

2C1 – ASTM classification for physical properties of closed-cell rubbers exhibiting fuel resistance and medium mass change.

ACCELERATED AGING - A means whereby the deterioration of a tape encountered in natural aging may be accelerated and reproduced in the laboratory.

ACCELERATED WEATHERING (weathering) - A means whereby the deterioration caused by outdoor exposure may be accelerated and reproduced in the laboratory.

ACRYLIC - A synthetic polymer with excellent aging characteristics that can be used as either a single component adhesive or a coating or saturant, depending upon composition.

ADHESION - A bond produced between a pressure sensitive adhesive and a surface.

ADHESION BUILD-UP - An increase in the peel adhesion value of a pressure sensitive tape after it has been allowed to dwell to the applied surface.

ADHESIVE - Any material that will usefully hold two or more objects together solely by intimate surface contact.

ADHESIVE RESIDUE - Adhesive that pulls away from the carrier and remains on the surface to which it was applied.

ADHESIVE TAPE – Narrow or flexible strip coated with an adhesive substance on one or both sides.

ASTM - American Society for Testing and Materials. The ASTM develops standards on characteristics and performance of materials.

ASTM D1056 – American Society For Testing Materials test method for classification of flexible cellular materials.

ASTM D1667 - American Society For Testing Materials test method for classification of flexible cellular materials — vinyl chloride polymers and copolymers (closed-cell foam).

ASTM D3574 - American Society For Testing Materials test method for classification of flexible cellular materials — slab, bonded and molded urethane foams.

ASTM D3575 - American Society For Testing Materials test method for classification of flexible cellular materials made from olefin polymers.

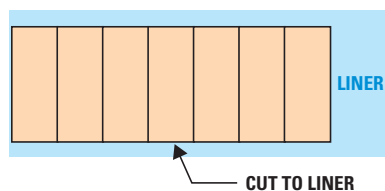
BACKING - A relatively thin, flexible material to which the adhesive is applied. Theoretically, any material that is reasonably flat, relatively thin and flexible could be used as a tape backing.

BOND - The ability of the material to adhere to the adhesive system.

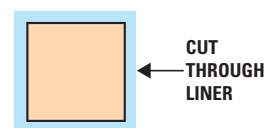
CARRIER - Sometimes used to refer to the backing material particularly in double-faced tapes.

DIE CUT OPTIONS:

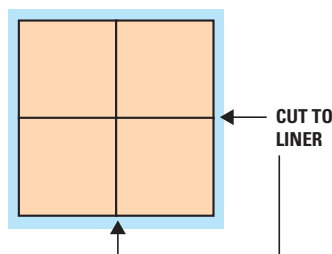
KISS CUT - parts are die cut to the release liner without cutting through the liner. Each part must separate cleanly from the other parts and the liner.



INDIVIDUAL PIECES - parts are die cut completely through the release liner. Each part must separate cleanly from the other parts and the liner.



PADS - parts are die cut in a combination. Each part must separate cleanly from the other parts and the liner.



CLOSED CELL - A flexible, cellular material consisting of a non-interconnecting cell structure.

COMPRESSION DEFLECTION - Pounds per square inch (PSI) required to compress a given material a stated percentage of its original thickness.

COMPRESSION SET - The amount of permanent set a sample has after being compressed a stated amount, at a specific temperature, for a given amount of time and recovery period.

CONFORMABILITY - The ability of tape to fit snugly or make essentially complete contact with the surface of an irregular object without creasing or folding.

DENSITY - A material's weight per unit volume.

DOUBLE COATED - The adhesive is applied on both sides of the backing which serves principally as a carrier for the adhesive.

DUROMETER - A meter used for measuring the hardness of cellular materials. The Shore 00 scale measures the hardness of sponge.

ELASTIC MEMORY - A tendency of some tape backings to attempt to return to original length after being elongated.

ELONGATION - The distance a tape will stretch lengthwise before backing expressed as a percentage of original length. Elongation is not necessarily an indication of conformability.

EPDM - A rubber polymer consisting of ethylene, propylene and diene molecules. EPDM materials have ozone resistant properties.

FILM - Uniform, homogeneous, non-fibrous synthetic webs.

FLAME RESISTANCE - The ability of a tape to withstand exposure to flame. Fireproof materials will not burn even when exposed to flame. Flame-resistant (fire-retardant, self-extinguishing) materials will burn when exposed to flame, but will not continue to burn after flame is removed.

FMVSS 302 - A Motor Vehicle Specification for flame spread. The rate of flame travel down a test sample must be less than 4" per minute.

FOAM - A soft, cushiony material formed by creating bubbles in base material such as natural or synthetic rubbers or other elastomeric materials.

HEAT RESISTANCE - The ability of a tape to withstand exposure to specified temperatures after application to a surface. Clean removal after exposure may or may not be important depending on the intended function of the tape and the type of adhesive.

HF-1 – One of three horizontal flammability classifications relating to low-density foam materials commonly used in fabricating gaskets, speaker grills and sound-deadening material. This rating is given when sample specimens, tested in a horizontal position, self-extinguish within two seconds after flame removal and do not drip any flaming particles.

HOLDING POWER (shear adhesion) - The ability of a tape to resist the static forces applied in the same plane as the backing. Usually expressed in a time required for a given weight to cause a given amount of tape to come loose from a vertical panel.

HOT MELT - A pressure sensitive adhesive applied to the backing in a hot molten form that cools to form a conventional pressure sensitive adhesive.

HYDROPHILIC - Having affinity for water: dissolving in, absorbing, or mixing easily with water.

HYDROPHOBIC - Not compatible with water: will not absorb or mix with water.

Glossary

IMPACT RESISTANCE (shock resistance) - The ability of a tape to resist sudden pulls or shocks as may sometimes be encountered by packages in transit.

LAMINATION - A combination of two or more similar or dissimilar materials that function as one backing for example acetate and tissue in acetate fiber tapes.

NON-TOXIC - A material that is free of any toxic substances in its composition.

NON-WOVEN - made of randomly laid or oriented fibers or threads held together by interlocking or bonding (as by chemical or thermal means).

NOTCHES - The notched portion of the part should easily separate from the scrap or other parts when removed in multiple directions without tearing the foam or liner.

OPAQUENESS - The ability of a tape to prevent the transmission of light.

OPEN CELL - A flexible, cellular material consisting of an interconnecting cell structure.

PEEL ADHESION - The force per unit width required to break the bond between a tape and a surface when peeled back; usually at 180 degrees at a standard rate and condition.

POLYETHYLENE - A tough, stretchy film having very good low-temperature characteristics.

POLYESTER - A strong film having good resistance to moisture solvents oilcaustics and many other chemicals. It is usually transparent.

POLYPROPYLENE - A cousin of polyethylene with generally similar properties but stronger and having a higher temperature resistance.

PSA - Pressure Sensitive Adhesive.

PSI - Pounds per Square Inch.

PRESSURE SENSITIVE – term commonly used in reference to adhesive tapes that require pressure by hand, roller or machine to bond to a surface.

PRESSURE SENSITIVE TAPE - A combination of a pressure sensitive adhesive and a backing.

PRIMING - Coating the backing on the adhesive side with a thin layer of adhesive-like material that serves as a bonding agent between the adhesive and the backing.

QUICK STICK - The property of a pressure sensitive adhesive that allows it to adhere to a surface under very light pressure. It is determined by the ability of the adhesive to wet the surface contacted quickly.

RECOVERY - The difference between ultimate elongation and dead stretch.

RELEASE LINER - A web or sheet of material covering the adhesive side of a tape. It is removed prior to application. Most frequently found on double-coated tapes and label stocks.

SCE41 – Prior ASTM classification for physical properties of closed-cell rubbers exhibiting fuel resistance and medium mass change. New rating 2C1.

SHEAR STRESS - Force of a material by slippage along a plane or planes parallel to the imposed stress.

SILICONE - A unique polymer system that can be a very effective release coating or pressure sensitive adhesive capable of functioning effectively at extreme temperatures.

SINGLE FACED - The adhesive is applied to one side of the backing only. Most pressure sensitive tapes are of this type.

TEAR RESISTANCE - The ability of a tape to resist tearing after a tear has been started by cutting or nicking of the edge.

TENSILE STRENGTH (breaking strength) - The force required to break a piece of tape by pulling on opposite ends of the piece.

THERMAL CONDUCTIVITY - The measure of heat transmission through a cellular material. Determined by the base material, cell size, density and often water resistant properties.

THICKNESS - Distance from one surface of either a tape backing or adhesive to the other usually expressed in mils or thousandths of an inch. This is usually measured under slight pressure with a special gauge.

TAPE – Narrow or flexible strip or band.

TRANSPARENCY - The ability of a tape to allow transmission of light. A tape is rated as transparent if 10 point type can be read easily when the tape is applied directly over it.

UL94 – Underwriters Laboratory rating for small-scale test data that does not pertain to building materials, furnishings and related contents. UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in components and parts of end-product devices and appliances, where the acceptability of the combination is determined by Underwriters Laboratory Inc.

VINYL or PLASTICIZED POLYVINYL CHLORIDE (PVC) - A tough, durable plastic film having excellent resistance to oils, chemicals and many solvents. It has excellent abrasion resistance. It also can be colored. Its high stretch is due to the addition of a plasticizer.

V-0 – One of six vertical flammability classifications relating to materials commonly used in manufacturing enclosures, structural parts and insulators. This rating is given when sample specimens, tested in a vertical position, self-extinguish within ten seconds after flame removal and do not drip any flaming particles.

WATER ABSORPTION - The measure of the amount of water that will be soaked up by a tape and held.

WEB - The width of any material going through a machine.