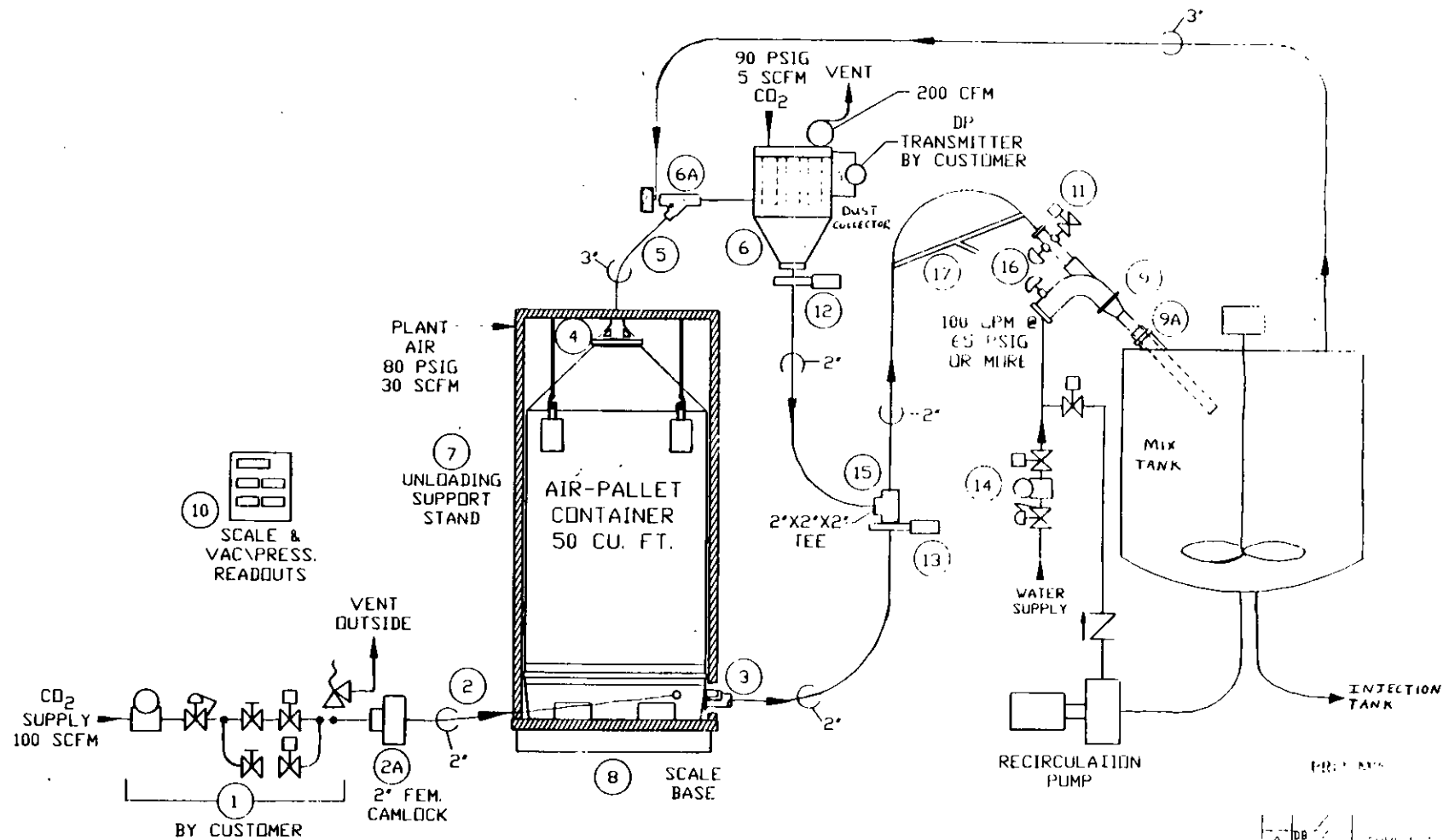
Anheuser-Busch Companies, Inc.



Donald M. DeHart
Senior Environmental Engineer
Environmental Affairs Department (202-4)

cc: A. Rutyna, PE Dist.
R. Robinson, Busch Co.

FLOW SCHEMATIC



DATE	12/2/74	APPROVED BY	
BY	DB	REVIEWED BY	
SEMI-ANNUAL INSPECTION			
Inspected by: [Signature]			
Inspected on: [Date]			
Inspected at: [Location]			
Inspected by: [Signature]			
Inspected on: [Date]			
Inspected at: [Location]			
Inspected by: [Signature]			
Inspected on: [Date]			
Inspected at: [Location]			

DUST COLLECTOR
SPECIFICATION

ANHEUSER-BUSCH, INC.
ST. LOUIS, MO.
ENGINEERING DEPARTMENT
REVISE AND RESUBMIT ☐

DATE: December 4, 1992

CUSTOMER: Anheuser-Busch,

PRODUCT TO BE HANDLED: Silica

BULK DENSITY OF PRODUCT: UNKNOWN

MATERIAL OF CONSTRUCTION: STAINLESS STEEL, 304

REVIEWED
REVIEWED AND RETAINED
REVIEWED AS NOTED
SUBJECT TO COMPANY REGULATIONS
BY _____

DESIGN PRESSURE: PLUS OR MINUS 17" WC.

DESIGN FLOW: 200 SCFM Carbon Dioxide & Air

FILTER MEDIA: GoreTex

FILTER AREA: 73 SQ.FT.

PARTICLE ANALYSIS: NOT AVAILABLE, LOADING WILL BE .5 lbs. OF
POWDER OR LESS PER MINUTE

SUGGESTED MODEL: ULTRA INDUSTRIES, CB-10-58-III

CONNECTIONS REQUIRED: INLET - 4" O.D. TUBE, 1/8" WT
Radial Entry
OUTLET- 5" CONNECT TO FAN

BOTTOM - 2" O.D. TUBE, 1/8"W.T.

OPTIONS DESIRED:

- VIBRATOR PAD,
- 60 DEGREE SLOPE ON HOPPER
- PROVIDE DISCHARGE FAN Sized at 200 SCFM at 10 In. WC, 1 Hp. Fan
- ENCLOSURE FOR ALL ELECTRICAL - NEMA 4
- ALL GASKETING TO BE - Food grade White
- INLET BAFFLE

GENERAL OPERATING DATA: Efficiency of 99.95 % at 0.2 Micron & larger.
Can Velocity Less than 60 Feet per Minute.
Gas Flow is approximately 200 cfm at 32 degrees F of a 50-50 mixture of pure carbon dioxide and air.
Operating time for ONE BATCH is 20 minutes or less.
Fan Motor is 1 Hp.
Bag Cleaning is by high pressure pulse blow-back controlled by a timer board.
Material removed by dust collector is RETURNED TO THE PROCESS automatically

==SILICA GEL==
==SILICA GEL==
==SILICA GEL==

MATERIAL SAFETY DATA SHEET

FISHER SCIENTIFIC
CHEMICAL DIVISION
1 REAGENT LANE
FAIR LAWN NJ 07410
(201) 796-7100

EMERGENCY NUMBER: (201) 796-7100
CHEMTREC ASSISTANCE: (800) 424-9300

THE INFORMATION BELOW IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. HOWEVER, WE MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO SUCH INFORMATION, AND WE ASSUME NO LIABILITY RESULTING FROM ITS USE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION FOR THEIR PARTICULAR PURPOSES.

SUBSTANCE IDENTIFICATION

SUBSTANCE: ==SILICA GEL==

CAS-NUMBER 83231-67-4

TRADE NAMES/SYNONYMS:

HYDROXYLATED SILICON DIOXIDE; HI-SIL; GASIL; BIOSIL; KIESELGEL;
HYDRATED AMORPHOUS SILICA; MERCKOSORB M.S.I.; PARTISIL; POLYPOR; SYLOID;
SORBSIL; SYNTHETIC PRECIPITATED SILICAS; STABIFIX;
S150; S157; S150; S679; S684; S689; S692; S698; S699; S701;
S704; S706; S707; S733; S734; S735; S736; S743; S744; S745; S746; 0291;

CHEMICAL FAMILY:
SILICON

NON-METALLIC OXIDE

MOLECULAR FORMULA: SI-O2

MOLECULAR WEIGHT: 60.08

CERCLA RATINGS (SCALE 0-3): HEALTH=U FIRE=0 REACTIVITY=0 PERSISTENCE=3
NFPA RATINGS (SCALE 0-4): HEALTH=U FIRE=0 REACTIVITY=0

COMPONENTS AND CONTAMINANTS

COMPONENT: SILICA GEL
CAS# 83231-67-4

PERCENT: 100.0

OTHER CONTAMINANTS: NONE

EXPOSURE LIMITS:

SILICON DIOXIDE, AMORPHOUS (SILICA, AMORPHOUS):
8 MG/M3 OSHA TWA (<1% CRYSTALLINE SILICA)
10 MG/M3 ACGIH TWA (TOTAL DUST, CONTAINING <1% QUARTZ)
(NOTICE OF INTENDED CHANGES 1989-1990)
4 MG/M3 DFG MAX TWA (TOTAL DUST)

MEASUREMENT METHOD: PARTICULATE FILTER; LOW-TEMPERATURE ASHING; X-RAY
DIFFRACTION SPECTROMETRY; (NIOSH VOL. III # 7501).

PHYSICAL DATA

DESCRIPTION: ODORLESS, COLORLESS TO WHITE, AMORPHOUS HYGROSCOPIC POWDER OR
GRANULES. BOILING POINT: 4046 F (2230 C) MELTING POINT: 3110 F (1710 C)

SPECIFIC GRAVITY: 2.1 VAPOR PRESSURE: NIL PH: 2.3-7.4 (AQU. SUSP)

SOLUBILITY IN WATER: INSOLUBLE

SOLVENT SOLUBILITY: SOLUBLE IN HYDROFLUORIC ACID, HOT FUSED ALKALI
HYDROXIDE SOLUTIONS.

FIRE AND EXPLOSION DATA

FIRE AND EXPLOSION HAZARD:
NEGLECTIBLE FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME.

FIREFIGHTING MEDIA:

EXTINGUISH USING AGENT SUITABLE FOR TYPE OF SURROUNDING FIRE.

FIREFIGHTING:

NO ACUTE HAZARD. MOVE CONTAINER FROM FIRE AREA IF POSSIBLE. AVOID BREATHING
VAPORS OR DUSTS; KEEP UPWIND.

TOXICITY

SILICA GEL:
CARCINOGEN STATUS: HUMAN INADEQUATE EVIDENCE, ANIMAL INADEQUATE EVIDENCE
(IARC GROUP-3).

TARGET EFFECTS: NO DATA AVAILABLE.
AT INCREASED RISK FROM EXPOSURE; PERSONS WITH IMPAIRED PULMONARY FUNCTION.

HEALTH EFFECTS AND FIRST AID

INHALATION:

SILICA GEL:

ACUTE EXPOSURE- EXPOSURE TO HIGH CONCENTRATIONS MAY CAUSE DRYING OF MUCOUS MEMBRANES, COUGHING AND POSSIBLY NOSEBLEEDS.
CHRONIC EXPOSURE- PULMONARY EFFECTS OF LONGTERM EXPOSURE MAY VARY WITH THE FORM OF THE NATURAL OR SYNTHETIC AMORPHOUS SILICA AND, MORE IMPORTANTLY, THE DEGREE OF CONTAMINATION WITH A CRYSTALLINE FORM OF SILICA. STUDIES DONE ON A GROUP OF WORKERS EXPOSED TO A PRECIPITATED SILICA DUST FOR AN AVERAGE OF 8.6 YEARS, REVEALED NO ADVERSE EFFECTS ON THEIR PULMONARY FUNCTION TESTS OR CHEST X-RAYS. IT IS POSSIBLE HOWEVER, THAT X-RAY CHANGES IN THE LUNGS, WITH ONLY EXERTIONAL DYSPNEA OR WITHOUT ANY DISABILITY, MAY OCCUR IN SOME WORKERS. IF THE QUANTITY OF DUST TO WHICH THEY ARE EXPOSED IS GREAT ENOUGH, THE PRESENCE OF CRYSTALLINE SILICA MAY GREATLY INCREASE THE POTENTIAL FOR A MORE DISABLING SILICOSIS TO OCCUR WITH THE POSSIBILITY OF ADVANCED FIBROSIS AND DIFFUSE OBSTRUCTIVE EMPHYSEMA LEADING TO SEVERE RESPIRATORY CRIPPLING AND ULTIMATELY, A FATAL CARDIORESPIRATORY FAILURE. IN ADDITION, EPIDEMIOLOGICAL STUDIES INDICATE LUNG CANCER OCCURS MORE FREQUENTLY AMONG PERSONS WITH SILICOSIS THAN IN THE GENERAL POPULATION. STUDIES IN WHICH RATS, GUINEA PIGS AND MONKEYS WERE EXPOSED TO FUMED, GEL AND PRECIPITATED FORMS OF AMORPHOUS SILICA AT CONCENTRATIONS OF 7-10 MG/M3 (RESPIRABLE DUST) FOR 5-6 HOURS A DAY FOR UP TO 18 MONTHS, RESULTED IN SOME FIBROGENIC LUNG CHANGES IN MONKEYS ONLY, PARTICULARLY WITH THE FUMED FORM. ALL THREE FORMS CAUSED MACROPHAGE AND MONONUCLEAR CELL AGGREGATES WITH RETICULIN FIBERS AND A RESULTANT REDUCTION IN THE SIZE OF THE BRONCHIOLE LUMINA IN THE LUNGS OF THE MONKEYS.

FIRST AID- REMOVE FROM EXPOSURE AREA TO FRESH AIR IMMEDIATELY. IF BREATHING HAS STOPPED, PERFORM ARTIFICIAL RESPIRATION. KEEP PERSON WARM AND AT REST. TREAT SYMPTOMATICALLY AND SUPPORTIVELY. GET MEDICAL ATTENTION IMMEDIATELY.

SKIN CONTACT:

SILICA GEL:

ACUTE EXPOSURE- NO HUMAN DATA AVAILABLE. ONE FUMED SILICA, PARTICLE SIZE 0.5-10 MICRONS WAS CONSIDERED INERT TO MILDLY IRRITATING WHEN TESTED ON RABBIT SKIN.
CHRONIC EXPOSURE- REPEATED OR PROLONGED CONTACT MAY HAVE A DRYING AND ABRASIVE EFFECT ON THE SKIN.

FIRST AID- REMOVE CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH AFFECTED AREA WITH SOAP OR MILD DETERGENT AND LARGE AMOUNTS OF WATER UNTIL NO EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 15-20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.

EYE CONTACT:

SILICA GEL:

ACUTE EXPOSURE- PARTICLES MAY CAUSE IMMEDIATE IRRITATION. ONE FUMED SILICA, PARTICLE SIZE 0.5-10 MICRONS, WAS CONSIDERED INERT TO MILDLY IRRITATING WHEN TESTED IN RABBIT EYES.
CHRONIC EXPOSURE- NO DATA AVAILABLE.

FIRST AID- WASH EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER OR NORMAL SALINE. OCCASIONALLY LIFTING UPPER AND LOWER LIDS, UNTIL NO EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 15-20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.

INGESTION:

SILICA GEL:

ACUTE EXPOSURE- THE EFFECTS OF INGESTION ARE PURELY MECHANICAL AS THE SUBSTANCE IS INERT CHEMICALLY AND BIOLOGICALLY BY THIS ROUTE.
CHRONIC EXPOSURE- AMORPHOUS SILICA IS PERMITTED IN SOME FORMS AS A FOOD ADDITIVE IN AMOUNTS OF LESS THAN 2% BY WEIGHT.

FIRST AID- GIVE WATER OR FLUIDS. EMESIS IS NOT NECESSARY. TREAT SUPPORTIVELY AND SYMPTOMATICALLY. IF IRRITATION OR DIGESTIVE UPSET OCCURS, GET MEDICAL ATTENTION.

ANTIDOTE:

NO SPECIFIC ANTIDOTE. TREAT SYMPTOMATICALLY AND SUPPORTIVELY.

REACTIVITY

REACTIVITY:

STABLE UNDER NORMAL TEMPERATURES AND PRESSURES.

INCOMPATIBILITIES:

SILICA GEL:

FLUORINE: FIRE AND EXPLOSION HAZARD.
HYDROCHLORIC ACID: MAY REACT VIOLENTLY DUE TO HEAT OF ADSORPTION.
MAGNESIUM: MAY EXPLODE VIOLENTLY.
MANGANESE TRIFLUORIDE: MAY CAUSE VIOLENT REACTION IF HEATED WITH RELEASE OF SILICON TRIFLUORIDE.
MANGANESE TRIOXIDE: FIRE AND EXPLOSION HAZARD.
OXIDIZERS (STRONG): FIRE HAZARD.
OXYGEN DIFLUORIDE: EXOTHERMIC REACTION WITH POSSIBLE EXPLOSION.
OZONE: POSSIBLE EXPLOSION AT TEMPERATURES BELOW -100 C.
VINYL ACETATE: MAY REACT VIGOROUSLY.
XENON HEXAFLUORIDE: MAY DETONATE WITH THE FORMATION OF XENON TRIOXIDE.

DECOMPOSITION:

AT TEMPERATURES ABOVE 800 C, CALCINING MAY OCCUR AND AMORPHOUS SILICA MAY BE

POLYMERIZATION:
HAZARDOUS POLYMERIZATION HAS NOT BEEN REPORTED TO OCCUR UNDER NORMAL
TEMPERATURES AND PRESSURES.

STORAGE AND DISPOSAL

OBSERVE ALL FEDERAL, STATE AND LOCAL REGULATIONS WHEN STORING OR DISPOSING
OF THIS SUBSTANCE. FOR ASSISTANCE, CONTACT THE DISTRICT DIRECTOR OF THE
ENVIRONMENTAL PROTECTION AGENCY.

****STORAGE****

STORE AWAY FROM INCOMPATIBLE SUBSTANCES.

CONDITIONS TO AVOID

PREVENT DISPERSION OF DUST IN AIR.

SPILL AND LEAK PROCEDURES

OCCUPATIONAL SPILL:
RESIDUE SHOULD BE CLEANED UP USING A HIGH-EFFICIENCY PARTICULATE FILTER
VACUUM.

FOR LARGE SPILLS, SWEEP UP WITH A MINIMUM OF DUSTING AND PLACE INTO SUITABLE
CLEAN, DRY CONTAINERS FOR RECLAMATION OR LATER DISPOSAL.

PROTECTIVE EQUIPMENT

VENTILATION:
PROVIDE LOCAL EXHAUST VENTILATION SYSTEM TO MEET PUBLISHED EXPOSURE LIMITS.

RESPIRATOR:
THE FOLLOWING RESPIRATORS AND MAXIMUM USE CONCENTRATIONS ARE RECOMMENDATIONS
BY THE U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, NIOSH POCKET GUIDE TO
CHEMICAL HAZARDS, NIOSH CRITERIA DOCUMENTS OR BY THE U.S. DEPARTMENT OF
LABOR, 29 CFR 1910 SUBPART Z.
THE SPECIFIC RESPIRATOR SELECTED MUST BE BASED ON CONTAMINATION LEVELS FOUND
IN THE WORK PLACE, MUST NOT EXCEED THE WORKING LIMITS OF THE RESPIRATOR AND
BE JOINTLY APPROVED BY THE NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND
HEALTH AND THE MINE SAFETY AND HEALTH ADMINISTRATION (NIOSH-MSHA).

SILICON DIOXIDE, AMORPHOUS (SILICA, AMORPHOUS):

100 MPPCF- ANY DUST AND MIST RESPIRATOR.

200 MPPCF- ANY DUST AND MIST RESPIRATOR EXCEPT SINGLE-USE AND QUARTER-MASK
RESPIRATORS,
ANY SUPPLIED-AIR RESPIRATOR.
ANY SELF-CONTAINED BREATHING APPARATUS.

500 MPPCF- ANY POWERED AIR-PURIFYING RESPIRATOR WITH A DUST AND MIST
FILTER.
ANY SUPPLIED-AIR RESPIRATOR OPERATED IN A CONTINUOUS FLOW MODE.

1000 MPPCF- ANY AIR-PURIFYING FULL FACEPIECE RESPIRATOR WITH A
HIGH-EFFICIENCY PARTICULATE FILTER
ANY POWERED AIR-PURIFYING RESPIRATOR WITH A TIGHT-FITTING
FACEPIECE AND A HIGH-EFFICIENCY PARTICULATE FILTER.
ANY SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE.
ANY SUPPLIED-AIR RESPIRATOR WITH A FULL FACEPIECE.
ANY SUPPLIED-AIR RESPIRATOR WITH A TIGHT-FITTING FACEPIECE
OPERATED IN A CONTINUOUS FLOW MODE.

10,000 MPPCF- ANY SUPPLIED-AIR RESPIRATOR WITH A HALF-MASK AND OPERATED IN A
PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE.

ESCAPE- ANY AIR-PURIFYING FULL FACEPIECE RESPIRATOR WITH A
HIGH-EFFICIENCY PARTICULATE FILTER.
ANY APPROPRIATE ESCAPE-TYPE SELF-CONTAINED BREATHING APPARATUS.

FOR FIREFIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH CONDITIONS:

ANY SELF-CONTAINED BREATHING APPARATUS THAT HAS A FULL FACEPIECE AND IS
OPERATED IN A PRESSURE-DEMAND OR OTHER POSITIVE-PRESSURE MODE.

ANY SUPPLIED-AIR RESPIRATOR THAT HAS A FULL FACEPIECE AND IS OPERATED IN A
PRESSURE-DEMAND OR OTHER POSITIVE-PRESSURE MODE IN COMBINATION WITH AN
AUXILIARY SELF-CONTAINED BREATHING APPARATUS OPERATED IN PRESSURE-DEMAND
OR OTHER POSITIVE-PRESSURE MODE.

CLOTHING:
EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE (IMPERVIOUS) CLOTHING AND EQUIPMENT
TO PREVENT REPEATED OR PROLONGED SKIN CONTACT WITH THIS SUBSTANCE.

GLOVES:
EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE GLOVES TO PREVENT CONTACT WITH THIS
SUBSTANCE.

EYE PROTECTION:
EMPLOYEE MUST WEAR SPLASH-PROOF OR DUST-RESISTANT SAFETY GOGGLES TO PREVENT
EYE CONTACT WITH THIS SUBSTANCE.

EMERGENCY EYE WASH: WHERE THERE IS ANY POSSIBILITY THAT AN EMPLOYEE'S EYES MAY
BE EXPOSED TO THIS SUBSTANCE, THE EMPLOYER SHOULD PROVIDE AN EYE WASH
FOUNTAIN WITHIN THE IMMEDIATE WORK AREA FOR EMERGENCY USE.

AUTHORIZED - FISHER SCIENTIFIC GROUP, INC.
CREATION DATE: 08/12/88 REVISION DATE: 05/02/91

-ADDITIONAL INFORMATION-

THE INFORMATION BELOW IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST
INFORMATION CURRENTLY AVAILABLE TO US. HOWEVER, WE MAKE NO WARRANTY OF
MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO
SUCH INFORMATION, AND WE ASSUME NO LIABILITY RESULTING FROM ITS USE. USERS
SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE
INFORMATION FOR THEIR PARTICULAR PURPOSES.

P 062 921 969



Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to Donald DeHart	
Street and No. Anheuser-Busch	
P.O., State and ZIP Code St. Louis, MO	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Post Exptn. Reg. 2-15-93	

PS Form 3800, June 1991

PS Form 3811, November 1990 * U.S. GPO: 1991-287-086

DOMESTIC RETURN RECEIPT

SENDER: • Complete items 1 and/or 2 for additional services. • Complete items 3, and 4a & b. • Print your name and address on the reverse of this form so that we can return this card to you. • Attach this form to the front of the mailpiece, or on the back if space does not permit. • Write "Return Receipt Requested" on the mailpiece below the article number. • The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address. 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Donald M. DeHart, SEC Environmental Affairs, Dept. Anheuser-Busch Co. St. Louis, MO 63118-1852		4a. Article Number 062 921 969	
5. Signature (Addressee) Donald M. DeHart 2/18/93		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
6. Signature (Agent)		7. Date of Delivery 2/18/93	
8. Addressee's Address (Only if requested and fee is paid)			