

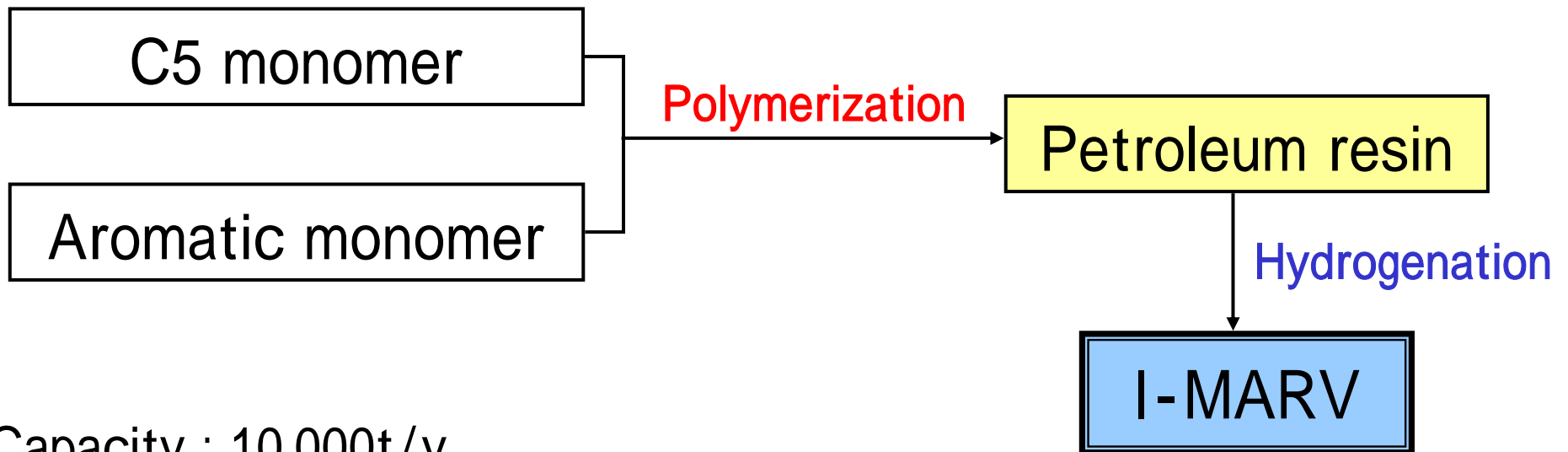
Hydrogenated Petroleum Resin
I - MARV

Idemitsu Kosan Co.,Ltd.

1. I-MARV

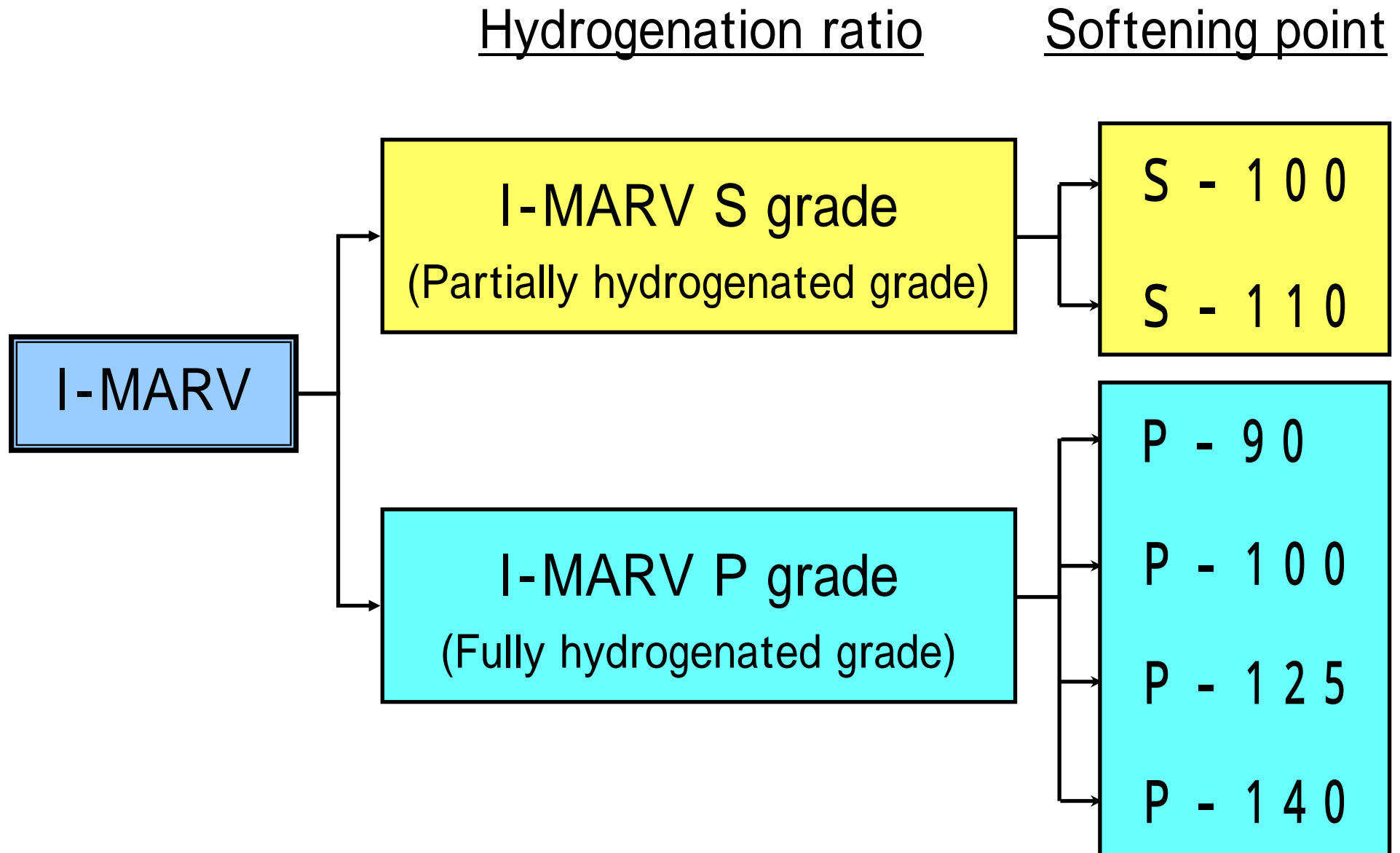
I-MARV is a **colorless** and **transparent** hydrogenated petroleum resin with excellent **heat resistance** and **performance at low temperature resistance** and **well-balanced adhesive characteristic** .

The product was developed by Idemitsu Petrochemical's polymerization and hydrogenation technologies accumulated over long years of experience.



Capacity ; 10,000t/y

2. Grades of I-MARV

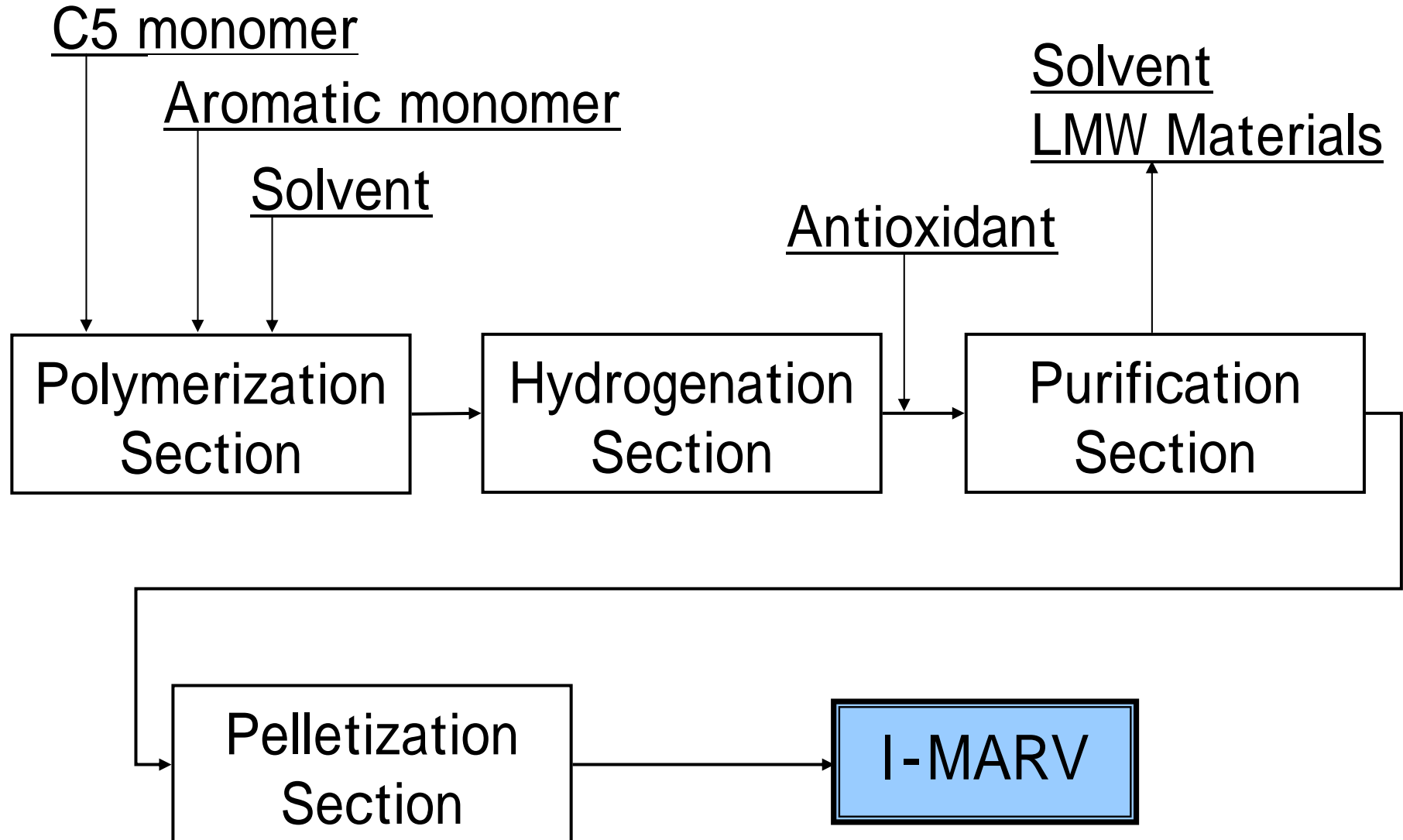


3. Typical properties of I-MARV

Typical properties of I-MARV

Item (Unit)	S-100	S-110	P-90	P-100	P-125	P-140	Method
Softening point ()	100	110	90	100	125	140	JIS K2207
Ave.molecular weight	700	760	600	660	820	900	VPO
Density (g/cm ³ at20)	1.05	1.05	1.03	1.03	1.03	1.03	JIS K0061
Color (Harzen)	25	25	10	10	20	20	JIS K6901
Bromine number (g/100g)	5.0	6.0	2.5	2.5	2.5	2.0	JIS K2605

4. Simple flow of I-MARV plant



5. Usage of I-MARV

- (1) Tackifier of Hot melt adhesives (HMA)
 - EVA base HMA (For package)
 - Elastomer base HMA (For diaper, sanitary napkin)
- (2) Tackifier of pressure sensitive adhesives (PSA)
 - NR base PSA, SIS base PSA (For tape)
- (3) Additives (adulterant) for polyolefin
 - Improvement transparency, stiffness, and tackiness of PP resin
- (4) Ingredient of compounds
 - Kneading improvement of EPDM