

# SAFETY DATA SHEET

TEMPERKOTE® 14105E-I-37038 BLACK

Page 1 of 7

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

**TRADE NAME:** TEMPERKOTE® 14105E-I-37038 BLACK

**CHEMICAL FAMILY:** SILICONE, AROMATIC SOLVENT

**MAIN USE:** INDUSTRIAL HI-HEAT® COATING

**MANUFACTURER'S NAME / ADDRESS:** FLAME CONTROL COATINGS LLC  
4120 HYDE PARK BLVD.  
NIAGARA FALLS, N.Y. 14305

**EMERGENCY TELEPHONE NUMBER:** 800-535-5053

**ISSUE DATE:** APRIL 12, 2016

**REVISION DATE:**

**PREPARED BY:** P. PISARSKI

## SECTION 2: HAZARDS IDENTIFICATION

**CLASSIFICATION:** BLACK PIGMENTED LIQUID, AROMATIC SOLVENT ODOR

### IMPORTANT HAZARDS:

FLAMMABLE LIQUID- CATEGORY 2  
SKIN CORROSION/IRRITATION- CATEGORY 2  
SERIOUS EYE DAMAGE/EYE IRRITATION- CATEGORY 2A  
CARCINOGENICITY- CATEGORY 3  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)  
(RESPIRATORY TRACT IRRITATION)- CATEGORY 3  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)  
(NARCOTIC EFFECTS)- CATEGORY 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE)- CATEGORY 3  
ASPIRATION HAZARD- CATEGORY 1

### GHS LABEL ELEMENTS HAZARD PICTOGRAMS:



**EMERGENCY OVERVIEW:** DANGER!  
FLAMMABLE LIQUID AND VAPOR  
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  
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.

# SAFETY DATA SHEET

TEMPERKOTE® 14105E-I-37038 BLACK

Page 2 of 7

## SECTION 2: HAZARDS IDENTIFICATION (CON'T)

### 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 DERMATITIS. 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

### 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 3: COMPOSITION/INFORMATION ON INGREDIENTS

**SUBSTANCE/MIXTURE:** MIXTURE

**OTHER MEANS OF IDENTIFICATION:** NOT AVAILABLE

<b>HAZARDOUS INGREDIENTS</b>	<b>Wt. %</b>	<b>CAS Number</b>
TALC	10-20	014807-96-6
COPPER CHROMITE BLACK SPINEL**	7-15	068186-91-4
CERAMIC FRITS	7-15	065997-18-4
MICA	1-5	012001-26-2
METHYL NORMAL AMYL KETONE	15-25	000110-43-0
TERTIARY BUTYL ACETATE	1-5	000540-88-5
METHOXY PROPYL ACETATE	5-10	000108-65-6
BARIUM METABORATE MONOHYDRATE	1-5	013701-59-2

\*\* 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 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.

# SAFETY DATA SHEET

TEMPERKOTE® 14105E-I-37038 BLACK

Page 3 of 7

## SECTION 4: FIRST AID MEASURES (CON'T)

**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

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

**SPECIFIC HAZARDS ARISING FROM CHEMICAL:** FLAMABLE LIQUID AND VAPOR. IN A FIRE OR IF HEATED A PRESSURE INCREASE WILL OCCUR AND THE CONTAINER MAY BURST, WITH THE RISK OF A SUBSEQUENT EXPLOSION. VAPOR IS HEAVIER THAN AIR AND WILL SPREAD ACROSS THE GROUND.

**HAZARDOUS DECOMPOSITION PRODUCTS:** CO, CO<sub>2</sub>

**HAZARDOUS POLYMERIZATION (REACTIVITY):** WILL NOT OCCUR.

**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.

## 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.

## SECTION 7: HANDLING AND STORAGE (CON'T)

**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	
014807-96-6	2mg/m <sup>3</sup>	ND	5mg/m <sup>3</sup>	ND	(SEE NOTE 1)
065997-18-4	2.5mg/m <sup>3</sup>	ND	2.5mg/m <sup>3</sup>	ND	(SEE NOTE 1)
013701-59-2	5mg/m <sup>3</sup>	ND	0.5mg/m <sup>3</sup>	ND	(SEE NOTE 1)

# SAFETY DATA SHEET

TEMPERKOTE® 14105E-I-37038 BLACK

Page 4 of 7

## SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

### EXPOSURE LIMITS (ppm)

INGREDIENTS (CAS)	OSHA		ACGIH		OTHER
	TWA	STEL	TWA	STEL	
068186-91-4*	NE	NE	NE	NE	
*chromium III compounds (as Cr)	0.5mg/m <sup>3</sup>	ND	0.5mg/m <sup>3</sup>	ND	(SEE NOTE 1, 2)
*copper dusts and mists (as Cu)	1mg/m <sup>3</sup>	ND	1mg/m <sup>3</sup>	ND	(SEE NOTE 1, 2)
012001-26-2	3mg/m <sup>3</sup>	ND	3mg/m <sup>3</sup>	ND	(SEE NOTE 1)
000110-43-0	50	100	50	100	
000540-88-5	200	NE	200	NE	
000108-65-6	NE	NE	NE	NE	

**LEGEND:** (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.

NOTE 2: POTENTIAL HAZARDOUS COMPONENTS OF PIGMENT; SEE \*\* SECTION 2 FOR DETAILS.

**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

### APPEARANCE

**PHYSICAL STATE:** LIQUID

**COLOR:** BLACK

**ODOR:** AROMATIC SOLVENT

**pH:** ND

**MELTING POINT:** ND

**BOILING POINT:** >98°C (>208°F)

**FLASHPOINT:** 4.4°C (40°F) TCC (TBAce)

**EVAPORATION RATE:** >1 (BUTYL ACETATE = 1)

**COEFFICIENT OF WATER/OIL DISTRIBUTION:** ND

**% VOLATILES BY VOLUME:** 50%

**FLAMMABLE LIMITS:** NOT AVAILABLE

**LOWER EXPLOSION LIMIT:** 1.2%

**UPPER EXPLOSION LIMIT:** 7.0%

**VAPOR PRESSURE:** 34 mm Hg

**VAPOR DENSITY:** ND (AIR = 1)

**SPECIFIC GRAVITY:** 1.4-1.6

**SOLUBILITY IN WATER:** INSOLUBLE

**AUTO IGNITION TEMP:** ND

**% SOLIDS BY WT:** 71%

## 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, AND PEROXIDES SHOULD NOT BE COMBINED WITH PHOSPHOROUS CONTAINING MATERIALS BECAUSE HIGHLY TOXIC FUMES CAN BE EMITTED IN A FIRE SITUATION.

# SAFETY DATA SHEET

TEMPERKOTE® 14105E-I-37038 BLACK

Page 5 of 7

## SECTION 11: TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY

PRODUCT/INGREDIENT NAME	RESULT	SPECIES	DOSE	EXPOSURE
Tertiary Butyl Acetate	LD50 ORAL	RAT	4100 mg/kg	-
	LC50 INHALATION GAS	RAT	2230mg/m <sup>3</sup>	4Hrs

### CARCINOGENICITY

PRODUCT/INGREDIENT NAME	OSHA	IARC	NTP
Ceramic Frits	POSSIBLE SELECT CARCINOGEN	3	-

### SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

PRODUCT/INGREDIENT NAME	CATEGORY	ROUTE OF EXPOSURE	TARGET ORGANS
Methyl Normal Amyl Ketone	CATEGORY 3	N/A	RESPIRATORY TRACT IRRITATION AND NARCOTIC EFFECTS

### SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE)

PRODUCT/INGREDIENT NAME	CATEGORY	ROUTE OF EXPOSURE	TARGET ORGANS
Methyl Normal Amyl Ketone	CATEGORY 3	N/D	RESPIRATORY TRACT IRRITATION AND NARCOTIC EFFECTS

### POTENTIAL ACUTE HEALTH EFFECTS

**EYE:** CAUSES SERIOUS EYE IRRITATION

**INHALATION:** CAN CAUSE CNS DEPRESSION, MAY CAUSE DROWSINESS AND DIZZINESS, RESPIRATORY IRRITATION

**SKIN CONTACT:** CAUSES SKIN IRRITATION

**INGESTION:** CAN CAUSE CNS DEPRESSION MAY BE FATAL IF SWALLOWED

### POTENTIAL CHRONIC EFFECTS

**GENERAL:** MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED AND REPEATED EXPOSURE

**TERATOGENICITY:** YES

**MUTAGENICITY:** NO

**EMBRYOTOXICITY:** NO

## SECTION 12: ECOLOGICAL INFORMATION

PRODUCT/INGREDIENT NAME	RESULT	SPECIES	EXPOSURE
Tertiary Butyl Acetate	LC50 296 - 362 mg/L FRESHWATER	FRESHWATER FISH	96 Hrs

## 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.

## SAFETY DATA SHEET

TEMPERKOTE® 14105E-I-37038 BLACK

Page 6 of 7

### SECTION 14: TRANSPORT INFORMATION

	DOT CLASSIFICATION	TDG CLASSIFICATION	MEXICO CLASSIFICATION	IATA	IMDG
<b>UN NUMBER</b>	UN1263	UN1263	UN1263	UN1263	UN1263
<b>UN PROPER SHIPPING NAME</b>	PAINT	PAINT	PAINT	PAINT	PAINT
<b>TRANSPORT HAZARD CLASS(ES)</b>	3 	3 	3 	3 	3 
<b>PACKING GROUP</b>	II	II	II	II	II
<b>ENVIRONMENTAL HAZARD</b>	NO	NO	NO	NO	NO
<b>ADDITIONAL HAZARD</b>	Special provisions Not Applicable <b>ERG No.128</b>	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3). <b>ERG No.128</b>	Special provisions (ERG#128) <b>ERG No.128</b>	Special provisions Not Applicable	Emergency schedules (EmS) F-E, S-E

### SECTION 15: REGULATORY INFORMATION

**MATERIAL VOC** = 407 gram/ liter

**COATING VOC** = 409 gram/liter

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

**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION and LIABILITY ACT):**

**SARA TITLE III**

**SECTION 312 HAZARD CLASS:** IMMEDIATE (ACUTE) HEALTH HAZARD, DELAYED HEALTH HAZARD; FIRE HAZARD

**SECTION 313 LISTED INGREDIENTS:** CHROMIUM COPMOUNDS, COPPER COMPOUNDS

**CALIFORNIA PROPOSITION 65:** THE BELOW LIST OF COMPOUNDS IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM:

