MATERIAL SAFETY DATA SHEET: DURABOND 70 TILE GRAY, U/L

Section I - General Information

(000000-000000- - 4183)

Date of Issue:
4/13/2004 12:00:00 AM

Supercedes:
9/8/2000 12:00:00 AM

Chemical Name & Synonyms:
N/A

Trade Name & Synonyms:
DURABOND 70 TILE GRAY, U/L

Chemical Family:
WATER-BASED EPOXY

Formula is a mixture: [v]

Manufacturer Name:
CERTIFIED LABS, DIV. OF NCH CORP.

Manufacturer Address:
BOX 152170
IRVING, TEXAS 75015

Prepared By:
L Boynton/Chemist

Product Code Number:
4183

Emergency Phone Number:
800-424-9300

Section II - Hazardous Ingredients

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS

Chemical Name (Ingredients)	Hazard	TLV	PEL	STEL	CAS #
2-PROPOXYETHANOL	IRRITANT	25 PPM* 1	N/E 2.	N/E	2807-30-9
POLYETHYLENE POLYAMINE ADDUCT	IRRITANT	N/E 1.	N/E 2.	N/E	TRADE SECRET
TITANIUM DIOXIDE	IRRITANT	10 MG/M3 1	15 MG/M3 2	N/E	13463-67-7
ALUMINUM HYDROXIDE	IRRITANT	2 MG/M3**1	N/E 2.	N/E	21645-51-2
AMORPHOUS SILICA	IRRITANT	10 MG/M3 1	8 MG/M3 2	N/E	7631-86-9
LIGHT AROMATIC NAPHTHA	IRRITANT	100PPM***1	500PPM***2	N/E	64742-95-6

* SKIN VALUE; ** ALUMINUM VALUE
*** STODDARD SOLVENT VALUES

Section III - Physical Data

Boiling Point (?F): >212?
Vapor Pressure (mm Hg): 10.91
Vapor Density (Air=1): 0.6
pH @ 100% : N/A
% Volatile by Volume: 63
$H_2$0 Solubility: COMPLETE

Specific Gravity ($H_2$0=1): 1.295
Color: GRAY
Odor: SLIGHT AMMONIA
Clarity: OPAQUE
Evaporation Rate (BuAc=1): 0.25
Viscosity: SEMI-VISCOUS

Section IV - Fire and Explosion Hazard

Flash Point: >200?F
Method Used: SETAFLASH
Flammable Limits: PRODUCT MIXTURE
UEL: 15.8%
LEL: 0.01%
Aerosol Level (NFPA 30B): N/A

Extinguishing Media:

[v] Foam	[v] Alcohol Foam	[v] CO2
[v] Dry Chemical	[v] Water Spray	[ ] Other

NFPA 704 Hazard Rating:

4-Extreme
3-High
2-Moderate
1-Slight
0-Insignificant

Health: 2
Flammability: 1
Instability: 0
Special:

Special Fire Fighting Procedures:
FIREFIGHTERS SHOULD WEAR A SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. EXTINGUISHING MEDIA SHOULD BE CHOSEN BASED ON THE NATURE OF THE SURROUNDING FIRE. COOL FIRE-EXPOSED CONTAINERS WITH WATER SPRAY TO PREVENT BURSTING.

Unusual Fire and Explosion Hazards:
THE USE OF WATER SPRAY (F0G) WHILE EFFECTIVE, MAY CAUSE FROTHING AND FOAMING. NEVER USE A WATER JET AS THIS WILL JUST SPREAD THE FIRE. USE CARE AS SPILLS MAY BE SLIPPERY.

Section V - Health and Hazard Data

Threshold Limit Value:
NOT ESTABLISHED FOR MIXTURE. SEE SECTION II.

Effects of Overexposure:

Acute: (Short Term Exposure)
EYE CONTACT: CAUSES SEVERE IRRITATION SEEN AS TEARING, SWELLING, STINGING, REDNESS, BLURRED VISION, AND A BURNING SENSATION. MAY CAUSE CORNEAL DAMAGE. SKIN CONTACT: CAUSES IRRITATION SEEN AS BLISTERS, ITCHING, REDNESS, SWELLING, AND A BURNING SENSATION. MAY CAUSE ALLERGIC SKIN REACTION SEEN AS DELAYED SKIN RASH WHICH MAY BE FOLLOWED BY BLISTERING, SCALING, AND OTHER SKIN EFFECTS. PROLONGED OR REPEATED CONTACT MAY CAUSE DRYNESS AND CRACKING OF THE SKIN. PRODUCT MAY BE ABSORBED THROUGH THE SKIN IN HARMFUL AMOUNTS. INHALATION: CAUSES RESPIRATORY IRRITATION SEEN AS COUGHING, SNEEZING, DIFFICULTY BREATHING, AND A TEMPORARY BURNING SENSATION OF THE NOSE AND THROAT. AT HIGH VAPOR CONCENTRATIONS, INHALATION MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH AS HEADACHE, DIZZINESS, DROWSINESS, WEAKNESS, UNCONCIOUSNESS, POSSIBLE ANESTHETIC EFFECTS FROM CENTRAL NERVOUS SYSTEM DEPRESSION, AND MAY BE FATAL. INGESTION: MAY CAUSE IRRITATION WITH POSSIBLE ABDOMINAL PAIN, NAUSEA, VOMITING, DIARRHEA, BLOOD ABNORMALITIES, AND KIDNEY/LIVER DAMAGE.

Chronic: (Long Term Exposure)
ON RARE OCCASIONS, PROLONGED AND REPEATED EXPOSURE TO HYDROCARBON MIST POSES A RISK OF CHRONIC LUNG INFLAMMATION. THIS CONDITION IS USUALLY ASYMPTOMATIC AS A RESULT OF REPEATED SMALL ASPIRATIONS. SHORTNESS OF BREATH AND COUGHING ARE THE MOST COMMON SYMPTOMS. ASPIRATION MAY LEAD TO PULMONARY EDEMA AND HEMORRHAGE AND MAY BE FATAL. SIGNS OF LUNG INVOLVEMENT INCLUDE INCREASED RESPIRATION AND HEART RATES AS WELL AS A BLUISH DISCOLORATION OF THE SKIN. CHRONIC SKIN CONTACT MAY PROMOTE DERMATITIS AND OIL ACNE. MAY CAUSE SKIN SENSITIZATION IN SOME INDIVIDUALS. PROLONGED OR REPEATED EXPOSURES TO HIGH CONCENTRATIONS HAVE RESULTED IN HEARING LOSS, IRREGULAR HEART RHYTHMS, AND CARDIAC ARREST. DAMAGE TO BLOOD-FORMING ORGANS MAY BE EVIDENCED BY FATIGUE, ANEMIA, DECREASED RESISTANCE TO INFECTION (WBC EFFECT), EXCESSIVE BRUISING AND BLEEDING (PLATELET EFFECT), AND PALLOR (RBC EFFECT). CONTAINS SOLID MATERIALS, WHICH WHEN SUBJECTED TO ABRASIVE OPERATIONS SUCH AS MILLING, SAWING, AND SANDING OF THE CURED COATING, CONSTITUTE A HAZARDOUS DUST. MEDICAL CONDITIONS AGGRAVATED: PRE-EXISTING KIDNEY AND LIVER DISEASES; PRE-EXISTING RESPIRATORY AND SKIN CONDITIONS SUCH AS ASTHMA, EMPHYSEMA, AND DERMATITIS. TARGET ORGANS: BLOOD-FORMING ORGANS, CARDIOVASCULAR/CENTRAL/PERIPHERAL NERVOUS SYSTEMS, HEART, KIDNEYS, LIVER, AND SPLEEN. THE PRIMARY ROUTES OF EXPOSURE ARE SKIN AND EYE CONTACT.

Primary Routes of Entry

[v] Inhalation	[ ] Ingestion	[v] Absorption

Emergency First Aid Procedures:

Inhalation:
REMOVE FROM THE AREA TO FRESH AIR. SEEK MEDICAL ATTENTION IF RESPIRATORY IRRITATION DEVELOPS OR IF BREATHING BECOMES DIFFICULT.

Eye Contact:
IMMEDIATELY RINSE THE EYES WITH WATER. REMOVE ANY CONTACT LENSES AND CONTINUE FLUSHING FOR AT LEAST 15 MINUTES. HOLD THE EYELIDS APART TO ENSURE RINSING OF THE ENTIRE SURFACE OF THE EYES AND LIDS WITH WATER. GET IMMEDIATE MEDICAL ATTENTION.

Skin Contact:
WASH AFFECTED AREAS WITH LARGE AMOUNTS OF SOAP AND WATER FOR 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. SEEK MEDICAL ATTENTION IF IRRITATION PERSISTS. WASH CLOTHING AND CLEAN SHOES BEFORE REUSE.

Ingestion:
GIVE 3 TO 4 GLASSES OF WATER, BUT DO NOT INDUCE VOMITING. IF VOMITING OCCURS, GIVE FLUIDS AGAIN. SEEK MEDICAL ATTENTION IF DISCOMFORT OCCURS.

Notes to Physician:
THERE IS NO SPECIFIC ANTIDOTE. TREAT THE PATIENT SYMPTOMATICALLY.

Section VI - Toxicity Information

Product Contains Chemicals Listed as Carcinogen or Potential Carcinogen By:
[ ] IARC [ ] NTP [ ] OSHA [ ] ACGIH [ ] Other

VOC CONTENT: 7.3% BY WEIGHT; 10.9% BY VOLUME; 204 G/L
VOC CONTENT PART A AND B: 154 G/L

2-PROPOXYETHANOL
IHL-RAT LCLo: 2000 PPM/4H 3.
ORL-RAT LD50: 3089 MG/KG 3.
SKN-RBT LD50: 960 UL/KG 3.
SKN-RBT SDT: 500 MG/24H MILD 3.
EYE-RBT SDT: 100 MG SEVERE 3.

OVEREXPOSURE TO THIS MATERIAL HAS BEEN SUGGESTED AS A CAUSE OF MILD, REVERSIBLE SPLEEN EFFECTS, BLOOD ABNORMALITIES (BREAKAGE OF RED BLOOD CELLS), LIVER AND KIDNEY DAMAGE IN LABORATORY ANIMALS. 4.

THIS MATERIAL HAS BEEN SHOWN TO CAUSE HARM TO THE FETUS IN LABORATORY ANIMAL STUDIES. HARM TO THE FETUS OCCURS ONLY AT EXPOSURE LEVELS THAT HARM THE PREGNANT ANIMAL. 4.

POLYETHYLENE POLYAMINE ADDUCT
ORL-RAT LD50: >4000 MG/KG-MALES 4.
ORL-RAT LD50: >2000 MG/KG-FEMALES 4.
SKN-RBT LD50: >5000 MG/KG 4.

IT HAS GENERALLY BEEN OBSERVED THAT ALIPHATIC AMINES CAN CAUSE CHANGES IN THE LUNGS, LIVER, KIDNEYS, AND HEART. 4.

TITANIUM DIOXIDE
SKN-HMN SDT: 300 UG/3D-I MLD 3.
IHL-RAT TCLO: 250 MG/M3/6H/4W-I 3.
IHL-RAT LC50: >6.82 MG/L/4 HR 4.
ORL-RAT LD50: >25 G/KG 4.
SKN-RBT LD50: >10 G/KG 4.

LIFETIME INHALATION STUDIES OF RESPIRABLE TITANIUM DIOXIDE HAVE BEEN CONDUCTED AT LEVELS UP TO 250 MG/MG. SLIGHT PULMONARY FIBROSIS WAS SEEN AT 50 TO 250 MG/M3 BUT NOT AT 10 MG/M3. THERE WAS NO EVIDENCE OF CANCER IN ANIMALS EXPOSED TO 10 OR 50 MG/M3. MICROSCOPIC LUNG TUMORS WERE SEEN IN 17% OF THE RATS EXPOSED TO 250 MG/M3.

THE NATIONAL CANCER INSTITUTE CONDUCTED A FEED STUDY IN RATS AND MICE WHICH EITHER 25,000 OR 50,000 PPM TITANIUM DIOXIDE WAS GIVEN IN THEIR DIET FOR TWO YEARS. UNDER THE CONDITION OF NCI, TITANIUM DIOXIDE DID NOT CAUSE CANCER BY THE ORAL ROUTE. 4.

ACGIH A4: NOT CLASSIFIABLE AS A HUMAN CARCINOGEN
IARC GROUP 3: NOT CLASSIFIABLE AS TO ITS CARCINOGENICITY TO HUMANS

ALUMINUM HYDROXIDE
ORL-RAT TDLO: 8040 MG/KG/67D-C 3.

LONG TERM ORAL ADMINISTRATION TO ANIMALS OF DOSES GREATER THAN THOSE EMPLOYED IN PATIENTS HAS NOT SHOWN ANY UNTOWARD EFFECTS. GROUPS OF 25 RATS WERE FED A DIET CONTAINING 14,470 PPM OR A CONTROL DIET FOR 28 DAYS WHICH DID NOT INDUCE ANY SIGNS OF TOXICITY. 4.

AMORPHOUS SILICA
EYE-RBT SDT: 25 MG/24H MILD 3.
ORL-RAT LDLo: 5 GM/KG 3.
IHL-RAT TCLo: 30 MG/M3/6H/6W-I 3.

LIGHT AROMATIC NAPHTHA
ORL-RAT LD50: >2000 MG/KG 4.
SKN-RAT LD50: >2000 MG/KG 4.
IHL-RAT LC50: GREATER THAN NEAR-SATURATED VAPOR CONCENTRATION/1 HR 4.

Section VII - Reactivity Data

Stability
[v] Stable [ ] Unstable

Conditions to Avoid:
NONE KNOWN.

Hazardous Polymerization
[v] Will not occur [ ] May occur

Conditions to Avoid:
N/A

Incompatibility (Materials to Avoid):
STRONG OXIDIZING AGENTS SUCH AS CHLORINE BLEACH AND CONCENTRATED HYDROGEN PEROXIDE; STRONG LEWIS OR MINERAL ACIDS; STRONG ORGANIC OR MINERAL BASES. REACTION WITH SOME CURING COMPOUNDS, ESPECIALLY PRIMARY AND SECONDARY AMINES MAY PRODUCE CONSIDERABLE HEAT.

Hazardous Decomposition Products:
OXIDES OF CARBON, NITROGEN, AND SULFUR; VARIOUS HYDROCARBONS. MAY FORM POTENTIALLY EXPLOSIVE PEROXIDES.

Section VIII - Spill Or Leak Procedures

Steps to be Taken if Material is Released or Spilled:
WEAR APPROPRIATE PROTECTIVE CLOTHING. USE CARE AS SPILLS MAY BE SLIPPERY. SHUT OFF SOURCE OF LEAK. DIKE AND CONTAIN SPILL. ABSORB WITH AN INERT MATERIAL AND TRANSFER ALL MATERIAL INTO A PROPERLY LABELED CONTAINER FOR DISPOSAL. PREVENT PRODUCT FROM CONTAMINATING SOIL OR FROM ENTERING SEWAGE AND DRAINAGE SYSTEMS AND BODIES OF WATER. FLUSH AREA WITH WATER.

Waste Disposal Method(s):
DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.

Neutralizing Agent:
N/A

Section IX - Special Protection Information

Required Ventilation:
LOCAL VENTILATION IS RECOMMENDED TO CONTROL EXPOSURE FROM OPERATIONS THAT CAN GENERATE EXCESSIVE LEVELS OF VAPORS OR MISTS. LOCAL VENTILATION IS PREFERRED, BECAUSE IT PREVENTS DISPERSION INTO WORK AREAS BY CONTROLLING IT AT ITS SOURCE.

Respiratory Protection:
RESPIRATORS SHOULD BE SELECTED BY AND USED UNDER THE DIRECTION OF A TRAINED HEALTH AND SAFETY PROFESSIONAL FOLLOWING REQUIREMENTS FOUND IN OSHA'S RESPIRATOR STANDARD (29 CFR 1910.134) AND ANSI'S STANDARD FOR RESPIRATORY PROTECTION (Z88.2-1992). FOR CONCENTRATIONS ABOVE THE TLV AND/OR PEL BUT LESS THAN 10 TIMES THESE LIMITS, A NIOSH APPROVED HALF-FACEPIECE RESPIRATOR EQUIPPED WITH APPROPRIATE CHEMICAL CARTRIDGES MAY BE USED. FOR CONCENTRATIONS GREATER THAN 10 TIMES THE TLV AND/OR PEL, CONSULT THE NIOSH RESPIRATOR DECISION LOGIC FOUND IN PUBLICATION NO. 87-116 OR ANSI Z88.2-1992.

Glove Protection:
NEOPRENE OR NITRILE RUBBER GLOVES SHOULD BE WORN. ENSURE COMPLIANCE WITH OSHA'S PERSONAL PROTECTIVE EQUIPMENT (PPE) STANDARD FOR HAND PROTECTION, 29 CFR 1910.138.

Eye Protection:
CHEMICAL GOGGLES SHOULD BE WORN. ENSURE COMPLIANCE WITH OSHA'S PERSONAL PROTECTIVE EQUIPMENT (PPE) STANDARD FOR EYE AND FACE PROTECTION, 29 CFR 1910.133.

Other Protection:
WEAR PROTECTIVE CLOTHING WHEN HANDLING. A SAFETY SHOWER AND AN EYEWASH STATION SHOULD BE AVAILABLE.

Section X - Storage and Handling Information

Storage Temperature
Max: 120?F Min: 35?F

Storage Conditions
[v] Indoors [ ] Outdoors [ ] Heated [ ] Refrigerated

Precautions to be Taken in Handling and Storing:
ALWAYS STORE MATERIAL IN ITS ORIGINAL CONTAINER. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. KEEP FROM FREEZING. IF PRODUCT FREEZES ALLOW IT TO SLOWLY WARM TO ROOM TEMPERATURE AND STIR THOROUGHLY BEFORE USING.

Other Precautions:
KEEP OUT OF REACH OF CHILDREN. READ THE ENTIRE LABEL BEFORE USING THE PRODUCT. FOLLOW THE LABEL DIRECTIONS.

Section XI - Regulatory Information

Chemical Name	CAS Number	Upper % Limit
2-PROPOXYETHANOL	2807-30-9	10

Those Ingredients listed above are subject to the reporting requirements of 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

Please call 1-800-527-9919 for additional information if you are a California customer. This MSDS is not intended for users in the state of California.

Section XII - References

1. THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES AND PHYSICAL AGENTS AND BIOLOGICAL EXPOSURE INDICES, ACGIH, 2004. 2. OSHA PEL. 3. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES, CCINFOWeb, 2004. 4. VENDOR'S MSDS. ALL THE COMPONENTS OF THIS PRODUCT ARE IN COMPLIANCE WITH THE TOXIC SUBSTANCES CONTROL ACT (TSCA) AND ARE EITHER LISTED ON THE TSCA INVENTORY OR OTHERWISE EXEMPTED FROM LISTING. IRR:IRRITANT, FLAM/FLAMM:FLAMMABLE, COMB:COMBUSTIBLE, CORR:CORROSIVE, CARC:CARCINOGENIC, TOX:TOXIC, N/A:NOT APPLICABLE, N/E:NOT ESTABLISHED, COC:CLEVELAND OPEN CUP, PMCC:PENSKY-MARTIN CLOSED CUP, TCC:TAGLIABUE CLOSED CUP, LEL:LOWER EXPLOSION LIMIT, UEL:UPPER EXPLOSION LIMIT, NFPA:NATIONAL FIRE PROTECTION ASSOCIATION, IARC:INTERNATIONAL AGENCY FOR THE RESEARCH ON CANCER, NTP:NATIONAL TOXICOLOGY PROGRAM, OSHA:OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION, ACGIH:AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS, TLV:THRESHOLD LIMIT VALUE, PEL:PERMISSIBLE EXPOSURE LIMIT, STEL:SHORT-TERM EXPOSURE LIMIT, MLD:MILD, MOD:MODERATE, SEV:SEVERE, MUT:MUTAGENIC, ASPHYX:ASPHYXIANT, PNOS:PARTICLES (INSOLUBLE) NOT OTHERWISE SPECIFIED, SDT:STANDARD DRAIZE TEST, ORL:ORAL, IHL:INHALATION, HMN:HUMAN

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