TEMPERKOTE® 600 PRIMER LIGHT GRAY

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

MANUFACTURER'S NAME / ADDRESS

FLAME CONTROL COATINGS LLC

TRADE NAME: TEMPERKOTE® 600 PRIMER

4120 HYDE PARK BLVD. COLOR: LIGHT GRAY

NIAGARA FALLS, N.Y. 14305 **MAIN USE**: INDUSTRIAL HI-HEAT®

CORROSION RESISTANT PRIMER

EMERGENCY TELEPHONE NUMBER: 800-535-5053

ISSUE DATE: FEBRUARY 25, 2013 REVISION DATE: PREPARED BY: A. MAHMOOD

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	Wt. %	CAS Number
TOLUENE	1-5	000108-88-3
PARACHLOROBENZOTRIFLOURIDE	5-10	000098-56-6
XYLENE-MIXED ORTHO, META AND PARA ISOMERS	5-10	001330-20-7
AROMATIC PETROLEUM DISTILLATES	5-10	064742-95-6
MICA	5-10	012001-26-2
BARIUM SULFATE	5-10	007727-43-7
TITANIUM DIOXIDE	1-5	013463-67-7

^{**} This product is the result of high temperature calcinations of the component substances. Due to its unique crystalline structure the properties of this finished pigment do not necessarily reflect the properties of the component metals or oxides.

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: DANGER!

HARMFUL OR FATAL IF SWALLOWED

HARMFUL IF INHALED

CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION

CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: BLOOD, KIDNEYS, LIVER, GASTROINTESTINAL TRACT,

RESPIRATORY TRACT, SKIN, NERVOUS SYSTEM, EYE, LENSE OR CORNEA

FLAMMABLE LIQUID AND VAPOR VAPOR MAY CAUSE FLASH FIRE

MAY BE HARMFUL IF ABSORBED THROUGH SKIN

POSSIBLE CANCER HAZARD

CONTAINS MATERIAL WHICH CAN CAUSE CANCER

PRIMARY ROUTES OF ENTRY: EYE CONTACT, SKIN CONTACT, INHALATION, INGESTION.

HEALTH HAZARDS (ACUTE AND CHRONIC EXPOSURES)

EYES:

ACUTE – LIQUID, AEROSOLS OR VAPORS ARE SEVERELY IRRITATING AND CAN CAUSE PAIN, TEARING, REDDENING AND SWELLING. IF LEFT UNTREATED, CORNEAL DAMAGE CAN OCCUR AND INJURY IS SLOW TO HEAL. HOWEVER, DAMAGE IS USUALLY REVERSIBLE

CHRONIC – PROLONGED VAPOR CONTACT MAY CAUSE CONJUNCTIVITIS

SKIN CONTACT:

ACUTE – REPEATED OR PROLONGED SKIN CONTACT CAN RESULT IN DRY, DEFATTED AND CRACKED SKIN CAUSING INCREASED SUSCEPTIBILITY TO INFECTION. IN ADDITION IRRITATION MAY DEVELOP INTO DERMATITUS. SOLVENTS CAN PENETRATE THE SKIN AND MAY CAUSE EFFECTS SIMILAR TO THOSE IDENTIFIED UNDER ACUTE INHALATION SYMPTOMS.

CHRONIC - MAY CAUSE EFFECTS SIMILAR TO THOSE IDENTIFIED UNDER CHRONIC INHALATION EFFECTS.

SKIN ABSORPTION:

ACUTE - ND

CHRONIC - ND

Page 1 of 5

TEMPERKOTE[®] 600 PRIMER LIGHT GRAY

SECTION 3: HAZARDS IDENTIFICATION (CON'T)

INHALATION:

ACUTE – SOLVENT VAPORS ARE IRRITATING TO THE EYES, NOSE, AND THROAT. SYMPTOMS OF IRRITATION MAY INCLUDE RED, ITCHY EYES, DRYNESS OF THE THROAT AND A FEELING OF TIGHTNESS IN THE CHEST. OTHER POSSIBLE SYMPTOMS OF OVEREXPOSURE INCLUDE: HEADACHE, DIZZINESS, NAUSEA, NARCOSIS, FATIGUE AND LOSS OF APPETITE.

CHRONIC – CHRONIC EXPOSURE TO ORGANIC SOLVENTS HAS BEEN ASSOCIATED WITH VARIOUS NEUROTOXIC EFFECTS INCLUDING PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. SYMPTOMS INCLUDE LOSS OF MEMORY, LOSS OF INTELLECTUAL ABILITY AND LOSS OF COORDINATION. TOLUENE HAS BEEN DEMONSTRATED TO BE EMBRYOFETOTOXIC AND TERATOGENIC IN LABORATORY ANIMALS. PROLONGED OR REPEATED OVEREXPOSURE TO TOLUENE CAN CAUSE IRRITATION TO THE RESPIRATORY TRACT, ENLARGED LIVER, KIDNEY EFFECTS AND CARDIAC SENSITIZATION.

INGESTION:

ACUTE – CAN RESULT IN IRRITATION OF THE DIGESTIVE TRACT. SYMPTOMS CAN INCLUDE SORE THROAT ABDOMINAL PAIN, NAUSEA, VOMITING AND DIARRHEA. VOMITING MAY CAUSE ASPIRATION OF SOLVENT RESULTING IN CHEMICAL PNEUMONITIS

CHRONIC - ND

CONDITIONS AGGRAVATED BY EXPOSURE: SKIN DISORDERS AND ALLERGIES

SECTION 4: FIRST AID MEASURES

GENERAL: REMOVE PERSON FROM AFFECTED AREA AND MAKE COMFORTABLE. TREAT SYMPTOMATICALLY.

EYES: FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION.

SKIN: REMOVE PRODUCT AND FLUSH AFFECTED AREA WITH WATER FOR 15 MINUTES. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION.

INHALATION: MOVE TO FRESH AIR. GIVE ASSISTED RESPIRATION IF BREATHING HAS STOPPED OR IS LABORED (CALL A PHYSICIAN).

INGESTION: GIVE 3 – 4 GLASSES OF WATER OR MILK IF PERSON CONSCIOUS. **DO NOT INDUCE VOMITING!** OBTAIN MEDICAL CARE AND TREATMENT.

NOTES TO PHYSICIAN: ACUTE MASSIVE EXPOSURE TO TOLUENE CAN CAUSE TRANSIENT HEMATURIA AND ALBUMINURIA. CARDIAC ARRHYTHMIAS CAN OCCUR AFTER MASSIVE INHALATION.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT: 4.4°C (40°F) TCC (TOLUENE) CONDITIONS OF FLAMMABILITY: NA

FLAMMABLE LIMITS: (TOLUENE) <u>LEL:</u> 1.2% <u>UEL:</u> 7.0% <u>SENSITIVITY TO IMPACT: ND</u>

OSHA CLASS: FLAMMABLE LIQUID, PACKING GROUP III AUTO IGNITION TEMP: 480°C (869°F)

HAZARDOUS COMBUSTION PRODUCTS: CO, CO2, ALDEHYDES, ACIDS

SENSITIVITY TO STATIC DISCHARGE: STATIC DISCHARGE MAY CAUSE MATERIAL TO IGNITE

EXTINGUISHNG MEDIA: IGNTION MAY GIVE RISE TO A CLASS B FIRE. IN CASE OF FIRE USE: WATER FOG, CARBON DIOXIDE, DRY CHEMICAL, ALCOHOL FOAM.

SPECIAL FIRE FIGHTING PROCEDURES: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING. WATER SPRAY IS USEFUL IN COOLING FIRE-EXPOSED VESSELS AND IN DISPERSING VAPORS.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS: MAY GENERATE TOXIC OR IRRITATING COMBUSTION PRODUCTS. SUDDEN REACTION AND FIRE MAY RESULT IF PRODUCT IS MIXED WITH AN OXIDIZING AGENT. SOLVENT VAPORS MAY BE HEAVIER THAN AIR. UNDER CONDITIONS OF STAGNANT AIR, VAPORS MAY BUILD UP AND TRAVEL ALONG THE GROUND TO AN IGNITION SOURCE.

TEMPERKOTE® 600 PRIMER LIGHT GRAY

SECTION 6: ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: SHUT OFF SOURCES OF IGNITION. COVER SPILLS WITH ABSORBENT. PLACE IN METAL CONTAINERS FOR RECOVERY OR DISPOSAL. PREVENT ENTRY INTO SEWERS, STORM DRAINS, AND WATERWAYS.

SECTION 7: HANDLING AND STORAGE

GENERAL: STORE IN COOL, WELL VENTILATED AREAS. KEEP AWAY FROM HEAT AND OPEN FLAMES. AVOID PROLONGED INHALATION OF HEATED VAPORS OR MISTS. AVOID PROLONGED SKIN CONTACT. USE NON-SPARKING TOOLS AND GROUNDING CABLES WHEN TRANSFERRING. CONTAINERS MAY BE HAZARDOUS WHEN EMPTY.

STORAGE: AVOID TEMPERATURE EXTREMES. STORE AWAY FROM EXCESSIVE HEAT, FROM SOURCES OF IGNITION AND FROM REACTIVE MATERIALS. MATERIAL CAN BURN; LIMIT INDOOR STORAGE TO AREAS EQUIPPED WITH AUTOMATIC SPRINKLERS. STORE OUT OF DIRECT SUNLIGHT IN A COOL PLACE. KEEP CONTAINERS TIGHTLY CLOSED. GROUND ALL METAL CONTAINERS DURING STORAGE AND HANDLING.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

EXPOSURE LIMITS (ppm)				
INGREDIENTS (CAS)	OSHA	ACGIH	OTHER	
	TWA STEL	TWA STEL		
000108-88-3	100 150	100 150		
000098-56-6	NE NE	NE NE		
012001-26-2	$3 \text{mg/m}^3 \text{ ND}$	3mg/m^3 ND	(SEE NOTE 1)	
001330-20-7	100 150	100 150		
064742-95-6	NE NE	NE NE		
007727-43-7	$5 \text{mg/m}^3 \text{ ND}$	5mg/m^3 ND	(SEE NOTE 1)	
013463-67-7	$10 \text{mg/m}^3 \text{ ND}$	10mg/m^3 ND	(SEE NOTE 1)	

<u>LEGEND</u>: (M) MAX. EXPOSURE LIMIT; (S) OCCUPATIONAL EXP. LIMIT; (R) SUPPLIERS REC. LIMIT, (+) PERCUTANEOUS RISK NOTE 1: VALUES MEANINGFUL ONLY WHEN HARDENED PRODUCT IS ABRADED, GROUND, ETC.

ENGINEERING CONTROLS: EXHAUST VENTILATION IS SUFFICIENT TO KEEP AIRBORNE CONCENTRATION OF THE SOLVENTS BELOW THEIR RESPECTIVE TLV'S. EXHAUST AIR MAY NEED TO BE CLEANED BY SCRUBBERS OR FILTERS TO REDUCE ENVIRONMENTAL CONTAMINATION.

RESPIRATORY PROTECTION: NONE REQUIRED IN ADEQUATELY VENTILATED AREAS. IF VAPOR CONCENTRATION EXCEEDS 20ppm FOR LONGER THAN 15 MINUTES, A NIOSH APPROVED RESPIRATOR FOR ORGANIC VAPORS IS RECOMMENDED.

PROTECTIVE GLOVES: NITRILE RUBBER

EYE PROTECTION: SPLASH-PROOF GOGGLES OR CHEMICAL SAFETY GLASSES

OTHER PROTECTIVE EQUIPMENT: LONG SLEEVED SHIRTS AND TROUSERS. EMERGENCY SHOWERS AND EYE WASH STATIONS SHOULD BE READILY ACCESSIBLE.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: 110.6°C (231.1°F) (TOLUENE) **SPECIFIC GRAVITY**: 1.85-1.95

VAPOR PRESSURE: 24 mm Hg (TOLUENE)

WELTING POINT: ND

VAPOR DENSITY: 3.1

(AIR = 1)

(BUTYL ACETATE = 1)

SOLUBILITY IN WATER: INSOLUBLE pH: NA

COEFFICIENT of WATER/OIL DISTRIBUTION: ND ODOR THRESHOLD: ND

APPEARANCE AND ODOR: GRAY PIGMENTED LIQUID, AROMATIC SOLVENT ODOR

% VOLATILES BY VOLUME: 53% %SOLIDS BY WEIGHT: 71%

TEMPERKOTE[®] 600 PRIMER LIGHT GRAY
Page 4 of 5

SECTION 10: STABILITY AND REACTIVITY

STABILITY: STABLE; HOWEVER MAY FORM PEROXIDES OF UNKNOWN STABILITY

CONDITIONS TO AVOID: NOT APPLICABLE (MATERIAL IS STABLE)

INCOMPATIBILITY (MATERIAL TO AVOID): OXIDIZING AGENTS (PERCHLORATES, NITRATES), STRONG ACIDS, HYPOCHLORITES, PEROXIDES. PRODUCT SHOULD NOT BE COMBINED WITH PHOSPHOROUS CONTAINING MATERIALS BECAUSE HIGHLY TOXIC FUMES CAN BE EMITED IN A FIRE SITUATION.

HAZARDOUS DECOMPOSITION PRODUCTS: CO, CO2.

HAZARDOUS POLYMERIZATION (REACTIVITY): WILL NOT OCCUR.

SECTION 11: TOXICOLOGICAL INFORMATION

CARCINOGENIC DATA: NTP: NONE
TERATOGENICITY: NO
OSHA: NONE
MUTAGENICITY: NO

EMBRYOTOXICITY: NO SYNERGISTIC MATERIAL: NO

OVEREXPOSURE EFFECTS: LACRIMATION OF EYES, SKIN IRRITATION, DIZZINESS.

IRRITANCY: YES SENSITIZER: YES

ACUTE TOXICITY EFFECTS: ORAL LD₅₀: 5.0g/kg (Rats); DERMAL LD₅₀: >12.0g/kg (Rabbit); INHALATION: ND

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: NOT READILY BIODEGRADABLE ECOTOXICITY: ND

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS: INCINERATION IS PREFERRED. COMPLY WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS. RCRA CLASSIFIED HAZARDOUS WASTE WITH CHARACTERISTIC OF IGNITABILITY.

SECTION 14: TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME: PAINT **HAZARD CLASS:** 3

UN NUMBER: UN1263 PACKAGING GROUP: III

DOT PRODUCT RQ LBS (KGS): 800 LBS. (362.9 KGS) **HAZARD LABEL:** FLAMMABLE LIQUID

HAZARD PLACARD FLAMMABLE LIQUID

IMO SHIPPING DATA: PAINT, HAZARD CLASS 3, UN1263, PAKAGING GROUP III, FLAMMABLE LIQUID

ICAO/IATA SHIPPING DATA: PAINT, HAZARD CLASS 3, UN1263, PACKING GROUP III, FLAMMABLE LIQUID

PASSENGER AIR MAX QUANTITY: 60L PASSENGER PACKING INSTRUCTION: 355

CARGO AIR- MAX QTY.: 220L CARGO AIR INSTRUCTION NUMBER: 366

SECTION 15: REGULATORY INFORMATION

MATERIAL VOC = 332 gram / liter

COATING VOC = 390 gram/liter

TSCA (TOXIC SUBSTANCE CONTROL ACT): ALL COMPONENTS ARE LISTED IN THE TSCA CHEMICAL SUBSTANCE INVENTORY.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION and LIABILITY ACT): REPORTABLE QUANTITY, TOLUENE 1000 LBS.

SARA TITLE III

SECTION 312 HAZARD CLASS: IMMEDIATE (ACUTE) HEALTH HAZARD, DELAYED (CHRONIC) HEALTH HAZARD: FIRE HAZARD.

SECTION 313 LISTED INGREDIENTS: TOLUENE (CAS #000108-88-3)

MATERIAL SAFETY DATA SHEET

TEMPERKOTE® 600 PRIMER LIGHT GRAY

Page 5 of 5

SECTION 15: REGULATORY INFORMATION (CON'T)

CALIFORNIA PROPOSITION 65: THE BELOW LIST OF COMPOUNDS IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCIVE HARM: CAS #000108-88-3, CAS#001330-20-7.

SECTION 16: OTHER INFORMATION

HAZARD RATING

HMIS: HEALTH 2 FLAMMABILITY 3 REACTIVITY 0

LEGEND

ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGEIENISTS

OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

STEL: SHORT TERM EXPOSURE LIMIT
TWA: TIME WEIGHTED AVERAGE
PEL: PERMISSABLE EXPOSURE LIMIT
TLV: THRESHOLD LIMIT VALUE

NA: NOT APPLICABLE NE: NOT ESTABLISHED

ND: NO DATA

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