944A552 Gel-coaT

MATERIAL SAFETY DATA SHEET

SECTION I - MANUFACTURERS INFORMATION

PRODUCT CODE IDENTITY: 9444552 700
PRODUCT NAME: GRAY
E : COOK PAINT AND VARNISH COMPANY
DATE OF MSDS: 12/19/87
..DRESS: P.O. BOX 419389
KANSAS CITY, MO 64141-6389
EMERGENCY TELEPHONE: 816-391-6000
INFORMATION TELEPHONE: 816-391-6003

good # 6003

ATTN: LILLIAN CRAIG
RESEARCH - ARCHIVES
COOK PAINT & VARNISH

CUSTOMER NUMBER: RESECH
DATE PRINTED: 07/27/88

SECTION II - HAZARDOUS INGREDIENTS

STYRENE MONOMER

CAS #: 000100-42-5 PERCENT: 40.000 VAPOR PRESSURE: (MMHG/DEG F) 4.5

EXPOSURE LIMIT:
ACGIH TLV/TWA: 50 PPM (SKIN) (215 MG/CU.M.)
ACGIH TLV/STEL: 100 PPM (SKIN) (425 MG/CU.M.)
OSHA PEL: 100 PPM (425 MG/CU.M.)
OSHA PEL/CEILING: 200 PPM (850 MG/CU.M.)
OTHER: OSHA: 600 PPM/5 MIN/3 HR PEAK

TALC (HYDROUS MAGNESIUM SILICATE)

CAS #: 014807-96-6 PERCENT: 5.000 VAPOR PRESSURE: (MMHG/DEG F) N/A

EXPOSURE LIMIT:
ACGIH TLV/TWA: 2 MG/M3 RESPIRABLE DUST
OSHA PEL: 20 M PPCF

SILICA, CRYSTALLINE-QUARTZ

CAS #: 014808-50-7 PERCENT: 5.000 VAPOR PRESSURE: (MMHG/DEG F) N/A

EXPOSURE LIMIT:
ACGIH TLV/TWA: 0.1 MG/CU.M. RESPIRABLE DUST
OSHA PEL: 0.1 MG/CU.M. RESPIRABLE DUST

SILICA, AMORPHOUS-SILICA GEL

CAS #: 063231-67-4 PERCENT: 5.000 VAPOR PRESSURE: (MMHG/DEG F) N/A

EXPOSURE LIMIT:
ACGIH TLV/TWA: 10 MG/CU.M. TOTAL DUST
OSHA PEL: 20MPPCF AS DUST

SILICA, AMORPHOUS

CAS #: 007631-86-9 PERCENT: LESS THAN 5 VAPOR PRESSURE: (MMHG/DEG F) N/A

EXPOSURE LIMIT:
ACGIH TLV/TWA: 10MG/CU.M. TOTAL DUST
OSHA PEL: 20M PPCF AS DUST

MAXIMUM VOC NOT CONSUMED DURING CURING IS 40 GRAM/LITER (OR 230 GRAMS/SQUARE METER OF SURFACE AREA OPEN TO AIR). MAXIMUM VOC OF UNCATALYZED RESINS AND GEL COATS IS 600 GRAMS/LITER.

THIS MATERIAL CONTAINS INGREDIENTS COVERED BY THE CALIFORNIA "SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986" (PROPOSITION 65).

Telecon 18 Jan 96 w/ Ms. Craig (Lilian)
will fax latest MSDS

VOC # 4.102 #/gal theoritical Calc. Formula

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SECTION III - HEALTH HAZARD DATA

FECTS OF OVEREXPOSURE TO PRODUCT. PRIMARY ROUTES OF ENTRY ARE:

EYE CONTACT: IRRITATION. SYMPTOMS ARE TEARING, REDNESS AND DISCOMFORT.

SKIN CONTACT: IRRITATION. CAN CAUSE DEFATTING OF SKIN WHICH MAY LEAD TO DERMATITIS.

INHALATION: IRRITATION TO NOSE AND THROAT. EXTENDED OR REPEATED EXPOSURE TO CONCENTRATIONS ABOVE THE RECOMMENDED EXPOSURE LIMITS MAY CAUSE BRAIN OR NERVOUS SYSTEM DEPRESSION, CAUSING DIZZINESS, HEADACHE OR NAUSEA AND IF CONTINUED INDEFINITELY, LOSS OF CONSCIOUSNESS, LIVER AND KIDNEY DAMAGE.

REPORTS HAVE ASSOCIATED REPEATED OR PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

INGESTION: MAY CAUSE MOUTH, THROAT, ESOPHAGUS AND STOMACH IRRITATION. NAUSEA, VOMITING AND DIARRHEA.

MEDICAL CONDITIONS THAT MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT:
PREEXISTING EYE, SKIN, LIVER, KIDNEY AND RESPIRATORY DISORDERS.

EMERGENCY AND FIRST AID PROCEDURES:

IN CASE OF EYE CONTACT, FLUSH IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION; FOR SKIN, WASH THOROUGHLY WITH SOAP AND WATER. IF AFFECTED BY INHALATION OF VAPORS OR SPRAY MIST, REMOVE TO FRESH AIR. IF SWALLOWED, GET MEDICAL ATTENTION IMMEDIATELY.

OTHER HEALTH HAZARDS:
THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) HAS RECLASSIFIED STYRENE AS GROUP 2B "POSSIBLY CARCINOGENIC TO HUMANS". THIS NEW CLASSIFICATION IS NOT BASED ON NEW HEALTH DATA RELATING TO EITHER HUMANS OR ANIMALS, BUT ON A CHANGE IN THE IARC CLASSIFICATION SYSTEM. THE STYRENE INFORMATION AND RESEARCH CENTER DOES NOT AGREE WITH THE RECLASSIFICATION AND HAS PUBLISHED THE FOLLOWING STATEMENT. "RECENTLY PUBLISHED STUDIES TRACING 50,000 WORKERS EXPOSED TO HIGH OCCUPATIONAL LEVELS OF STYRENE OVER A PERIOD OF 45 YEARS SHOWED NO ASSOCIATION BETWEEN STYRENE AND CANCER, NO INCREASE IN CANCER AMONG STYRENE WORKERS (AS OPPOSED TO THE AVERAGE AMONG ALL WORKERS), AND NO INCREASE IN MORTALITY RELATED TO STYRENE."
OVEREXPOSURE TO FREE CRYSTALLINE SILICA DUST CAN CAUSE INJURY TO THE LUNGS; EXAMPLE SILICOSIS. CRYSTALLINE SILICA IS LISTED BY THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) AS "PROBABLY CARCINOGENIC TO HUMANS" (GROUP 2B) RISK OF CANCER DEPENDS ON DURATION AND LEVEL OF EXPOSURE.

SECTION IV - PHYSICAL DATA

BOILING POINT,DEG.F. 293 VAPOR DENSITY IS HEAVIER THAN AIR

WEIGHT PER GALLON: 9.83 EVAPORATION RATE IS SLOWER THAN ETHER

PERCENT VOLATILE BY VOLUME: 53.322

SECTION V - FIRE AND EXPLOSION HAZARD DATA

OSHA FLAMMABILITY CLASSIFICATION: FLAMMABLE LIQUID CLASS IC

FLASH POINT SETA CLOSED CUP, DEG F: 88

DOT HAZARD CLASS: RED-LABEL, FLAMMABLE LIQUID LEL: 1.10

EXTINGUISHING MEDIA: FOAM, CARBON DIOXIDE, DRY CHEMICAL, WATER FOG.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

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IF POLYMERIZATION TAKES PLACE IN A CONTAINER, THERE IS POSSIBILITY OF VIOLENT RUPTURE OF THE CONTAINER. STYRENE VAPORS ARE UNINHIBITED AND MAY FORM POLYMERS IN VENTS OR FLAME ARRESTORS OF STORAGE TANKS RESULTING IN STOPPAGE OF VENTS. VAPORS MAY CAUSE FLASH FIRE. KEEP CONTAINERS TIGHTLY CLOSED AND ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT, SPARKS AND FLAME. NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY.

SPECIAL FIRE FIGHTING PROCEDURES:
FULL PROTECTIVE EQUIPMENT INCLUDING SELF-CONTAINED BREATHING APPARATUS SHOULD BE USED. WATER SPRAY MAY BE INEFFECTIVE. IF WATER IS USED, FOG NOZZLES ARE PREFERABLE. WATER MAY BE USED TO COOL CLOSED CONTAINERS TO PREVENT PRESSURE BUILD-UP AND POSSIBLE AUTO-IGNITION OR EXPLOSION WHEN EXPOSED TO EXTREME HEAT

SECTION VI - REACTIVITY DATA

STABILITY: STABLE HAZARDOUS POLYMERIZATION: MAY OCCUR.

CONDITIONS TO AVOID:
ELEVATED TEMPERATURES. IMPROPER ADDITION OF PROMOTER AND/OR CATALYST. AVOID DIRECT CONTACT OF MEKP CATALYST WITH ACCELERATOR. IF AN ACCELERATOR SUCH AS COBALT DRIER IS TO BE ADDED, MIX THIS ACCELERATOR WITH BASE MATERIAL BEFORE ADDING CATALYST.

INCOMPATIBILITY (MATERIALS TO AVOID):
OXIDIZERS, PEROXIDES, STRONG ACIDS, ALUMINUM CHLORIDE AND VINYL POLYMERS.

HAZARDOUS DECOMPOSITION PRODUCTS:
THERMAL DECOMPOSITION OR COMBUSTION CAN PRODUCE FUMES CONTAINING ORGANIC ACIDS, CARBON DIOXIDE AND CARBON MONOXIDE.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
REMOVE ALL SOURCES OF IGNITION (FLAMES, HOT SURFACES, AND ELECTRICAL, STATIC, OR FRICTIONAL SPARKS). AVOID BREATHING VAPORS. VENTILATE AREA. CONTAIN AND REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.

WASTE DISPOSAL METHOD:
DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE CLOSED CONTAINERS. INCINERATE IN APPROVED FACILITY.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:
DO NOT BREATHE OR INGEST VAPORS, SPRAY MIST OR DUST WHILE APPLYING, SANDING, GRINDING, OR SAWING CURED PRODUCT. WEAR AN APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING APPLICATION AND OTHER USE OF THIS PRODUCT UNTIL ALL VAPORS, MISTS, AND DUSTS ARE EXHAUSTED, UNLESS AIR MONITORING DEMONSTRATES VAPOR AND MIST AND DUST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE. OBSERVE OSHA STANDARD 29CFR 1910.134.

VENTILATION:
PROVIDE GENERAL CLEAN AIR DILUTION OR LOCAL EXHAUST VENTILATION IN VOLUME AND PATTERN TO KEEP THE AIR CONTAMINANT CONCENTRATION BELOW THE LOWER EXPLOSION LIMIT AND BELOW CURRENT APPLICABLE EXPOSURE LIMITS IN THE MIXING, APPLICATION AND CURING AREAS; AND TO REMOVE DECOMPOSITION PRODUCT DURING WELDING AND FLAME CUTTING ON SURFACES COATED WITH THIS PRODUCT. IN CONFINED AREAS, USE ONLY WITH FORCED VENTILATION ADEQUATE TO KEEP VAPOR CONCENTRATION BELOW 20% OF LOWER EXPLOSION LIMITS. REFER TO OSHA STANDARDS 29CFR 1910.94, 1910.107, 1910.108.

NOTE: HEAVY SOLVENT VAPORS SHOULD BE REMOVED FROM LOWER LEVELS OF THE WORK AREA AND ALL IGNITION SOURCES (NONEXPLOSION-PROOF MOTORS, ETC.) SHOULD BE ELIMINATED.

PROTECTIVE GLOVES: USE SOLVENT IMPERMEABLE GLOVES TO AVOID CONTACT WITH PRODUCT

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PROTECTION:
O NOT GET IN EYES. USE SAFETY EYEWEAR WITH SPLASH GUARDS OR SIDE SHIELDS. HEMICAL GOGGLES, FACE SHIELDS.

R PROTECTIVE EQUIPMENT:
VOID CONTACT WITH SKIN. USE PROTECTIVE CLOTHING. PREVENT CONTACT WITH ONTAMINATED CLOTHING. WASH CONTAMINATED CLOTHING, INCLUDING SHOES, BEFORE EUSE.

SECTION IX - SPECIAL PRECAUTIONS

AUTIONS TO BE TAKEN IN HANDLING AND STORING:
O NOT STORE ABOVE 120 DEG. F. STORE LARGE QUANTITIES IN BUILDINGS DESIGNED O COMPLY WITH OSHA 1910.106. KEEP AWAY FROM HEAT, SPARKS AND FLAME. KEEP ONTAINERS CLOSED WHEN NOT IN USE AND UPRIGHT TO PREVENT LEAKAGE.

R PRECAUTIONS:
ONTAINERS SHOULD BE GROUNDED WHEN POURING. DO NOT TAKE INTERNALLY. WASH ANDS AFTER USING AND BEFORE SMOKING OR EATING. EMPTIED CONTAINERS MAY RE-AIN HAZARDOUS RESIDUE AND EXPLOSIVE VAPORS. KEEP AWAY FROM HEAT, SPARKS AND LAMES. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR EMPTIED CONTAINERS. FOLLOW LL HAZARD PRECAUTIONS GIVEN IN THIS DATA SHEET UNTIL CONTAINER IS THOROUGHLY LEANED OR DESTROYED. IF THIS PRODUCT IS BLENDED WITH OTHER COMPONENTS SUCH S THINNERS, CONVERTER, COLORANTS AND CATALYSTS PRIOR TO USE, READ ALL WARN-NG LABELS. ANY MIXTURE OF COMPONENTS WILL HAVE HAZARDS OF ALL COMPONENTS. OLLOW ALL PRECAUTIONS. IF SPRAYING THIS MATERIAL, KEEP SPRAY BOOTHS CLEAN. VOID BUILDUP OF SPRAY DUST OR OVERSPRAY IN BOOTHS OR DUCTS.

KEEP OUT OF REACH OF CHILDREN FOR INDUSTRIAL USE ONLY

DISCLAIMER AND LIMITATION OF LIABILITY

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COOK PAINT AND VARNISH COMPANY WILL NOT BE LIABLE FOR ANY INCIDENTAL OR NSEQUENTIAL DAMAGES. FINAL DETERMINATION OF THE SUITABILITY OF THE MATERIAL R THE USE CONTEMPLATED, THE MANNER OF USE, AND WHETHER THE SUGGESTED USE FRINGES ANY PATENT IS THE SOLE RESPONSIBILITY OF THE BUYER.

DOD Hazardous Materials Information System
DoD 6050.5-L
AS OF July 1995

FSC: 6810
NIIN: 002900048
Manufacturer's CAGE: 5W216
Part No. Indicator: A
Part Number/Trade Name: TOLUENE,TECHNICA

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General Information

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Item Name: TOLUENE,TECHNICAL
Company's Name: C S D INC.
Company's Street: 420 SEABOARD
Company's P. O. Box: N/K
Company's City: MATTHEWS
Company's State: NC
Company's Country: US
Company's Zip Code: 28105-5073
Company's Emerg Ph #: 704-821-9822
Company's Info Ph #: 704-821-9822
Distributor/Vendor # 1: N/R
Distributor/Vendor # 1 Cage:
Distributor/Vendor # 2:
Distributor/Vendor # 2 Cage:
Distributor/Vendor # 3:
Distributor/Vendor # 3 Cage:
Distributor/Vendor # 4:
Distributor/Vendor # 4 Cage:
Safety Data Action Code:
Safety Focal Point: D
Record No. For Safety Entry: 011
Tot Safety Entries This Stk#: 015
Status: SM
Date MSDS Prepared: 29SEP86
Safety Data Review Date: 10JUL89
Supply Item Manager:
MSDS Preparer's Name: ROBERT G. SCHORY
Preparer's Company:
Preparer's St Or P. O. Box:
Preparer's City:
Preparer's State:
Preparer's Zip Code:
Other MSDS Number:
MSDS Serial Number: BGWYC
Specification Number: TT-T-548
Spec Type, Grade, Class: N/R
Hazard Characteristic Code: F3
Unit Of Issue: CN
Unit Of Issue Container Qty: 5.0 GL
Type Of Container: CAN
Net Unit Weight: 5.0 GL

Report for NIIN: 002900048

Reactivity Data

Stability: YES
Cond To Avoid (Stability): EXTREME HEAT.
Materials To Avoid: STRONG OXIDIZING AGENTS,STRONG ACIDS,OR BASES,SELECTED AMINES.
Hazardous Decomp Products: ON THERMAL DECOMPOSITION,CO AND/OR CO*2.
Hazardous Poly Occur: NO
Conditions To Avoid (Poly): N/R

Health Hazard Data

LD50-LC50 Mixture:
Route Of Entry - Inhalation: YES
Route Of Entry - Skin: YES
Route Of Entry - Ingestion: YES
Health Haz Acute And Chronic: ACUTE:IRRITATION OF EYES,SKIN AND RESPIRATORY TRACT,CNS DEPRESSION,EFFECT ON KIDNEY,LIVER,BRAIN CELSS, HEADACHE,NAUSEA,VOMITING. CHRONIC:IRRITATION,KIDNEY,LIVER OR BRAIN DAMAGE.
Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity: NO DATA AVAILABLE.
Signs/Symptoms Of Overexp: SEE HEALTH HAZARDS DATA.
Med Cond Aggravated By Exp: NO DATA AVAILABLE.
Emergency/First Aid Proc: EYES AND SKIN:FLUSH WITH WATER FOR AT LEAST 15-20 MINUTES,SEEK MEDICAL HELP. INHALATION:REMOVE TO FRESH AIR;SEEK MEDICAL HELP. INGESTION:DO NOT INDUCE VOMITING,SEEK MEDICAL ADVICE IMMEDIATELY.

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: USE PROPER PERSONAL PROTECTION;REMOVE ALL IGNITION SOURCES;CONTAIN FREE LIQUID;USE SUITABLE INERT ABSORBENT MATERIAL AND RECOVER FOR PROPER DISPOSAL.
Neutralizing Agent: N/R
Waste Disposal Method: INCINERATION OR DISPOSAL MUST BE IN ACCORDANCE WITH LOCAL,STATE AND FEDERAL REGULATIONS.
Precautions-Handling/Storing: STORE IN COOL,DRY AND WELL VENTILATED AREA. KEEP AWAY FROM HEAT,OPEN FLAMES;KEEP CONTAINER TIGHTLY CLOSED.
Other Precautions:

Control Measures

Respiratory Protection: USE NIOSH/MSHA APPROVED RESPIRATOR FOR ORGANIC VAPORS/MIST IF ABOVE PEL/TLV.
Ventilation: LOCAL/GENERAL TO MAINTAIN PEL/TLV.
Protective Gloves: IMPERVIOUS.
Eye Protection: SAFETY GLASSES/GOGGLES.
Other Protective Equipment: APRON,EYE WASH FACILITIES.
Work Hygienic Practices: AVOID CONTACT WITH EYES AND SKIN;DO NOT BREATHE VAPORS/MIST;DO NOT USE CONTAMINATED CLOTHES.

Report for NIIN: 002900048

NRC/State License Number: N/R
Net Explosive Weight:
Net Propellant Weight-Ammo: N/R
Coast Guard Ammunition Code:

Ingredients/Identity Information

Proprietary: NO
Ingredient: TOLUENE (SARA III)
Ingredient Sequence Number: 01
Percent: 99.0
Ingredient Action Code:
Ingredient Focal Point: D
NIOSH (RTECS) Number: XS5250000
CAS Number: 108-88-3
OSHA PEL: 200 PPM/150 STEL
ACGIH TLV: 50 PPM; 9293
Other Recommended Limit: N/R

Physical/Chemical Characteristics

Appearance And Odor: CLEAR,LITTLE IF ANY COLOR,CHARACTERISTIC ODOR.
Boiling Point: 232F/111.1C
Melting Point: N/K
Vapor Pressure (MM Hg/70 F): 22 MMHG
Vapor Density (Air=1): 3.2
Specific Gravity: 0.871
Decomposition Temperature: N/K
Evaporation Rate And Ref: 4.5 (ETHER=1)
Solubility In Water: NEGLIGIBLE
Percent Volatiles By Volume: 100
Viscosity:
pH: N/K
Radioactivity:
Form (Radioactive Matl):
Magnetism (Milligauss): N/P
Corrosion Rate (IPY): N/K
Autoignition Temperature: N/K

Fire and Explosion Hazard Data

Flash Point: 45F/7.2C
Flash Point Method: TCC
Lower Explosive Limit: 1.2
Upper Explosive Limit: N/K
Extinguishing Media: FOAM,CO*2,DRY CHEMICAL.
Special Fire Fighting Proc: USE NIOSH/MSHA APPROVED SCBA IN AN ENCLOSED AREA.
Unusual Fire And Expl Hazrds: KEEP WORK AREAS FREE OF HOT METAL SURFACES AND OTHER SOURCES OF IGNITIONS.

Report for NIIN: 002900048

Suppl. Safety & Health Data:

→ Air inhibited

wax additive to cure tack free

PPA to seal O_2 off

to cure tack free

at least 20 mil

< 70°F

→ over 90 days old no good
