JAN-1-1990----SECTION I - PRODUCT IDENTIFICATION -----MAINT-DEPT___

MILLER PAINT CO., ING. 12730 H.E. WHITAKER WAY PORTLAND, OR 97230

INFORMATION AND EMERGENCY TELEPHONE NUMBER: 503-255-0190

NAME OF PRODUCT:

SPAR ENAMEL

PRODUCT NUMBER: 2510 - 2558, PRODUCT CLASS: SOLVENT-BASED COATING

PREPARATION DATE: 11/25/85

SECTION II - HAZARDOUS INGREDIENTS

EXPOSURE LIMITS VAPOR TLV PEL PRESSURE PERCENT TLV PEL (PPM) (MG/M3) MM HG a68F (BY WEIGHT) INGREDIENT

MINERAL THINNER

33.5-51.1 125

5 a 77 F

SECTION III - PHYSICAL DATA

BOILING RANGE (F): 148-391 VAPOR DENSITY: HEAVIER THAN AIR EVAPORATION RATE: SLOWER THAN ETHER 42.5-55.6 % VOLATILE BY VOLUME WEIGHT PER GALLON (IN POUNDS): 7.7-9.5

SECTION IN - FIRE & EXPLOSION HAZARDS

DOT FLAMMABILITY CLASSIFICATION: COMPUSTIBLE LIQUID SETAFLASH FLASH POINT (F): 112 LEL:

LEL: 0.7 %

EXTINGUISHING MEDIA:

FOAM, 'ALCOHOL' FOAM, COZ, DRY CHEMICAL, WATER FOG.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, SPARKS, FLECTRICAL EQUIPMENT AND OPEN FLAME. APPLICATION TO HOT SURFACES REQUIRES SPECIAL PRECAUTIONS. SOLVENT VAPORS CAN TRAVEL TO AM IGNITION SOURCE AND FLASH BACK. FINE SPRAYS/MISTS HAY BE COMBUSTIBLE AT TEMPERATURES BELOW NORMAL FLASH POINT. DURING EMERGENCY CONDITIONS, OVEREXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SPECIAL FIRE FIGHTING PROCEDURES:

KEEP PEOPLE AWAY. DO NOT ENTER CONFINED, FIRE SPACE WITHOUT PROPER PROTECTIVE EQUIPMENT INCLUDING A NIDSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL CLOSED CONTAINERS WITH WATER. FULL STREAM WATER MAY BE INNEFECTIVE AS AN EXIINGUISHING METHOD, BUT IS HELPFUL IN KEEPING NEARBY CONTAINERS COOL. AVOID SPREADING BURNING LIQUID WITH WATER USED FOR COOLING PURPOSES.

SECTION V - HEALTH HAZARD DATA

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MAINT, DEPT.

HAZARDS:

EYES: MAY CAUSE IRRITATION

DERMAL: PROLONGED AND REPEATED CONTACT CAN CAUSE SKIN IRRITATION, DRYNESS, DEFATTING, DERMATITIS.

INGESTION: MAY CAUSE HEADACHE, GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, DIARRHEA, WEAKNESS, AND IN SUFFICIENT QUANTITIES MAY BE FATAL. ASPIRATION OF LIQUID MUST BE AVOIDED AS LIQUID CONTACT WITH LUNGS CAN RESULT IN CHEMICAL PNEUMONITIS AND PULMONARY EDEMAZHEMORRAGE.

INHALATION: SOLVENT VAPORS, MISTS OR RESIDUAL MONOMERS CAN CAUSE DROWSINESS, COUGH, BRONCHITIS, BLURRED VISION, IRRITATION OF MEMBRANES OF THE RESPIRATORY TRACT, ASPHYXIATION AND SIGNS OF CENTRAL NERVOUS SYSTEM DEPRESSION SUCH AS HEADACHE, DIZZINESS, NAUSEA, WEAKNESS AND LOSS OF COORDINATION. REPEATED AND PROLONGED EXPOSURE MAY CAUSE PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

PRIMARY ROUTE(S) OF ENTRY: DERMAL, INHALATION, INGESTION.

EMERGENCY & FIRST AID PROCEDURES:

SPLASH (EYES): FLUSH IMMEDIATELY WITH LARGE AMOUNTS OF VATER FOR AT LEAST 15 MINUTES. TAKE TO A PHYSICIAN FOR MEDICAL TREATMENT. SPLASH (SKIN): WASH EFFECTED AREA WITH SOAP AND WATER. REMOVE

CONTAMINATED CLOTHING. CONSULT PHYSICIAN IF IPRITATION PERSISTS.
INGESTION: DRINK 1 OR 2 GLASSES OF WATER TO DILUTE. DO NOT INDUCE

VOMITING. CONSULT PHYSICIAN OR POISON CONTROL CENTER.

IMMEDIATELY. TREAT SYMPTOMATICALLY.

INHALATION: REMOVE TO FRESH AIR. RESTUPE BREATHING. TREAT SYMPTOMATICALLY. CONSULT A PHYSICIAN.

SECTION VI - REACTIVITY DATA

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

HAZARDOUS DECOMPOSITION PRODUCTS: NORMAL COMBUSTION FORMS CARRON

DIOXIDE; INCOMPLETE COMBUSTION CAN PRODUCE CARBON MONOXIDE.

LOW MOLECULAR WEIGHT HYDROCARBONS AND ORGANIC ACID.

HYDROGEN CYANIDE AND TOLUENE DIISOCYANATE

POSSIBLY ACROLEIN GAS.

CONDITIONS TO AVOID: HIGH TEMPERATURES AND EXTREME HEAT.

OXIDIZING MATERIALS.

INCOMPATIBILITY (MATERIALS TO AVOID): MAY REACT WITH OXIDIZING MATERIALS. AVOID HEAT, SPARKS AND OPEN FLAME.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: KEEP UNNECESSARY PEOPLE AWAY. CLEAN UP SPILLS AS SOON AS POSSIBLE. ELIMINATE ALL SOURCES OF IGNITION. HANDLING EQUIPMENT MUST BE GROUNDED TO PREVENT SPARKING. USE NON-SPARKING TOOLS. VENTILATE ENCLOSED SPACES. AVIOD BREATHING VAPORS. WEAR PROTECTIVE EQUIPMENT, OBSERVING PRECAUTIONS IN SECTIONS IN THROUGH VIII. DIKE AND CONTAIN SPILL WITH INERT MATERIAL (CLAY, SAND, FTC.). UP RESIDUE WITH AN ABSORBANT SUCH AS CLAY OR DIATOMACEOUS EARTH. PLACE IN NON-LEAKING CONTAINERS, SEAL TIGHTLY AND LABEL PROPERLY FOR DISPOSAL. A FIRE OR HEALTH HAZARD MAY STILL EXIST SIMCE THESE MATERIALS WILL ONLY ABSORB LIQUID: THEY WILL NOT ABSORB VAPORS. WASTE DISPOSAL: OBSERVE ALL FEDERAL, STATE AND LOCAL RECEIVEDS CONCERNING HAZARDOUS WASTE.

SECTION MITT - CALL MINES : SECTION VIII - SAFE HANDLING AND USE INFORMATIONT DEPT.

RESPIRATORY PROTECTION: IF EXPOSUPE CAN POTENTIALLY EXCEED TLY, OR FOR APPLICATION WITH SPRAY EQUIPMENT, USE NIOSH APPROVED SELF CONTAINED BREATHING EQUIPMENT.

EXPOSURE DATA IS LACKING, ASSUME TLV IS EXCHEDED.

PROVIDE ADEQUATE VENTILATION (WITH EXPLOSION PROOF VENTILATION: EQUIPMENT) TO MAINTAIN EXPOSURE LEVEL BELOW TLV.

PROTECTIVE GLOVES: USE SOLVENT RESISTANT GLOVES TO PREVENT CONTACT. EYE PROTECTION: . SAFETY EYEWEAR INCLUDING SPLASH GUARDS. CHEMICAL GOGGLES OR FACE SHIELDS RECOMMENDED (REQUIRED FOR SPRAY APLICATION). OTHER PROTECTIVE EQUIPMENT: REMOVE CONTAMINATED CLOTHING AND ALLOW

SOLVENT TO EVAPORATE BEFORE RE-USE.

WASH HANDS BEFORE EATING, DRINKING, SMOKING OR HYGIENIC PRACTICES: USING THE WASHROOM.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STOPING: KEEP CONTAINERS CLUSED WHEN NOT IN USE. DO, NOT STORE OF USE MEAR HEAT, SPARK, OPEN FLAME OF OXIDIZERS. STORE AND USE ONLY IN WELL VENTILATED AREAS. AVOID BREATHING VAPORS OF SPRAY MIST. AVOID EYE OR SKIN CONTACT. WASH THOROUGHLY AFTER HADDLING. PEAD AND ORSERVE PRECAUTIONS ON PRODUCT LABEL AND THES SHEET. KEEP OUT OF REACH OF CHILDREN. 'EMPTY' CONTAINERS MAY BE HAZAFDOUS FROM RESIDUES OF PRODUCT AND VAPOR AND ALL CAUTIONS OF THIS SHEET APPLY TO THEM.

OTHER PRECAUTIONS:

DRUMS OF THIS MATERIAL SHOULD BE GROUNDED AND BONDED WHEN POURING.

THE INFORMATION CONTAINED IN THIS MATERIAL SAFETY DATA SHEET IS BASED ON THE DATA AVAILABLE TO US AND IS PELIEVED TO BE CORPECT. HOWEVER, WE ASSUME NO RESPONSIBILITY FOR ANY INACCURACIES THAT MAY SUBSEQUENTLY HE PROVEN. PURCHASER ASSUMES ALL PISK IN HIS USF OF THE MATERIAL EVEN WHEN RECOMMENDED SAFETY PROCEDURES ARE FOLLOWED. AS MANUFACTURER CANNOT PRESCRIBE SAFETY MEASURES FOR ALL POSSIBLE COMBINATIONS OF USE, ENVIRONMENT, AND SUSCEPTABILITY OF ALL PERSONS TO CHEMICAL SUBSTANCES.