

Material Safety Data Sheet

KOLDfoil – SX (Holographic Security) – (Wet Lamination)

**K LASER**

I. GENERAL INFORMATION

TRADE NAME: KOLDfoil SX (for Wet Lamination)
TELEPHONE NUMBER: (714) 897-3978
MANUFACTURER: K Laser Technology (USA) Co., Ltd.
7152 Patterson Drive
Garden Grove, CA 92841
TDS REVISION DATE: January 1, 2012

II. HAZARDOUS COMPONENTS

INGREDIENT NAME	CONCENTRATION	CAS No.
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None known

III. PHYSICAL DATA

APPEARANCE: Thin gauge PET film with a colored vacuum metalized aluminum coating on one side
ODOR: None
PH VALUE: Not Applicable
BOILING POINT: Not Applicable
FLASH POINT: Not Applicable
VAPOR PRESSURE: Not Applicable
SOLUBILITY IN WATER: Insoluble

IV. HEALTH HAZARDS IDENTIFICATION

ROUTES OF EXPECTED ENTRY

INGESTION: No
INHALATION: Possible inhalation of metallic dust sometimes leftover from slitting
SKIN: No

HEALTH HAZARDS

ACUTE:	This product may cause dermal abrasions. Metallic dust that sometimes results from slitting may cause respiratory issues. No other specific acute health effects have been seen or are expected with contact.
CHRONIC:	This product is not known to cause any delayed or chronic health effect.
SPECIAL:	This product has not been designed for extended direct contact with food. Hence, FDA approval has not been sought. Avoid using this product for food packaging applications where the product would be in direct contact with food.

SIGNS AND SYMPTOMS OF OVEREXPOSURE:

Mechanical skin injury such as abrasions or cuts.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

None are known or specifically expected.

V. EMERGENCY FIRST AID PROCEDURES

INGESTION:	The material is not known to cause any ingestion related toxicity. However, if a moderate to large amount is ingested. It may be worthwhile to contact a poison control center and/or physician familiar with plastics to seek any specific recommendation concerning appropriate care.
INHALATION:	A typical route of entry for this product. On occasion, metallic dust due to slitting may enter the atmosphere during handling and processing. If this occurs, people in the area should be ventilated. Additionally, if person is exposed to smoke from combustion of this material, remove person to fresh air and have person examined by medical professionals. If person is not breathing, conduct rescue breathing and call 911.
SKIN:	Not a likely route of entry for this product. Conduct routine first aid for expected cuts/abrasions, if present.

VI. FIRE FIGHTING MEASURES

RECOMMENDED EXTINGUISHING:	Normal fire extinguishing media such as water, carbon dioxide (CO ₂), dry chemical, and alcohol foam are recommended.
RECOMMENDED SPECIAL FIRE FIGHTING TECHNIQUES:	None, use standard procedures for dealing with plastic-based fires.
SPECIAL EXPOSURE HAZARDS:	Do not breathe the smoke from the fire.

SPECIAL PROTECTION EQUIPMENT: Use appropriate fire fighting protective gear including self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

The smoke coming from the combustion of this material is of unknown composition. The smoke may contain oxides of aluminum, carbon monoxide (CO) and carbon dioxide (CO₂) along with other hazardous materials in unknown quantities. Risk during a fire is unknown.

VII. STABILITY AND REACTIVITY DATA

STABILITY (STABLE OR UNSTABLE): Stable

CONDITIONS TO AVOID: Avoid extremes in high temperature unless in controlled manufacturing operations.

INCOMPATIBILITIES (MATERIALS WITH WHICH TO AVOID CONTACT): The material is incompatible with very strong acids, bases, and other chemically reactive materials such as oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS OR BYPRODUCTS: None specifically known. The material is very stable in typical environments. Under conditions of combustion, smoke is of unknown composition. It is likely to contain quantities of aluminum, carbon monoxide (CO), carbon dioxide (CO₂) and other products of combustion at unknown quantities.

VIII. HANDLING AND STORAGE

STEPS TO BE TAKEN IN THE EVENT OF A SPILL OR UNEXPECTED RELEASE:

Sweeping or other manual handling should be used to clean up spilled film material. No specific personal protective equipment is recommended for handling other than equipment required by the facility safety program for handling non-hazardous waste materials. However, if there is a noticeable amount of metallic dust present, the wearing of masks is recommended.

HANDLING PRECAUTIONS: Avoid handling near open flame. Standard industry precautions are recommended.

STORAGE PRECAUTIONS: Keep away from open flames.

RECOMMENDED WASTE DISPOSAL METHOD:

Material is considered to be non-hazardous. Check with local, state and federal agencies to determine if laws and regulations are present that would change or modify this determination. Material may be disposed of by land filling in a sanitary landfill.

IX. EXPOSURE CONTROL AND PERSONAL PROTECTION

ENGINEERING CONTROLS:

None specifically recommended.

VENTILATION**LOCAL EXHAUST:**

If heated to combustion, facility safety staff should evaluate need for additional controls.

GENERAL VENTILATION:

None specifically recommended. However, if metallic dust due to slitting is present, ventilation to the outside atmosphere can be considered.

SPECIAL VENTILATION:

None specifically recommended.

OTHER VENTILATION:

None specifically recommended.

RESPIRATORY PROTECTION:

In typical handling, no respiratory protection should be needed. Occasionally, metallic dust due to slitting may be present. At these times, it is recommended that workers use masks covering the nose and mouth.

PROTECTIVE GLOVES:

Gloves of at least 5-mil thickness are recommended to prevent possible cuts and abrasion during handling.

EYE PROTECTION:

None specifically recommended.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

None specifically recommended.

WORK/HYGIENE PRACTICES RECOMMENDED:

Good personal hygiene is recommended. Washing after contact with this material is recommended prior to eating, drinking, smoking or using the toilet. Storing food, drink, or other personal items in the same area where this material is handled and used is not recommended.

X. TRANSPORT INFORMATION

GENERAL:	To obtain additional information on packaging for shipment refer to the Code of Federal Regulations and your carrier.
U.S. DOT CLASSIFICATION:	Not applicable.
U.S. DOT LABELING REQUIREMENTS:	None.
U.S. DOT HAZARD GUIDE:	None applicable to this material.
OTHER INFORMATION ON ROAD TRANSPORTATION:	None.
INFORMATION ON SEA TRANSPORTATION:	None.
INFORMATION ON AIR TRANSPORTATION:	None.

XI. DISCLAIMERS

This Material Safety Data Sheet is provided to you as a means of conveying information about the proper handling and use of this product. It is completed with the best information available to K Laser Technology at the time of its preparation. However, no express or implied guarantee or warranty of any kind is made with respect to this information. K Laser Technology believes that this product can be used safely if the ideas and information presented above are utilized constructively as part of an overall safety, health, and environmental affairs program within your organization. Use this information only to supplement other information you have gathered and then make an independent determination about the completeness and suitability of all information to insure the proper use and disposal of this product and the health and safety of employees and customers.