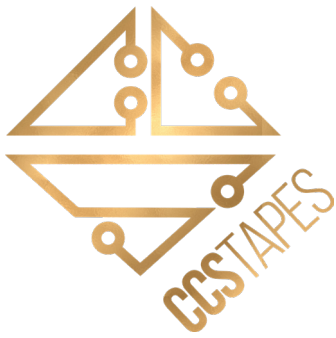
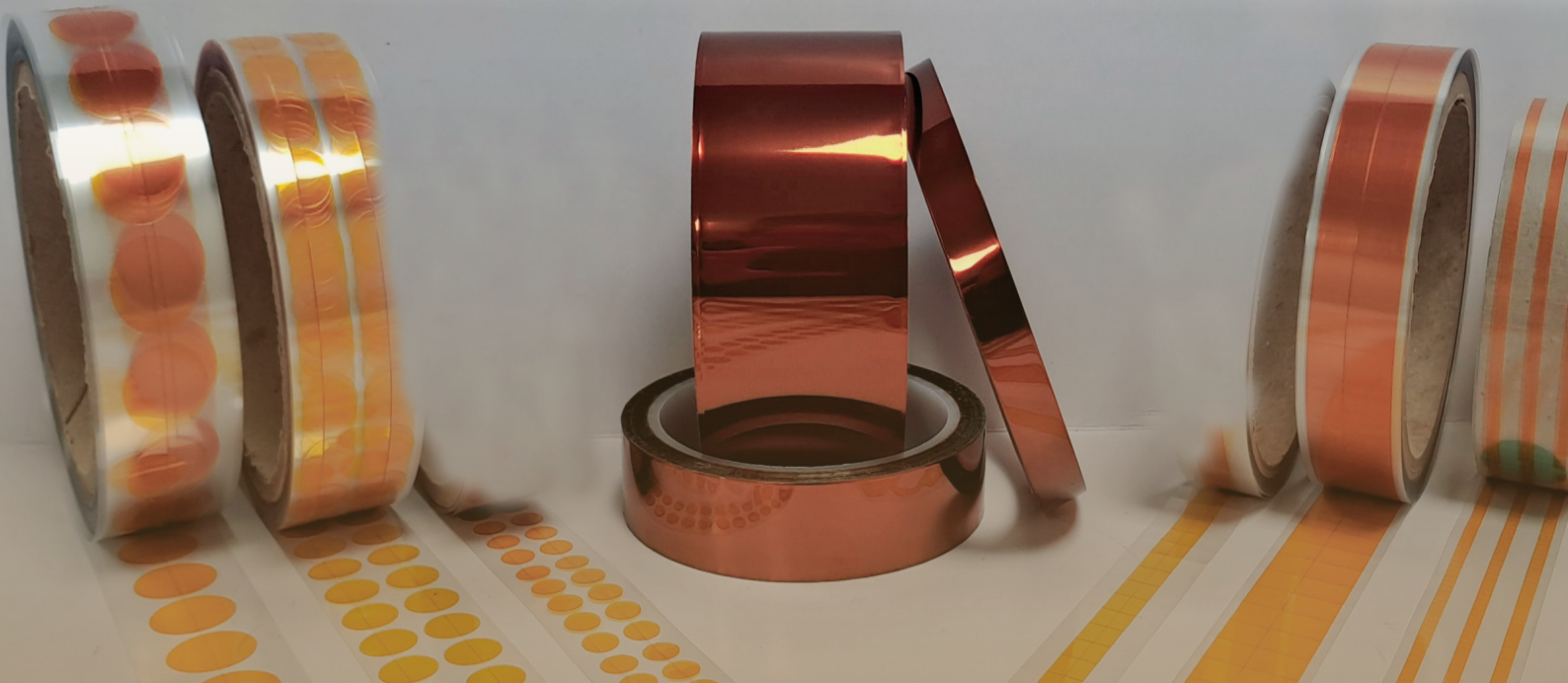




590LC DUPONT™ KAPTON® TAPE

POLYIMIDE HAS SEVERAL ADVANTAGES OVER POLYESTER, MAKING IT A PREFERRED CHOICE IN CERTAIN APPLICATIONS.



MECHANICAL STRENGTH

POLYIMIDE OFFERS BETTER MECHANICAL STRENGTH AND DIMENSIONAL STABILITY, MAKING IT MORE DURABLE AND RELIABLE IN CHALLENGING ENVIRONMENTS.

ELECTRICAL INSULATION

POLYIMIDE HAS SUPERIOR ELECTRICAL INSULATION PROPERTIES COMPARED TO POLYESTER. IT MAINTAINS ITS INSULATING CAPABILITIES EVEN AT ELEVATED TEMPERATURES, WHICH IS CRUCIAL FOR ELECTRONICS AND ELECTRICAL COMPONENTS.

HEAT RESISTANCE

POLYIMIDE EXHIBITS EXCEPTIONAL HEAT RESISTANCE, WITHSTANDING MUCH HIGHER TEMPERATURES THAN POLYESTER. IT CAN HANDLE TEMPERATURES UP TO SEVERAL HUNDRED DEGREES CELSIUS WITHOUT DEGRADING, MAKING IT SUITABLE FOR HIGH-TEMPERATURE APPLICATIONS IN ELECTRONICS AND OTHER INDUSTRIES.

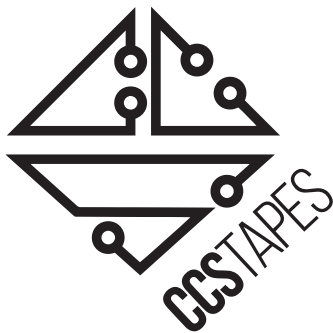
LOW OUTGASSING

IN VACUUM AND SPACE APPLICATIONS, POLYIMIDE PRODUCES LOWER LEVELS OF OUTGASSING COMPARED TO POLYESTER, WHICH IS ESSENTIAL TO AVOID CONTAMINATION IN SENSITIVE ENVIRONMENTS.

CHEMICAL RESISTANCE

POLYIMIDE IS MORE RESISTANT TO VARIOUS CHEMICALS, SOLVENTS, AND OILS THAN POLYESTER, MAKING IT SUITABLE FOR APPLICATIONS WHERE EXPOSURE TO THESE SUBSTANCES IS A CONCERN.





590LC DUPONT™ KAPTON® TAPE

DATA SHEET

PRODUCT DESCRIPTION

590LC IS A POLYIMIDE FILM COATED WITH A SILICONE THERMOSET ADHESIVE SYSTEM.

APPLICATIONS

590LC HAS A HIGH TEMPERATURE (180°C) PERFORMANCE IN MASKING AND DC/FRACTIONAL MOTOR APPLICATIONS.

PERFORMANCE FEATURES

KAPTON® SUBSTRATE: PROVIDES HIGH PUNCTURE RESISTANCE AND SUPERB HIGH TEMPERATURE PERFORMANCE, EXCELLENT CONFORMABILITY.

SILICONE THERMOSET ADHESIVE SYSTEM: PERFORMS AT HIGH TEMPERATURE UP TO 180°C.

SPECIFICATION

PROPERTY	UNIT	TEST RESULT
ADHESIVE TYPE	SILICONE	
INSULATION CLASSIFICATION	CLASS H (180C)	
TEMPERATURE RESISTANCE	(°C)	260
BACKING THICKNESS	(μ)	25 (KAPTON®)
ADHESIVE THICKNESS	(μ)	0.0375
ADHESIVE TYPE	SILICONE	
TOTAL THICKNESS	(μ)	0.0625
ADHESION TO STEEL	(N/25MM) (LOW) 4.1	
ADHESION TO STEEL	(N/25MM) (AVERAGE) 5.56	
ADHESION TO STEEL	(N/25MM) (HIGH) 8	
TENSILE STRENGTH	(N/25MM)	155
BREAKING STRENGTH	(KG PER CM)	5.4
ELONGATION AT BREAK	(%)	50
DIELECTRIC BREAKDOWN	(KV)	7.5
COLOUR	AMBER	

ALL VALUES SHOWN ARE APPROXIMATE AND ARE INTENDED SOLELY AS A GUIDE. NO RESPONSIBILITY IS ACCEPTED FOR THEIR ACCURACY. IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE INTENDED APPLICATION.

