

CHAMBERLAIN PLASTICS INTERNATIONAL LIMITED**HEALTH AND SAFETY DATA SHEET.**

Following Regulation No 1907/2006 (REACH) Annex II

1 PRODUCT TRADE NAME:	METALON.				
PRODUCT DESCRIPTION:	THIN GAUGE CLEAR/METALLISED POLYESTER FILMS UNSUPPORTED OR LAMINATED TO VARIOUS POLYMER AND/OR FABRIC CONSTRUCTIONS.				
MANUFACTURER:	CHAMBERLAIN PLASTICS INTERNATIONAL LIMITED, BURY CLOSE, HIGHAM FERRERS, NORTHANTS, ENGLAND, NN10 8HQ.				
TELEPHONE:	+44 (0) 1933 353875 (BETWEEN 08.00 – 17.00)				
E-MAIL:	SALES@CHAMBERLAIN-PLASTICS.CO.UK				
KNOWN USES:	HIGHLY REFLECTIVE POLYMER FILM AND LAMINATE COMPLEXES PROVIDING DECORATIVE AND FUNCTIONAL PRODUCT FOR AUTOMOTIVE, FURNITURE, LABEL STOCK AND DECALS, INSULATION AND DISPLAY APPLICATIONS.				
2 HAZARDS:	METALON IS NOT CONSIDERED HAZARDOUS MERCHANDISE.				
3 COMPOSITION:	REFER TO RELEVANT PRODUCT DATA SHEET FOR PRODUCT CONSTRUCTION COMPONENTS.				
	COMPONENT	CAS No	EINECS No	CONCENTRATION	OEL
	POLYESTER FILM	25038-59-9	UNKNOWN	3 – 24%	10 mg/m ³ AS DUST
	ALUMINIUM OR CHROMIUM	7429-90-5 7440-47-3	UNKNOWN	<0.10%	10 mg/m ³ AS DUST
	VINYL FILM OR POLYTHENE OR COTTON OR NYLON OR APET	9002-86-2 UNKNOWN UNKNOWN UNKNOWN 25038-59-9	2008310	55 – 97%	10 mg/m ³ AS DUST
4 FIRST AID MEASURES:	THE MEASURES LISTED BELOW ARE ONLY NECESSARY WHEN THE PRODUCT IS HANDLED WITH UNDUE CARE AND ATTENTION.				
INHALATION:	IF DECOMPOSITION OCCURS DUE TO OVERHEATING, OR THE PRODUCT COMES IN CONTACT WITH FIRE REMOVE AFFECTED PERSONS TO FRESH AIR AND SEEK MEDICAL ATTENTION.				
SKIN CONTACT:	IF CONTACT WITH HOT PRODUCT OCCURS WASH AFFECTED AREA WITH WATER FOR SEVERAL MINUTES AND TREAT AS FOR A THERMAL BURN. ROUGH HANDLING MAY RESULT IN CUTS TO FINGERS AND HANDS.				
EYE CONTACT:	IF CONTACT WITH HOT PRODUCT OCCURS, FLUSH EYE WITH WATER FOR SEVERAL MINUTES AND SEEK MEDICAL ATTENTION. BEWARE SHARP DEBRIS MAY CAUSE EYE DAMAGE.				
INGESTION:	AVOID INGESTION. LOW INGESTION TOXICITY. SEEK MEDICAL ADVICE.				
NOTES TO MEDICAL TEAM:	AFTER INHALATION OF DECOMPOSITION PRODUCTS, SYMPTOMATIC TREATMENT AGAINST IRRITATION OF THE MUCOUS MEMBRANES BY HCl IS ADVISED.				
5 FIRE FIGHTING MEASURES:	IN THE EVENT OF FIRE, DENSE SMOKE CONTAINING NOXIOUS PARTIAL OXIDATION PRODUCTS IS EMITTED (CO, CO ₂ , H ₂ O, HCl). SOME OF THESE COMBUSTION PRODUCTS CAN BE CORROSIVE.				
	BURNING MAY BE ACCOMPANIED BY MELTING DROPLETS, WHICH MAY CAUSE THE FIRE TO SPREAD.				
	BREATHING APPARATUS SHOULD BE WORN.				
EXTINGUISHING MEDIA:					
SUITABLE:	WATER, FOAM, CARBON DIOXIDE OR DRY EXTINGUISHING AGENTS.				
UNSUITABLE:	NONE.				
6 ACCIDENTAL SPILLAGE:	FILMS AND LAMINATE LYING ON THE FLOOR MAY CONSTITUTE A TRIP AND SLIP HAZARD. BEWARE THAT A STATIC CHARGE MAY BE PRESENT AND ROUGH HANDLING MAY RESULT IN CUTS TO THE FINGERS AND HANDS.				
	TO PREVENT BLOCKAGE OF LOCAL VENTS, EXTRACTION SYSTEMS, SEWERAGE AND DRAINAGE PIPES ETC DO NOT LET THE PRODUCT ENTER THE SYSTEM.				
	COLLECT BY MECHANICAL MEANS, SWEEP UP AND DISPOSE OF RESPONSIBLY FOLLOWING LOCAL AUTHORITY REQUIREMENTS.				
7 STORAGE/HANDLING PRECAUTIONS:					
STORAGE CONDITIONS:	PACKAGING AND SECURING TAPE SHOULD REMAIN INTACT DURING STORAGE. STORE IN A COOL DRY PLACE (20c/50% RH) AVOIDING DIRECT SUNLIGHT AND EXTREME CONDITIONS.				
	HIGH STORAGE TEMPERATURES WILL CAUSE THE MATERIAL TO BECOME MORE FLEXIBLE AND PLIABLE, AND TOP-COATED PRODUCT MAY BLOCK ON ITSELF.				

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<p>HANDLING:</p> <p>WORK HYGIENE:</p>	<p>THE PVC REVERSE MAY APPEAR GLOSSY AND THIS IS NOT DETRIMENTAL TO PRODUCT PERFORMANCE.</p> <p>EXTREME COLD CONDITIONS WILL CAUSE THE MATERIAL TO BECOME RIGID AND BRITTLE. IF THIS OCCURS BRING THE MATERIAL INDOORS AND ALLOW IT TO STABILISE AT ROOM TEMPERATURE BEFORE PROCESSING.</p> <p>STORE AND TRANSPORT SUSPENDED. DO NOT ALLOW MATERIAL TO BECOME DAMAGED, EDGE DAMAGE MAY RESULT IN WEB BREAKS.</p> <p>FILMS AND LAMINATE LYING ON THE FLOOR MAY CONSTITUTE A TRIP AND SLIP HAZARD. BEWARE OF ANY STATIC CHARGE THAT MAY BE PRESENT AND OBSERVE PROPER EARTHING TECHNIQUES. DULL CUTTING BLADES, OR TECHNIQUE MAY RESULT IN A RAGGED/SHARP EDGE AND ROUGH HANDLING MAY RESULT IN CUTS TO THE FINGERS AND HANDS. WEAR PROTECTIVE GLOVES.</p> <p>OBSERVE GOOD, NORMAL HYGIENE PRACTICES.</p>
<p>8 EXPOSURE CONTROLS/PERSONAL PROTECTION:</p> <p>PROTECTIVE EQUIPMENT: ROUGH HANDLING MAY RESULT IN CUTS TO THE FINGERS AND HANDS. WEAR PROTECTIVE GLOVES. HAND AND EYE PROTECTION IS RECOMMENDED IN PROCESSES WHERE HIGH TEMPERATURES ARE USED.</p> <p>VENTILATION: } RECOMMENDED FOR PROCESSES WHERE HIGH TEMPERATURES ARE USED AND PROCESSES THAT CREATE FILM DEBRIS, EYE PROTECTION: } DUST OR FINE PARTICLES.</p> <p>FIRE/EXPLOSION PROTECTION: BUILD UP OF STATIC ELECTRICAL CHARGE MAY EARTH ITSELF BY SPARKING. PRECAUTIONS SHOULD BE TAKEN TO ELIMINATE THE STATIC CHARGE, AND TO PREVENT SUBSEQUENT RECHARGING DURING FURTHER PROCESSING, ESPECIALLY WORK INVOLVING FLAMMABLE SOLVENTS. KEEP AWAY FROM RADIANT HEAT SOURCES.</p>	
<p>9 PHYSICAL AND CHEMICAL PROPERTIES:</p> <p>APPEARANCE: NON-VOLATILE SOLID.</p> <p>COLOUR: VARIOUS.</p> <p>ODOUR: PLASTIC.</p> <p>CHANGE OF PHYSICAL STATE: SOFTENS/MELTS WHEN HEATED. BECOME BRITTLE IN EXTREME COLD.</p> <p>SOFTENING RANGE: APPROX 50 - 80°C.</p> <p>MELTING POINT: >160°C.</p> <p>DENSITY: Ca 1.3 - 1.7 g/cm³ (@ 20c).</p> <p>SOLUBILITY IN WATER: INSOLUBLE.</p> <p>PH VALUE: N/A.</p> <p>FLASH POINT: N/A.</p> <p>DECOMPOSITION TEMPERATURE: APPROX 130°C LONG TERM CONTACT. APPROX 220°C SHORT TERM CONTACT.</p> <p>FLAMMABILITY: LOW TO MODERATE FLAMMABILITY DEPENDING ON PRODUCT CONSTRUCTION.</p> <p>THERMAL DECOMPOSITION: } NONE WHEN USED FOR ITS INTENDED PURPOSE AND APPROPRIATE DECOMPOSITION PRODUCTS: } HANDLING, STORAGE AND PRESERVATION CONDITIONS.</p> <p>HAZARDOUS REACTIONS: }</p> <p>FURTHER INFORMATION: THE METALLISED LAYER WILL CONDUCT ELECTRICITY, IF EXPOSED.</p>	
<p>10 STABILITY AND REACTIVITY: PRODUCT IS STABLE AT ROOM TEMPERATURE.</p> <p>CONDITIONS TO AVOID: THERMAL DEGRADATION BY OVERHEATING.</p> <p>STATIC BUILD UP AND SUBSEQUENT RECHARGING DURING FURTHER PROCESSING.</p> <p>STRONG SOLVENTS WILL SOFTEN AND DISSOLVE THE FILM COMPONENTS OF THE LAMINATE.</p> <p>STRONG ACIDS AND ALKALIS WILL ATTACK THE METALLISING AND ETCH THE FILM COMPONENTS OF THE LAMINATE.</p>	
<p>11 TOXICOLOGICAL DATA METALON MATERIALS DO NOT PRESENT ANY HAZARD PROVIDING THEY ARE USED CORRECTLY ACCORDING TO NORMAL GOOD SAFETY PRACTICES. METALON MATERIALS SHOULD NOT BE INGESTED, AND SHOULD NOT BE USED FOR FOOD CONTACT, TOYS AND CHILDCARE ARTICLES UNLESS THE MATERIAL HAS BEEN SPECIFICALLY FORMULATED FOR SUCH APPLICATIONS. METALON PRODUCTS ARE CADMIUM FREE.</p>	
<p>12 ECOLOGICAL DATA THE IMPACT OF THIS PRODUCT ON PLANTS AND ANIMALS HAS NOT BEEN EXAMINED. NO VALUES ARE AVAILABLE ON BIOLOGICAL DEGRADATION. PRODUCT IS SLOWLY DEGRADED BY UV LIGHT.</p>	
<p>13 DISPOSAL: OBSERVE GOOD WASTE MANAGEMENT PRACTICES TO KEEP THE PRODUCT SECURE AND CONFINED TO PREVENT ACCIDENTAL SPILLAGES AND CONTAMINATION WHILE AWAITING DISPOSAL.</p> <p>LAMINATED PRODUCT CONSISTS OF DISSIMILAR PLASTICS AND, THEREFORE, DOES NOT LEND ITSELF TO RECYCLING, ALTHOUGH UNSUPPORTED PVC AND POLYTHENE FILMS ARE RECYCLEABLE.</p> <p>LANDFILL IS PREFERRED. DISPOSAL SHOULD BE CARRIED OUT THROUGH RESPONSIBLE FIRMS WHO SPECIALISE IN THE DISPOSAL AND RECYCLING OF SUCH MATERIAL.</p>	

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13 DISPOSAL CONTINUED...	INCINERATION SHOULD BE CARRIED OUT IN AN APPROVED FACILITY. DISCUSSION AND CO-OPERATION WITH LOCAL AUTHORITIES IS ADVISED.																
14 TRANSPORT:	METALON IS NOT CONSIDERED HAZARDOUS MERCHANDISE.																
15 REGULATORY INFORMATION:	METALON IS NOT CONSIDERED HAZARDOUS MERCHANDISE.																
16 OTHER INFORMATION:																	
HEAVY METALS:	<p>BASED ON SUPPLIER HEALTH AND SAFETY INFORMATION HEAVY METAL EXTRACTION CONCENTRATION OF COMPONENTS USED TO PRODUCE METALON (mg/m³):</p> <table> <tr><td>ARSENIC As</td><td><1</td></tr> <tr><td>BARIUM Ba</td><td><5</td></tr> <tr><td>CADMIUM Cd</td><td><1</td></tr> <tr><td>CHROMIUM Cr* (AS Cr⁶⁺)</td><td><1</td></tr> <tr><td>MERCURY Hg</td><td><1</td></tr> <tr><td>LEAD Pb</td><td><1</td></tr> <tr><td>ANTIMONY Sb</td><td><5</td></tr> <tr><td>SELENIUM Se</td><td><10</td></tr> </table>	ARSENIC As	<1	BARIUM Ba	<5	CADMIUM Cd	<1	CHROMIUM Cr* (AS Cr ⁶⁺)	<1	MERCURY Hg	<1	LEAD Pb	<1	ANTIMONY Sb	<5	SELENIUM Se	<10
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EN71:	BASED ON SUPPLIER DATA METALON FILM AND LAMINATE COMPONENTS CONFORM TO EN71, PART 3.																
CONFLICT MATERIALS:	BASED ON SUPPLIER DATA METALON FILM AND LAMINATE COMPONENTS DO NOT CONTAIN CONFLICT MATERIALS AS DEFINED UNDER THE SEC'S CONFLICT MINERALS RULE.																
PROPOSITION 65:	BASED ON SUPPLIER DATA FNM PVC CONTAINS CARBON BLACK AT A LEVEL OF 0.33% AND DINP PLASTICISER AT 15% WHICH ARE BOTH LISTED ON CALIFORNIA PROPOSITION 65. ALL OTHER INGREDIENTS ARE EITHER NOT LISTED, OR IF PRESENT, ARE IN CONCENTRATIONS THAT DO NOT NEED TO BE REPORTED. NO OTHER SUBSTANCES HAVE BEEN REPORTED. NO OTHER SUBSTANCES ARE DELIBERATELY ADDED.																
ROHS	<p>ALTHOUGH METALON IS NOT DESIGNED FOR USE IN ELECTRONIC COMPONENTS, METALON FILM AND LAMINATES MEET THE REQUIREMENTS OF THE ROHS DIRECTIVE 2002/95/EC.</p> <p>*METALLISED FILM AND LAMINATES MAY CONTAIN EITHER CHROMIUM OR ALUMINIUM METAL WITHIN THE STRUCTURE AS THE METALLISING LAYER, AND WHERE PRESENT, THE METAL IS DEPOSITED IN A NOMINAL CONCENTRATION OF <1 X 10⁻¹ g/m².</p>																
REACH	<p>METALON FILMS AND LAMINATES ARE CONSIDERED POLYMERS AND ARE, THEREFORE, EXEMPT FROM THE REQUIREMENT TO REGISTER FOR REACH.</p> <p>LAMINATES USING A FLEXIBLE PVC BASE CODED FNM (COLOUR GREY), FNM4 (WHITE) AND FNM5 (WHITE) CONTAIN DINP, CAS-No 68515-488-0, EINECS-No 271-090-9 AS A PLASTICISER WITHIN THE PVC FORMULATION IN CONCENTRATIONS GREATER THAN 0.10% W/W AND IN ADDITION, FLEXIBLE PVC BASE CODED FNM (BLACK) CONTAINS DEHP (DOP) AS A PLASTICISER. THESE SUBSTANCES ARE INCLUDED IN REACH ANNEX XVII RESTRICTING IT FOR USE IN TOYS AND CHILDCARE ARTICLES.</p> <table> <tr><td>RIGID VINYL FILM CONTAINS PVC HOMOPOLYMER RESIN</td><td>80 – 90%</td></tr> <tr><td>MBS TERPOLYMER RESIN (IMPACT MODIFIER)</td><td>7 – 15%</td></tr> <tr><td>VINYL CHLORIDE MONOMER IN PVC</td><td>LESS THAN 1PPM</td></tr> </table>	RIGID VINYL FILM CONTAINS PVC HOMOPOLYMER RESIN	80 – 90%	MBS TERPOLYMER RESIN (IMPACT MODIFIER)	7 – 15%	VINYL CHLORIDE MONOMER IN PVC	LESS THAN 1PPM										
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DIRECTIVE 1999/45/CE:	<p>METALON IS ALSO FREE FROM:</p> <p>BENZYL BUTYL PHTHALATE, DIBUTYL PHTHALATE, DIETHYL HEXYL PHTHALATE, DIMETHYL FUMARATE, OCTABROMODIPHENYL ETHER, POLYNUCLEAR AND POLYCYCLIC AROMATIC HYDROCARBONS, POLYBROMINATED BIPHENYLS, POLYBROMINATED DIPHENYLETERS, PENTABROMODIPHENYL ETHER.</p>																
FOOD CONTACT:	<p>PRODUCT CODES SUFFIXED WITH AN 'F' ARE LAMINATES MANUFACTURED WITH A TOP SURFACE FOOD APPROVED POLYESTER FILM WHICH COMPLIES WITH EU FOOD CONTACT LEGISLATION 2004/19/EC AND FDA REGULATION CFR177.1630. INTERMEDIATE AND BASE FILMS USED IN THESE CONSTRUCTIONS ARE NOT FORMULATED FOR FOOD CONTACT. REFER TO THE RELEVANT PRODUCT DATA SHEET FOR FURTHER INFORMATION.</p>																

THE ABOVE INFORMATION IS TO THE BEST OF OUR KNOWLEDGE AND IS GIVEN IN GOOD FAITH. THE DATA RELATES ONLY TO THE SPECIFIED MATERIAL AND DOES NOT RELATE TO USE IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PROCESS.