



Blk. 2, Lot 2. Plastic City Industrial Park. Maysan, Valenzuela City 1440, Philippines  
Tel: 63-2-2945215; Tel: 63-2-2919951; Fax: 63-2-2943531

## Material Safety Data Sheet

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: TK Plastic Additive  
 Product Code: TK-1 (SS-1), and TK-2 (SS-2); Polymer Processing Additive  
 Chemical Family: Esters  
 CAS Number: 64742-55-8  
 Manufacturer: Tsong-Kai Enterprise Co., Ltd.  
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Emergency Telephone Numbers:  
 North America: +1 (727) 9346392  
 International: +63 (2) 8970308

### SECTION 2: COMPOSITION, PHYSICAL AND CHEMICAL PROPERTIES

(Note: Unless otherwise stated, values are determined at 20C (68F) and 760 mm Hg (1atm)

#### TK ADDITIVE in LIQUID form (TK-1)

SPECIFIC GRAVITY: 0.910+/-0.005; ASTM D 792-64T  
 MOISTURE: 0.1% Max.  
 VISCOSITY: 39.89 cP @ 40°C  
 BOILING POINT: 250 Deg. C or Up  
 PH VALUE: 5.6  
 INGREDIENTS: ACID ESTERS, DCP  
 EFFECTIVE INGREDIENTS: 99.9%  
 APPEARANCE: TRANSPARENT LIQUID (some dyed for product segregation purpose)  
 SMELL: MILD FATTY ALCOHOL  
 STABILITY: HARDLY DECOMPOSE or DETERIORATE UNDER HIGH TEMPERATURE  
 IGNITION POINT: NON-INFLAMMABLE, NON-COMBURENT

#### TK ADDITIVE in POWDER form (TK-2)

SPECIFIC GRAVITY: 1.5 +/- 0.1; ASTM D 792-64T  
 MOISTURE: 0.1% Max.  
 MELTING POINT: 120 Deg. C or Up  
 FLASH POINT: 280 Deg. C or Up  
 CHEMICAL INGREDIENTS: Fatty acids and alcohols; acid amide and other hydrocarbons  
 AVERAGE PARTICLE SIZE: 7.4 micron  
 APPEARANCE: White Powder  
 SMELL: Odorless  
 STABILITY: HARDLY DECOMPOSE or DETERIORATE UNDER HIGH TEMPERATURE

STORAGE/SHELF LIFE: To be used within 12 months

### SECTION 3: HAZARDS IDENTIFICATION

#### ACUTE HEALTH HAZARDS:

**EYE CONTACT:** May cause minimal irritation.

**SKIN CONTACT:** May cause slight irritation. Prolonged or repeated contact may cause irritation, redness and swelling.

**INHALATION:** Hazard is negligible. Vapors or dusts may cause mucous membrane irritation, pulmonary irritation, headache, drowsiness and nausea.

**INGESTION:** No adverse effect is expected. Swallowing more than a few mouthfuls may cause gastrointestinal irritation, nausea and diarrhea. Aspiration during swallowing or vomiting may cause lung damage.

**CARCINOGEN STATUS:** None of the components is listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Pre-existing skin conditions may be aggravated.

### SECTION 4: FIRST AID

**EYE CONTACT:** Flush thoroughly with clear running water for several minutes. Get medical attention if irritation develops.

**SKIN CONTACT:** Wash well with soap and water. Remove contaminated clothing and launder before re-use. Get medical attention if irritation develops.

**INHALATION:** Due to the low volatility of this material, overexposure is very unlikely. If irritation develops, remove to fresh air and get medical attention.

**INGESTION:** Get medical attention.

### SECTION 5: FIRE AND EXPLOSION HAZARD DATA

**AUTOIGNITION TEMPERATURE:** Not determined

**FLAMMABLE LIMITS: LEL:** Not determined **UEL:** Not determined

**EXTINGUISHING MEDIA:** Use water spray, foam, carbon dioxide or dry chemical. Cool exposed containers with water.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Heating may produce hydrocarbon and other vapors.

**HAZARDOUS COMBUSTION PRODUCTS:** uninflamable

### SECTION 6: ACCIDENTAL RELEASE MEASURES

Ventilate area. Avoid breathing vapor. Contain spill and collect with absorbent. Keep out of sewers and waterways. Avoid contact with the eyes, skin and clothing. Notify authorities as required.

### SECTION 7: HANDLING AND STORAGE

**WORK PRACTICES:** Avoid contact with the eyes, skin or clothing. Avoid breathing mists or vapors. Wash hands thoroughly with soap and water after handling. Do not eat, drink or smoke in the work area. Avoid over heating. Minimum handling temperatures should be maintained. If product is overheated, hazardous concentrations of

hydrocarbon vapor may be released. When opening large containers of this product, keep your face away from the opening and avoid breathing excess vapors.

**Personal precautions:** the spilled liquid or powder may cause operators slide and hurt.

**SPECIAL PRECAUTIONS:** Keep containers closed and away from excessive heat and sources of ignition. Empty containers retain residues and may be hazardous. Follow all recommended precautions in handling empty containers.

**STORAGE:** Store in a cool, dry place. Avoid excessive heat and extended storage periods. Water contamination should be avoided.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**VENTILATION:** General or local exhaust as needed to maintain concentrations below the exposure limits.

**RESPIRATORY PROTECTION:** None should be needed under normal conditions and ambient temperatures. For operations where the TLV may be exceeded, a NIOSH/MSHA approved supplied air respirator is recommended. Gas masks or other air purifying respirators can be used. Equipment selection depends on contaminant type and concentration, select in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

**GLOVES:** Oil impervious such as neoprene or nitrile if needed. Workers should wash exposed skin several times per day.

**EYE PROTECTION:** Safety glasses with side shields or chemical safety goggles.

**OTHER PROTECTIVE EQUIPMENT:** Protective coveralls or apron if contact is likely to keep personal clothing clean. Soiled work clothing should be laundered or dry cleaned at least weekly.

## SECTION 9: STABILITY AND REACTIVITY

**STABILITY:** Stable.

**CONDITIONS TO AVOID:** Avoid excessive heat and sources of ignition.

**HAZARDOUS DECOMPOSITION PRODUCTS:** not applicable

**HAZARDOUS POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** Not applicable.

## SECTION 10: TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY DATA:** not applicable (ASTM F.963-96a of USA); Report No: CY/2000/70372A

**IRRITANCY DATA:** Not a primary irritant.

**SENSITIZATION:** This material has not been reported to cause sensitization in animals or humans.

**REPRODUCTIVE TOXICITY:** This material has not been reported to cause reproductive toxicity in animals or humans.

**TERATOGENICITY:** This material has not been reported to cause teratogenic effects in humans or laboratory animals.

**MUTAGENICITY:** No mutagenic data is available for this product.

**SECTION 11: ECOLOGICAL INFORMATION**

The ecological effects of this product have not been evaluated.

**SECTION 12: DISPOSAL**

Dispose in accordance with all local, state and federal regulations.  
RCRA HAZARDOUS WASTE CODES: None

**SECTION 13: TRANSPORTATION DATA**

**US DOT SHIPPING NAME:** NOT REGULATED  
**DOT LABELS REQUIRED:** N/A  
**EMERGENCY RESPONSE GUIDE NUMBER:** N/A  
**IATA SHIPPING NAME:** NOT REGULATED  
**IATA LABELS REQUIRED:** N/A

**SECTION 14: OTHER INFORMATION**

**NFPA HAZARD RATING:** HEALTH: 1      FIRE: 0      REACTIVITY: 0

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