COLGATE-PALMOLIVE COMPANY

2007 NOV 16 PM 12:12

November 12, 2007

Tennessee Department of Environment and Conservation
Division of Air Pollution Control
9th Floor, L & C Annex
401 Church Street
Nashville, Tennessee 37243-1531

32-0238
61502

Re: Construction Permit Application for Storage Silo
Colgate – Palmolive Company, Morristown, Tennessee

Dear Sir,

Attached is the permit application for the construction of a silo for storing Sylodent 783 at the Colgate-Palmolive facility in Morristown, Tennessee. The facility currently holds Operating Permit No. 960780F, issued May 21, 2007.

The Colgate facility has completed the necessary application forms and included a calculation sheet for the potential to emit (PTE) particulate matter from the silo. The PTE is well below the 4 ton/yr threshold and can be considered as insignificant activities. The Material Safety Data Sheet for Sylodent 783 is also attached. The Colgate facility seeks authorization from the Division of Air Pollution Control to proceed with the construction of this silo.

Should you have any questions regarding this matter, please call me at (423) 522-3330 or our environmental consultant with ERM, Jeff Twaddle at (615) 373-3350.

Sincerely,

Alvaro Cantillo
Plant Manager

Cc: Jeff Twaddle, ERM
Eric Ikenberry, Colgate – Palmolive Company

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF AIR POLLUTION CONTROL

NOT TO BE USED FOR TITLE V APPLICATIONS

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Telephone:(615) 532-0554
FAX: (615) 532-0614

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PERMIT APPLICATION

APC 20

PLEASE TYPE OR PRINT AND SUBMIT IN DUPLICATE FOR EACH EMISSION SOURCE. ATTACH APPROPRIATE SOURCE DESCRIPTION FORMS.

1. **ORGANIZATION'S LEGAL NAME** Colgate-Palmolive Company			/ / / FOR	APC COMPANY--POINT NO. 32-0238-04
2. **MAILING ADDRESS** (ST/RD/P.O. BOX) 200 Centennial Court			/ / / APC	APC LOG/PERMIT NO. 61502
CITY Morristown	STATE TN	ZIP CODE 37816		PHONE WITH AREA CODE (423) 522-3000
3. **PRINCIPAL TECHNICAL CONTACT** Bart Fisher				PHONE WITH AREA CODE (423) 522-3000
4. **SITE ADDRESS** (ST/RD/HWY) 200 Centennial Court				COUNTY NAME Hamblen
CITY OR DISTANCE TO NEAREST TOWN Morristown		ZIP CODE 37816		PHONE WITH AREA CODE (423) 522-3000
5. **EMISSION SOURCE NO.** (NUMBER WHICH UNIQUELY IDENTIFIES THIS SOURCE)		PERMIT RENEWAL YES ( ) NO (X)		

6. **BRIEF DESCRIPTION OF EMISSION SOURCE**

Construction of Sylodent 783 storage silo with fabric filter control on conveying equipment.

7. **TYPE OF PERMIT REQUESTED**

CONSTRUCTION (X)	STARTING DATE 10/07	COMPLETION DATE 12/07	LAST PERMIT NUMBER 960780F	EMISSION SOURCE REFERENCE NUMBER
OPERATING ( )	DATE CONSTRUCTION STARTED	DATE COMPLETED	LAST PERMIT NUMBER	EMISSION SOURCE REFERENCE NUMBER
LOCATION TRANSFER ( )	TRANSFER DATE		LAST PERMIT NUMBER	EMISSION SOURCE REFERENCE NUMBER

ADDRESS OF LAST LOCATION

8. **DESCRIBE CHANGES THAT HAVE BEEN MADE TO THIS EQUIPMENT OR OPERATION SINCE THE LAST CONSTRUCTION OR OPERATING PERMIT APPLICATION.**

9. **SIGNATURE** (APPLICATION MUST BE SIGNED BEFORE IT WILL BE PROCESSED) Alvaro Cantillo		**DATE** 11/13/2007
10. **SIGNER'S NAME** (TYPE OR PRINT) Alvaro Cantillo	**TITLE** Plant Manager	**PHONE WITH AREA CODE** (423) 522-3001

TABLE OF POLLUTION REDUCTION DEVICE OR METHOD CODES
(ALPHABETICAL LISTING)

NOTE: FOR CYCLONES, SETTLING CHAMBERS, WET SCRUBBERS, AND ELECTROSTATIC PRECIPITATORS. THE EFFICIENCY RANGES CORRESPOND TO THE FOLLOWING PERCENTAGES:
HIGH: 95-99+%. MEDIUM: 80-95%. AND LOW: LESS THAN 80%.
IF THE SYSTEM HAS SEVERAL PIECES OF CONNECTED CONTROL EQUIPMENT, INDICATE THE SEQUENCE, FOR EXAMPLE: 008'010.97%.
IF NONE OF THE BELOW CODES FIT, USE 999 AS A CODE FOR OTHER AND SPECIFY IN THE COMMENTS.

NO EQUIPMENT....000
ACTIVATED CARBON ADSORPTION....048
AFTERBURNER--DIRECT FLAME....021
AFTERBURNER--DIRECT FLAME WITH HEAT EXCHANGER....022
AFTERBURNER--CATALYTIC....019
AFTERBURNER--CATALYTIC WITH HEAT EXCHANGER....020
ALKALIZED ALUMINA....040
CATALYTIC OXIDATION--FLUE GAS DESULFURIZATION....039
CYCLONE--HIGH EFFICIENCY....007
CYCLONE--MEDIUM EFFICIENCY....008
CYCLONE--LOW EFFICIENCY....009
DUST SUPPRESSION BY CHEMICAL STABILIZERS OR WETTING AGENTS....062
ELECTROSTATIC PRECIPITATOR--HIGH EFFICIENCY....010
ELECTROSTATIC PRECIPITATOR--MEDIUM EFFICIENCY....011
ELECTROSTATIC PRECIPITATOR--LOW EFFICIENCY....012
FABRIC FILTER--HIGH TEMPERATURE....016
FABRIC FILTER--MEDIUM TEMPERATURE....017
FABRIC FILTER--LOW TEMPERATURE....018
FABRIC FILTER--METAL SCREENS (COTTON GINS)....059
FLARING....023
GAS ADSORPTION COLUMN--PACKED....050
GAS ADSORPTION COLUMN--TRAY TYPE....051
GAS SCRUBBER (GENERAL: NOT CLASSIFIED)....013
LIMESTONE INJECTION--DRY....041
LIMESTONE INJECTION--WET....042
LIQUID FILTRATION SYSTEM....049
MIST ELIMINATOR--HIGH VELOCITY....014
MIST ELIMINATOR--LOW VELOCITY....015
PROCESS CHANGE....046
PROCESS ENCLOSED....054
PROCESS GAS RECOVERY....060
SETTLING CHAMBER--HIGH EFFICIENCY....004
SETTLING CHAMBER--MEDIUM EFFICIENCY....005
SETTLING CHAMBER--LOW EFFICIENCY....006
SPRAY TOWER (GASEOUS CONTROL ONLY)....052
SULFURIC ACID PLANT--CONTACT PROCESS....043
SULFURIC ACID PLANT--DOUBLE CONTACT PROCESS....044
SULFUR PLANT....045
VAPOR RECOVERY SYSTEM (INCLUDING CONDENSERS, HOODING AND OTHER ENCLOSURES)....047
VENTURI SCRUBBER (GASEOUS CONTROL ONLY)....053
WET SCRUBBER--HIGH EFFICIENCY....001
WET SCRUBBER--MEDIUM EFFICIENCY....002
WET SCRUBBER--LOW EFFICIENCY....003
WET SUPPRESSION BY WATER SPRAYS....061

TABLE OF EMISSION ESTIMATION METHOD CODES

NOT APPLICABLE EMISSIONS ARE KNOWN TO BE ZERO....0
EMISSIONS BASED ON SOURCE TESTING....1
EMISSIONS BASED ON MATERIAL BALANCE USING ENGINEERING EXPERTISE AND KNOWLEDGE OF PROCESS....2
EMISSIONS CALCULATED USING EMISSION FACTORS FROM EPA PUBLICATION NO. AP-42 COMPILATION OF AIR POLLUTANT EMISSIONS FACTORS....3
JUDGEMENT....4
EMISSIONS CALCULATED USING A SPECIAL EMISSION FACTOR DIFFERING FROM THAT IN AP-42....5
OTHER (SPECIFY IN COMMENTS)....6

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PROCESS OR FUEL BURNING SOURCE DESCRIPTION

APC21(& 24)

PLEASE TYPE OR PRINT, SUBMIT IN DUPLICATE AND ATTACH TO THE PERMIT APPLICATION.

1. **ORGANIZATION NAME** Colgate-Palmolive Company		/ / / FOR	APC COMPANY-POINT NO. 32-0238-04
2. **EMISSION SOURCE NO.** (AS ON PERMIT APPLICATION)	SIC CODE 2844	/ / / APC	APC PERMIT/LOG NO. 61502

3. **DESCRIPTION OF PROCESS OR FUEL BURNING UNIT**

Sylodent 783 silo

4. **NORMAL OPERATION:** →	HOURS/DAY 24	DAYS/WEEK 7	WEEKS/YEAR 52	DAYS/YEAR 365
5. **PERCENT ANNUAL THROUGHPUT:** →	DEC.-FEB. 25	MARCH-MAY 25	JUNE-AUG. 25	SEPT.-NOV. 25

6. **TYPE OF PERMIT APPLICATION**	(CHECK BELOW ONE ONLY)
PROCESS SOURCE: APPLY FOR A SEPARATE PERMIT FOR EACH SOURCE. (CHECK AT RIGHT, AND COMPLETE LINES 7, 8, 13, AND 14).	(X)
PROCESS SOURCE WITH IN-PROCESS FUEL:PRODUCTS OF COMBUSTION CONTACT MATERIALS HEATED. APPLY FOR A SEPARATE PERMIT FOR EACH SOURCE. (CHECK AT RIGHT, AND COMPLETE LINES 7, 8, AND 10 THROUGH 14)	( )
NON-PROCESS FUEL BURNING SOURCE: PRODUCTS OF COMBUSTION DO NOT CONTACT MATERIALS HEATED. COMPLETE THIS FORM FOR EACH BOILER OR FUEL BURNER AND COMPLETE AN EMISSION POINT DESCRIPTION FORM (APC 22) FOR EACH STACK. (CHECK AT RIGHT, AND COMPLETE LINES 9 TO 14)	( )

7. **TYPE OF OPERATION:** CONTINUOUS , ( )	BATCH (X)	NORMAL BATCH TIME 1 hour	NORMAL BATCHES/DAY 1

8. **PROCESS MATERIAL INPUTS AND IN-PROCESS SOLID FUELS**	DIAGRAM* REFERENCE	INPUT RATES (POUNDS/HOUR) DESIGN	ACTUAL	/ /	(FOR APC USE ONLY) SCC CODE
A. Sylodent 783		34,000	34,000	/ /	
B.				/ /	
C.				/ /	
D.				/ /	
E.				/ /	
F.				/ /	
G.				/ /	
	TOTALS	34,000	34,000	/ /	

* A SIMPLE PROCESS FLOW DIAGRAM MUST BE ATTACHED.

(OVER)

9. BOILER OR BURNER DATA: (COMPLETE LINES 9 TO 14 USING A SEPARATE FORM FOR EACH BOILER)

BOILER NUMBER	STACK NUMBER**	TYPE OF FIRING***	RATED BOILER HORSEPOWER	RATED INPUT CAPACITY (10^6 BTU/HR)	OTHER BOILER RATING (SPECIFY CAPACITY AND UNITS)

BOILER SERIAL NO.	DATE CONSTRUCTED	DATE OF LAST MODIFICATION (EXPLAIN IN COMMENTS BELOW).

** BOILERS WITH A COMMON STACK WILL HAVE THE SAME STACK NUMBER.

*** CYCLONE, SPREADER (WITH OR WITHOUT REINJECTION), PULVERIZED (WET OR DRY BOTTOM, WITH OR WITHOUT REINJECTION), OTHER STOKER (SPECIFY TYPE), HAND FIRED, AUTOMATIC, OR OTHER TYPE (DESCRIBE BELOW IN COMMENTS).

10. FUEL DATA: (COMPLETE FOR A PROCESS SOURCE WITH IN-PROCESS FUEL OR A NON-PROCESS FUEL BURNING SOURCE)

PRIMARY FUEL TYPE (SPECIFY) | STANDBY FUEL TYPE(S) (SPECIFY)

FUELS USED	ANNUAL USAGE	HOURLY USAGE		%	%	BTU VALUE		(FOR APC ONLY)
		DESIGN	AVERAGE	SULFUR	ASH	OF FUEL		SCC CODE
NATURAL GAS:	10^6 CUFT	CUFT	CUFT	/ / / / / / / /	/ / / / /	1,000		
#2 FUEL OIL:	10^3 GAL	GAL	GAL		/ / / / /			
#5 FUEL OIL:	10^3 GAL	GAL	GAL		/ / / / /			
#6 FUEL OIL:	10^3 GAL	GAL	GAL		/ / / / /			
COAL:	TONS	LBS	LBS					
WOOD:	TONS	LBS	LBS	/ / / / / / / /	/ / / / /			
LIQUID PROPANE:	10^3 GAL	GAL	GAL	/ / / / / / / /	/ / / / /	85,000		
OTHER (.SPECIFY TYPE & UNITS.):								

11. IF WOOD IS USED AS A FUEL, SPECIFY TYPES AND ESTIMATE PERCENT BY WEIGHT OF BARK

12. IF WOOD IS USED WITH OTHER FUELS, SPECIFY PERCENT BY WEIGHT OF WOOD CHARGED TO THE BURNER.

13. COMMENTS

14. SIGNATURE Jeff Smith

DATE 11/13/07

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EMISSION POINT DESCRIPTION

APC 22

PLEASE TYPE OR PRINT AND SUBMIT IN DUPLICATE FOR EACH STACK OR EMISSION POINT.
ATTACH TO THE PERMIT APPLICATION.

1. ORGANIZATION NAME Colgate-Palmolive Company			/ / / FOR	APC COMPANY POINT NO. 32-0238-04
2. EMISSION SOURCE NO. (FROM APPLICATION) TF4		FLOW DIAGRAM POINT NUMBER	/ / / APC	APC SEQUENCE NO. 61502
3. LOCATION: →	LATITUDE	LONGITUDE	UTM VERTICAL	UTM HORIZONTAL
4. BRIEF EMISSION POINT DESCRIPTION (ATTACH A SKETCH IF APPROPRIATE): Sylodent 783 silo baghouse (emissions occur only during silo loading operations)				DISTANCE TO NEAREST PROPERTY LINE (FT)

COMPLETE LINES 5 AND 6 IF DIFFERENT FROM THAT ON THE PROCESS OR FUEL BURNING SOURCE DESCRIPTION (APC 21)

5. NORMAL OPERATION: →	HOURS/DAY 24	DAYS/WEEK 7	WEEK/YEAR 52		DAYS/YEAR 365
6. PERCENT ANNUAL THROUGHPUT: →	DEC.-FEB. 25	MARCH-MAY 25	JUNE-AUG. 25		SEPT.-NOV. 25
7. STACK OR EMISSION POINT DATA: →	HEIGHT ABOVE GRADE (FT) 57	DIAMETER (FT) 4	TEMPERATURE (°F) Ambient	% OF TIME OVER 125°F 0	DIRECTION OF EXIT (UP, DOWN OR HORIZONTAL) Down
DATA AT EXIT CONDITIONS: →	FLOW (ACTUAL FT^3/MIN.) 600	VELOCITY (FT/SEC) 12.7	MOISTURE ($GRAINS/FT^3$) Ambient		MOISTURE (PERCENT) Ambient
DATA AT STANDARD CONDITIONS: →	FLOW (DRY STD. FT^3/MIN) 600	VELOCITY (FT/SEC) 12.7	MOISTURE ($GRAINS/FT^3$) Ambient		MOISTURE (PERCENT) Ambient

8. AIR CONTAMINANTS	ACTUAL EMISSIONS						
	EMISSIONS (LBS/HR) AVERAGE	EMISSIONS (LBS/HR) MAXIMUM	CONCENTRATION	AVG. EMISSIONS (TONS/YR)	EMISSIONS* EST.	CONTROL DEVICES*	CONTROL EFFICIENCY%
PARTICULATES	0.15	0.15	**	0.18	4	018	95+
SULFUR DIOXIDE			***				
CARBON MONOXIDE			PPM				
ORGANIC COMPOUNDS			PPM				
NITROGEN OXIDES			PPM				
FLUORIDES							
OTHER(SPECIFY)							
OTHER(SPECIFY)							

$4,000 lb/hr * 1 ton/2000 lb * 0.0004 lb/lb = 1.6$

(OVER)

9. CHECK TYPES OF MONITORING AND RECORDING INSTRUMENTS THAT ARE ATTACHED:
OPACITY MONITOR ( ), SO2 MONITOR ( ), NOX MONITOR ( ), OTHER (SPECIFY IN COMMENTS) ( )

10. COMMENTS

11. SIGNATURE	**DATE**
[signature]	11/13/2017

* REFER TO THE BACK OF THE PERMIT APPLICATION FORM FOR ESTIMATION METHOD AND CONTROL DEVICE CODES.

** EXIT GAS PARTICULATE CONCENTRATION UNITS: PROCESS — GRAINS/DRY STANDARD FT3 (70°F); WOOD FIRED BOILERS — GRAINS/DRY STANDARD FT3 (70°F); ALL OTHER BOILERS — LBS/MILLION BTU HEAT INPUT.

*** EXIT GAS SULFUR DIOXIDE CONCENTRATIONS UNITS: PROCESS — PPM BY VOLUME, DRY BASES; BOILERS — LBS/MILLION BTU HEAT INPUT.

Colgate-Palmolive Company
Sylodent storage silo

Storage silo is filled using pneumatic transfer from trucks.
The bin vents or baghouse associated with the silos and the pneumatic transfer are process equipment as the material collected falls directly into the storage silos.
These bin vents are therefore not control equipment and potential to emit is determined after the bin vents.

Hourly transfer capacity = 34,000 lb/hr (each)

Annual throughput is limited based on the capacity out of the silos of 9000 lb/hr each.

Potential to Emit - Particulate Matter

Silo	PWR	EF* (lb PM /ton)	Emission rate (lb/hr)	Hours of operation	PTE (ton/yr)
Sylodent	34,000	0.0089	0.15	2,319	0.18

* Emission Factor based on AP-42 Table 11.12-2 for pneumatic transfer of cement supplement

The silo is an insignificant activity and exempted from permitting as the PTE is less than 5 tons/year each.

GRACE Davison

Material Safety Data Sheet

Reviewed on 08/01/2004

1 Identification of substance

Product details

Trade name: SYLODENT® 783

Article number: 5101335, 5101330

Manufacturer/Supplier:
GRACE Davison
W.R.GRACE & CO.-CONN
7500 Grace DR
Columbia, MD 21044

Information department: Health and Safety (9 AM to 5 PM-EST) 1-410-531-4764

Emergency information:
Transportation Emergency (24 hr) Chemtrec 1-800-424-9300
Other Emergencies (24 hr) 1-410-531-4000

2 Data on components

CAS No. &	List of Components
7631-86-9	amorphous silicon dioxide, chemically prepared
7732-18-5	water, distilled, or of similar purity

Additional information: None Applicable

3 Hazards identification

Information pertaining to particular dangers for man and environment:
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the European Union" in the latest valid version.

Classification system:
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
NFPA ratings (scale 0 - 4)

Health = 1
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 1
Fire = 0
Reactivity = 0

4 First aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:
Generally the product does not irritate the skin.

(Contd. on page 2)

Material Safety Data Sheet

Trade name: SYLODENT ® 783

(Contd. of page 1)

Immediately rinse with water.
If skin irritation occurs, consult a doctor.

After eye contact:
Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. If symptoms occur, consult a doctor.

After swallowing: If symptoms occur consult doctor.

5 Fire fighting measures

Suitable extinguishing agents:
CO2, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.
Use fire fighting measures that suit the environment.

Protective equipment: Wear protective equipment.

Additional Information
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

Person-related safety precautions:
Avoid formation of dust.
Wear protective clothing.

Measures for environmental protection:
Sweep up and containerize for reclamation or disposal.

Measures for cleaning/collecting:
Vacuuming or wet sweeping may be used to avoid dust dispersal.
Dispose of the collected material according to regulations.

Additional Information:
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

Handling:

Information for safe handling: Prevent formation of dust.

Information about protection against explosions and fires:
The product is not flammable.
When pouring powder into a container of flammable liquid, ground both containers electrically to prevent a static electric spark.

Storage:
Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: None required.

(Contd. on page 3)

Material Safety Data Sheet

Trade name: SYLODENT ® 783

(Contd. of page 2)

Further information about storage conditions: Keep receptacle tightly sealed.

Class according to regulation on flammable liquids: None Applicable

8 Exposure controls and personal protection

Components with limit values that require monitoring at the workplace:	
7631-86-9 amorphous silicon dioxide, chemically prepared	
IDLH	Short-term value: 3000 mg/m³ NIOSH Immediately Dangerous to Life and Health.
PEL	80 / (%SiO2) mg/m³ OSHA TWA for amorphous silica
REL	6 mg/m³ NIOSH TWA
TLV	10* 5** mg/m³ ACGIH TWA * Total Dust ** Respirable fraction
7732-18-5 water, distilled, or of similar purity	
PEL	None established OSHA TWA
TLV	None established ACBIH TWA

Personal protective equipment:

General protective and hygienic measures:
The usual precautionary measures for handling chemicals should be followed.

Breathing equipment:
If exposure limit is exceeded, a suitable respiratory protective device is recommended.

Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Eye protection:

Safety glasses

Body protection: Protective work clothing

9 Physical and chemical properties

General Information	
Form:	Powder

(Contd. on page 4)

Material Safety Data Sheet

Trade name: SYLODENT ® 783

(Contd. of page 3)

Color:	White
Odor:	Odorless
Change in condition	
Melting point/Melting range:	Undetermined.
Flash point:	Not applicable.
Auto igniting:	Product is not self-igniting.
Danger of explosion:	Product does not present an explosion hazard.
Density at 20°C (68°F):	15 - 20 lbs/ft³
Solubility in / Miscibility with Water:	Insoluble.
pH-value at 20°C (68°F):	3.4 - 4.2

* 10 Stability and reactivity

Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.

Dangerous reactions Reacts with Hydrogen fluoride

Dangerous products of decomposition: No dangerous decomposition products known.

* 11 Toxicology information

Acute toxicity:

LD/LC50 values that are relevant for classification:		
7631-86-9 amorphous silicon dioxide, chemically prepared		
Oral	LD50	10000 mg/kg (rat)
Dermal	LD50	> 5000 mg/kg (rabbit) OECD 402
Inhalative	LC50	0.139 mg/l/14h (rat)

Primary irritant effect:

on the skin: May cause irritation with dryness and abrasion.

in the eye: May cause abrasion, redness and pain.

Sensitization: No sensitizing effects known.

Subacute to chronic toxicity:
Amorphous silicon dioxide, chemically prepared:
No negative effects were determined during tests for chronic oral toxicity, carcinogenicity, teratogenicity and fertility. No irreversible changes and no symptons of silicosis were determined during tests for chronic inhalative toxicity.

(Contd. on page 5)

Material Safety Data Sheet

Trade name: SYLODENT ® 783

(Contd. of page 4)

Additional toxicological information:
The product is not subject to classification according to internally approved calculation methods for preparations:
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 Ecology information

Information about elimination (persistence and degradability):

Other information: Amorphous silica dioxide is chemically and biologically inert.

Ecotoxical effects:

Aquatic toxicity:

Fish toxicity	
7631-86-9 amorphous silicon dioxide, chemically prepared	
LC50 (96 h)	> 10000 mg/l (Brachydanio rerio) OECD 202

Water flea toxicity	
7631-86-9 amorphous silicon dioxide, chemically prepared	
EC50 (24 h)	> 1000 mg/l (Daphnia magna) OECD 202

General notes: Generally not hazardous for water

13 Disposal considerations

Product:

Recommendation:
Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14 Transport information

Transport/Additional information:
Not regulated as hazardous goods by DOT, ADR, IMO, or IATA.

15 Regulations

Sara

Section 355 (extremely hazardous substances):
None of the ingredients are listed.

(Contd. on page 6)

Material Safety Data Sheet

Trade name: SYLODENT ® 783

(Contd. of page 5)

Section 313 (Specific toxic chemical listings):
None of the ingredients are listed.

TSCA (Toxic Substances Control Act):
All ingredients are listed.

Proposition 65

Chemicals known to cause cancer:
None of the ingredients are listed.

Chemicals known to cause reproductive toxicity:
None of the ingredients are listed.

Carcinogenicity categories

EPA (Environmental Protection Agency)
None of the ingredients are listed.

IARC (International Agency for Research on Cancer)
None of the ingredients are listed.

NTP (National Toxicology Program)
None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)
None of the ingredients are listed.

MAK (German Maximum Workplace Concentration)

7631-86-9	amorphous silicon dioxide, chemically prepared	Ja

NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients are listed.

Canadian DSL
All ingredients are listed.

Canadian NDSL
None of the ingredients are listed.

Japan ENCS
All ingredients are listed.

Korea ECL
All ingredients are listed.

Philippines: PICCS
All ingredients are listed.

Australia: AICS
All ingredients are listed.

European EINECS
All ingredients are listed.

Product related hazard information:
Observe the general safety regulations when handling chemicals.

(Contd. on page 7)

Material Safety Data Sheet

Trade name: SYLODENT ® 783

(Contd. of page 6)

The product is not subject to identification regulations according to directives on hazardous materials.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing MSDS: GRACE Davison Safety & Health Department

Contact:

SALES OFFICES

USA:
GRACE Davison
7500 Grace DR
Columbia, MD 21044
410-531-4000

Germany:
Grace GmbH & Co. KG, D-67545 Worms
+49 6241/40300

Singapore:
501 Orchard Road
05-11/12 Wheelrock Place
Singapore 238880
(65) 737-5488

*** Data compared to the previous version altered.**