

**MAGICAL FILM ENTERPRISE CO., LTD.**

No.36, Lane 378, Sec. 2, Yongsing Rd., Wuci Township, Taichung County 435, Taiwan

TEL:886-4-26380889 FAX:886-4-26308298

MATERIAL SAFETY DATA SHEET**SECTION 1:CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**1.1 Product Details

Product Name	PLA FILM
Product Code	PLF
Composition/ Approx. wt%	POLY LACTIC ACID 100%
CAS No.	9051-89-2
Use type	COATING · PRINTING · LAMIATED

1.2 Company Identingation

Supplier's Name	MAGICAL FILM ENTERPRISE CO., LTD.
Supplier's Address	No.36, Lane 378, Sec.2, Yongsing Rd., Wuci Township, Taichung County 435, Taiwan
Telephone Number	886-4-2638-0889
FAX Number	886-4-2630-8298

SECTION 2:COMPOSITION/INFORMATION ON INGREDIENT

Main ingredients	Ingeo TM Biopolymer
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SECTION 3:PHYSICAL AND CHEMICAL PROPERTIES



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Appearance	Solid
Colour	Clear
Odour	Sweet
Solubility (in water)	Insoluble
Boiling Point	Not applicable
Melting Point(°C)	220-250°C (428-482°F)
Vapour Pressure	Not applicable
Percentage Volatiles	Not applicable
Evaporation Rate	Not applicable
Vapour Density	Not applicable
Specific Gravity	1

SECTION 4:HAZARD IDENTIFICATION

Health hazard	
Inhalation	Combustion products may be irritant.
Skin contact	No evidence of irritant effects from normal handling and use. Sharp edges may cause cuts.
Eye Contact	Sharp off-cuts may cause eye damage.
Ingestion	Not applicable
Long Term Exposure	This material has been in use for many years with no evidence of adverse effects.

SECTION 5:FIRST AID MEASURES

Ingestion	Unlikely to be required but,if necessary,treat symptomatically.
Eye contact	Irrigate with eyewash solution or clean water,holding the eyelids apart.
Skin contact	If symptoms develop,obtain medical attention.
Inhalation	Remove patient from exposure



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Notes to physician :	Only normally needed for thermal burns and following inhalation of smoke from burning material. Treat in the same way as other thermal burns and wood smoke inhalation.
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SECTION 6:FIRE FIGHTING MEASURES

Extinguishing media	Normal extinguishing media
Fire fighting instruction:	Combustible but not readily ignited. Thin films(<38 micron) will shrink away from a heat source or flame.Persistent application of a flame will ignite the material. Burning is accompanied by melting and dripping which may cause the fire to spread.Combustion will evolve irritant vapours.
Special Hazards	At complete combustion,the major products formed are carbon dioxide and water.Some of the products of decomposition will also be present but at a concentration considerably less than carbon dioxide and water.During incomplete combustion a range of products will be formed but mainly carbon dioxide,water and carbon monoxide.
(Eg.Explosion properties and explosion hazards in the presence of various chemicals.)	

SECTION 7:ACCIDENTAL,RELEASE MEASURES

Scrap film generated through processing, eg, slitting/shredding, should be swept up and disposed of in drums or plastic bags.

SECTION 8: HANDLING AND STORAGE



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HANDLING	Thick gauges of film have very sharp edges which can easily cause cuts.
Process Hazards	Static In most processes in which there is movement of film (of any kind) over metal or other rollers, surface electrical charges develop on the film. Static charges should be eliminated or reduced as much as possible, since they provide a source of ignition for flammable vapours and gases or may give electrical shock to operators. Use either passive or active static eliminators to reduce the charges.
	Reeling Machine design and work practices should be organised to remove the danger of trapping parts of the body, or clothing, in reeled materials and between the film and
	Dusts Operations which produce dusts (eg, stamping, tape slitting, cutting and grinding) should be controlled so that the appropriate standard for dusts is not exceeded. Suitable respiratory equipment should be used in cases of insufficient ventilation or where operational procedures demand it.
	Heating during processing Extra care should be taken to prevent burns from contact with
	All polymers degrade to some extent at their processing
	temperature, an effect which increases with increasing
	temperature. TALILIN film has a relatively high melting 255-260 deg C. Prior to this temperature, film shrinkage will degree of shrinkage being time/temperature and grade

SECTION 8: HANDLING AND STORAGE

Process Hazards	The exact quantity and nature of the degradation products varies with temperature, oxygen supply and process conditions. It is therefore impossible to be precise about
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	<p>which substances may be evolved. However, it is only the minor components which vary substantially. The major components are given in section 10. Appropriate control measures, such as ventilation, should be applied.</p>
	<p>Storage</p>
	<p>Keep away from heat and sources of ignition.</p>
	<p>Storage temperature: Ambient.</p>
	<p>Exposure to extremes of heat and cold should be avoided. Avoid extremes of humidity.</p>

SECTION 9: EXPOSURE CONTROL AND PERSONAL PROTECTION

<p>Unlikely to cause harmful effects under normal conditions of handling and use.</p>	
<p>The following values apply to nuisance dust which may be formed during cold processing (eg, cutting, grinding, stamping).</p>	
a.Exposure Limit	<p>Total dust : 10mg/m³ (8hr TWA) Respiratory dust : 5mg/m³ (8hr TWA)</p>
b.Engineering measures	<p>UK EH40 OES</p>
c.Personal protection	<p>Wear suitable gloves to avoid cuts from the sharp edges of films > 125 micron thickness. Wear suitable eye protection when using the material in cold processes (eg, cutting, stamping , grinding).</p>

SECTION 10: STABILITY AND REACTIVITY

Stability	<p>Stable under normal conditions</p>
Incompatibility	<p>Strong oxidizing agent</p>



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(Materials to avoid)	
Combustion products	Carbon dioxide, Carbon monoxide
Thermal decomposition	
Hazardous polymerization	Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicity Data	None
Carcinogenicity	None
Reproductive Effect	None
Effects of overexposure	None
Chronic effects	None
Target organs	None
Medical Conditions Generally Aggravated by exposure	None

SECTION 12: ECOLOGICAL INFORMATION

Mobility	This material has not been tested for environmental effects.
Bioaccumulation	No data available
Biodegradability	No data available
Aquatic toxicity	No data available

SECTION 13: DISPOSAL INFORMATION

WASTE DISPOSAL:

Waste material should be burned in a smokeless incinerator of high temperatures and

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long residence times, to enable complete combustion. To achieve this, the incinerator must have an afterburner which maintains the gases at a suitable temperature for 3 or 4 seconds.

SECTION 14:TRANSPORT INFORMATION

Any international and national regulatory requirements	None
Packaging information	Using the cartons 、 pallet and paper core.
Any other special requirements	None
Transportation	By land transport and sea transport.

SECTION 15:REGULATORY INFORMATION

USER	Not classified as hazardous to users
IATA TRANSPORT	Not classified as hazardous for transport