Rubber Lining Material

Our rubber materials use for application has imported from OHJI (Japan) manufacture.
We provide rubber sheet, adhsive, materials and the supervisor which will be best suited for your needs.

Natural Hard Rubber

OHJI - HARD

Material	Characteristics	General Application	Curing Method		Hardness
			Autoclave	Open steam	
E-5	Hard rubber used for chemical resistance under high temperature condition. Less flexible than E-7.	Electrolytic equipment Recovery system for hydrochloric acid & alcohol Bromine production equipment	●		70 ~ 90 Type/Shore D
E-5I	Compound of low Ca and Mg.	Special for Cell - liquor of IM electrolysis	●		60 ~ 80 Type/Shore D
E-7	Wide range of corrosion resistance. Excellent flexibility. Standard grade of natural hard rubber.	Hydrochloric acid, Dilute sulfuric acid, Phosphoric acid, Caustic soda, etc.	●		65 ~ 85 Type/Shore D
E-7i	Compound of low Ca and Mg	IM electrolysis Used for the case of disrelishing metal ion	●		65 ~ 86 Type/Shore D
E-8	Used for oxide and osmotic agent, such as gaseous chlorine.	For equipment for gaseous chlorine (wet) of electrolysis in saturated	●		70 ~ 90 Type/Shore D
E-15	General hard rubber for site application.	Used when the organic solvent such as SO is mixed such as gaseous chlorine. Same as E-7		●	60 ~ 80 Type/Shore D
E-16	Fast vulcanizing hard rubber. Used as SH type (Soft-Hard-Soft lining). Gaseous chlorine.	Same as E-7		●	60 ~ 80 Type/Shore D
E-18	For gaseous chlorine for site application.	Same as E-8		●	65 ~ 85 Type/Shore D
E-20	Hard rubber for site application. Compound of low Ca and Mg.	Same as E-7I		●	60 ~ 80 Type/Shore D

* With regard to service condition, in the case of food-related, E-7, E-15 are certified by the Japan Ministry of Welfare No.85

Natural Soft Rubber

OHJI-SOFT

Material	Characteristics	General Application	Curing Method		Hardness
			Autoclave	Open steam	
R-4	Used in the case of extreme slurry abrasion where R-6 is not sufficient.	For abrasion resistance of slurry	●	●	42 ± 7 Type A
R-5	Inadequate for slurry abrasion, but applicable for abrasion with large diameter of coarse particle and high loading.	For special abrasion resistance	●	●	62 ± 7
R-6 (R-16)	Standard grade of natural soft rubber for acid resistance. Alkali - resistance and slurry abrasion resistance shall be separately considered.	Storage and piping for chemical resistance Suitable for caustic soda	●	●	62 ± 7 Type A
R-7 (R-17)	Inadequate for general acid and alkali resistance. Used for surface application of single or on hard rubber.	Hydrofluoric acid resistance (Only a little amount in phosphoric acid)	●	●	67 ± 7
R-8 (R-18)	Soft rubber blended with hard rubber for vulcanization.	Used as SH type (SH-8168, SH-8078, SH-78)	●	●	70 ± 7 Type A
R-8i	Compound of low Ca and Mg	Same as R-6 and R-8	●	●	42 ± 7 Type A

* With regard to service condition, in the case of food-related, R-6 (R-16) is certified by the Japan Ministry of Welfare No.85.

Butyl Rubber

OHJI-I

Material	Characteristics	General Application	Curing Method		Hardness
			Autoclave	Open steam	
B-5 (B-15)	Standard grade of butyl rubber. The most chemical resistance rubber. Excellent in vapor permeability among the natural rubber. Certified as water supply standard. (JWWA Z109:2004).	Excellent resistance to HSO and HFFGD equipment. Phosphoric acid plant.	●	●	57 ± 7 Type A
B-5C (B-15C)	Halogenated (chlorinated) butyl rubber. Same performance as B -15 (B-15).	FGD system in overseas.	●	●	57 ± 7 Type A
B-5S	Pre-cured type butyl rubber. Not necessary for vulcanization.	Large size tank for field For repair at FGD system.	Not required	Not required	52 ± 7 Type A
B-7 (B-17)	Butyl rubber for NaClO (Black).	Storage and piping of hypo-chlorite soda.	●	●	57 ± 7 Type A
B-115	Non contamination grade for phosphoric acid.	High quality phosphoric acid storage.	●	●	52 ± 7 Type A
B-215	Non contamination grade for sulfuric acid.	High quality sulfuric storage.	●	●	52 ± 7 Type A

* With regard to service condition, in the case of food-related, B-5 (B-15), B-7 (B-17) are certified by the Japan Ministry of Welfare No.85.

Rubber Lining Material

Chloroprene Rubber

OHJI-PRENE

Material	Characteristics	General Application	Curing Method		Hardness
			Autoclave	Open steam	
C-5	Better performance for workability of lining application.	Seawater pipe. Water box condenser.	●	●	62 ± 7 Type A
C-55	Self vulcanization type of CR. Vulcanization with operating temperature.	NaOH storage, PAC, CaCl. Wastewater treatment equipment.	●	●	62 ± 7 Type A
C-55F	Food grade of self vulcanization type of CR.	Storage tank for NaOH as a food additive.	●	●	62 ± 7 Type A
C-6	Standard grade of CR. Except oxidizing chemical resistance, heat and oil resistance, also excellent in ozone resistance. Can be applied for coexistent with hydrofluoric acid such as phosphoric acid production.	Phosphoric acid production related equipment. Seawater pipe. Water box condenser.	●	●	62 ± 7 Type A
H-411	Certified with standard of water service (JIS K 6353-1997).	Tap water piping.	●		62 ± 7 Type A

* With regard to service condition, in the case of food-related, C-55F is certified by the Japan Ministry of Welfare No.85.

Special Material (EPDM)

OHJI-S

Material	Characteristics	General Application	Curing Method		Hardness
			Autoclave	Open steam	
S-2	Certified as water supply standard. (JWWA Z108:2004). Heat and ozone resistance.	Water supply equipment with heat.	●		70 ± 7 Type A
S-6	Certified as water supply standard. (JWWA Z108:2004). Heat and ozone resistance.	Water supply equipment with heat.	●		64 ± 7 Type A

Special Material (NBR)

OHJI-N

Material	Characteristics	General Application	Curing Method		Hardness
			Autoclave	Open steam	
N-8	Soft rubber with oil resistance.	Bucket of oil storage.	●		70 ± 7 Type A

Natural Soft and Rubber (SH/SH Type)

Material	Characteristics
SH-74	Although soft rubber type (R, C, B and S type) is not be damaged by shock or vibration, there is a problem in this point for hard rubber type (E type). When hard rubber is used for corrosion resistance and shock and vibration resistance need to be taken advantage, triple layer application or soft~hard~soft (SH type) is used.
SH-8078	SH (Sunhard) specifies the sign of each structure (hard-soft and soft-hard-soft) from metal surface, and the contents of thickness and material differs depending on the required service condition.
SH-78	In this case, therefore, it is separately specified. Designed value of standard hardness differs from by each rubber structure.
SH-8168	
SH-76	

Material	SH Type Structure (Material of Each layer)			Curing Method	©Hardness tester (according to JIS K6256)
	Substrate	Middle Layer	Facing Surface		
SH-8168	R-8	E-16	R-8	Open steam	A: Type A Durometer
SH-8078	R-8	E-7	R-8	Autoclave	D: Type D Durometer
SH-78	E-7	-	R-8		©Temperature: 23±2°C
SH-76	E-7	-	R-6		

* With regard to service condition, in the case of food-related, SH-8078 is certified by the Japan Ministry of Welfare No.85