INJECTION CONDITIONS

注塑成型加工参考资料如下：

注塑机：大多数聚烯烃系能使用的注塑机均能使用 压缩比：>2.4以上
For Injection molding references (most olefin plastic machines can be used)
Compression ratio: 2.4 and higher

注塑机料管温度	Cylinder Temperatures:
进料段	Feed Zone: 175-185˚C
中间段	Center Zone: 185-195˚C
出料前段	Front Zone: 190-205˚C
注塑口	Nozzle: 190-210˚C
模温	Mold Temperature: 40~50˚C
注塑压力	Injection Pressure: 35-50 kg/cm^2
注塑速度	Injection rate: 快速/Fast
保压时间	Hold Time: 5 sec.
螺杆速度	Screw Speed: 中速/Medium
背压	Back Pressure: 5-10 kg/cm^2
循环时间	Cycle Time:15~20 sec.

(以2mm厚度以下物件/Goods material thickness under 2mm)

请注意硬度较低的规格可使用较低的注塑温度：
正确的熔融温度为180˚C~220˚C，勿超过230˚C.
Please maintain the material melt temp. around 180˚C to 220˚C during processing, but not exceeding 230°C.

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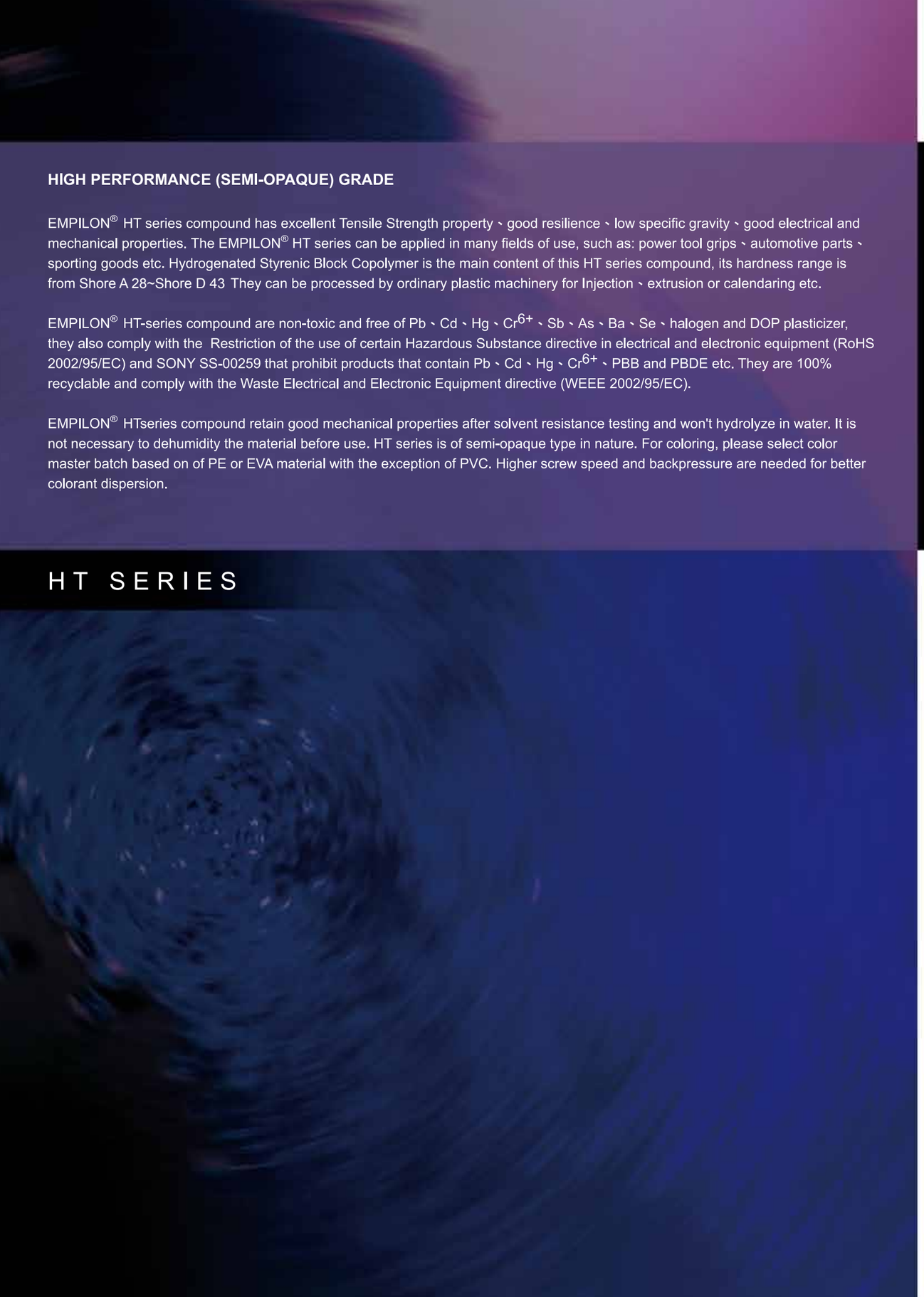
EMPILON 优能胶

HT SERIES

High performance (semi-opaque) grade

www.empilon.com



HIGH PERFORMANCE (SEMI-OPAQUE) GRADE

EMPILON® HT series compound has excellent Tensile Strength property、good resilience、low specific gravity、good electrical and mechanical properties. The EMPILON® HT series can be applied in many fields of use, such as: power tool grips、automotive parts、sporting goods etc. Hydrogenated Styrenic Block Copolymer is the main content of this HT series compound, its hardness range is from Shore A 28~Shore D 43 They can be processed by ordinary plastic machinery for Injection、extrusion or calendaring etc.

EMPILON® HT-series compound are non-toxic and free of Pb、Cd、Hg、Cr^{6+}、Sb、As、Ba、Se、halogen and DOP plasticizer, they also comply with the Restriction of the use of certain Hazardous Substance directive in electrical and electronic equipment (RoHS 2002/95/EC) and SONY SS-00259 that prohibit products that contain Pb、Cd、Hg、Cr^{6+}、PBB and PBDE etc. They are 100% recyclable and comply with the Waste Electrical and Electronic Equipment directive (WEEE 2002/95/EC).

EMPILON® HTseries compound retain good mechanical properties after solvent resistance testing and won't hydrolyze in water. It is not necessary to dehumidity the material before use. HT series is of semi-opaque type in nature. For coloring, please select color master batch based on of PE or EVA material with the exception of PVC. Higher screw speed and backpressure are needed for better colorant dispersion.

HT SERIES

特高性能级

EMPILON® HT系列产品是针对高韧性、高强度、高耐热性...等特性所开发的特高性能热可塑性弹性材料，材料颜色为半透明,可以广泛应用於一般产品(如工具握把、车用零件、工业制品、运动用品...等)它是以氢化Styrenic block copolymer为主的掺配材料，硬度范围在Shore A 28 ~ Shore D 43之间，可以用注塑(射出)、挤出、压延...等加工方式加工。

EMPILON® HT系列产品为无毒性材料，不含八大重金属、卤素、DOP可塑剂...等有害物质，是100%可回收的环保材料。可通过欧盟电子及电器设备废弃物处理法(WEEE)及电子资讯产品禁用化学物质法令(RoHS)规范、并符合SONY SS-00259环保要求；另外在耐化学药品性、耐水解性能也佳。

EMPILON® HT系列产品，在加工前无需乾燥即可使用.欲将本系列产品染色时，请选择以PE或EVA为基材之色母，切勿使用以PVC为基材者，另外加工时请采用较高的螺杆转速和较高的背压，才能让著色剂达到较好的分散效果。

EMPILON® HT SERIES PHYSICAL PROPERTIES

		METHOD 测试方法	UNIT单位	HT20	HT45	HT55	HT65	HT75	HT85	HT94
比重 Specific gravity		ASTM D792		0.89	0.89	0.89	0.89	0.89	0.89	0.89
硬度 Hardness		ASTM D2240	10Sec. Shore	28A	44A	60A	71A	81A	32D	43D
抗张强度 Tensile strength		ASTM D412	kgf/cm^2	60	72	84	96	108	156	180
300% 抗张强度 300%Tensile strength		ASTM D412	kgf/cm^2	2	17	27	37	45	63	88
伸长率 Elongation at break		ASTM D412	%	670	670	730	720	720	720	700
流动指数 Melt index		ASTM D1238	g/10min	G14	G21	G29	G27	G23	G17	G15
压缩变形 Compression set		ASTM D359 (23°C /70hrs)	%	19	23	21	28	35	45	22
脆化温度 Brittle temperature		估计值(estimate)	℃	-50	-50	-50	-50	-50	-50	-50
收缩率(参考用) Shrinkage (reference only)		平行 (machine direction)	%	1.2	0.8	0.6	0.4	0.3	0.5	0.5
		垂直 (transverse direction)	%	1.2	1.0	0.9	0.9	0.7	0.9	0.9
热老化 Thermal aging resistance	硬度变化 Hardness change	ASTM D573 (125 °C *168hrs)	shore	-14A	-1A	1A	1A	-1A	0	4D
	抗张变化率 Tensile strength percentage change		%	14	2	-11	-4	-7	8	-5
	伸长变化率 Elongation at Break percentage change		%	5	-5	-3	-4	-1	-1	-5

＊以上数据由和泰实验室提供

＊Data is provided by HOTAI laboratory.

＊流动指数： G表示为200°C/5kg测试条件。

＊Melt Index：G represent the condition is 200°C/5kg(loading).