

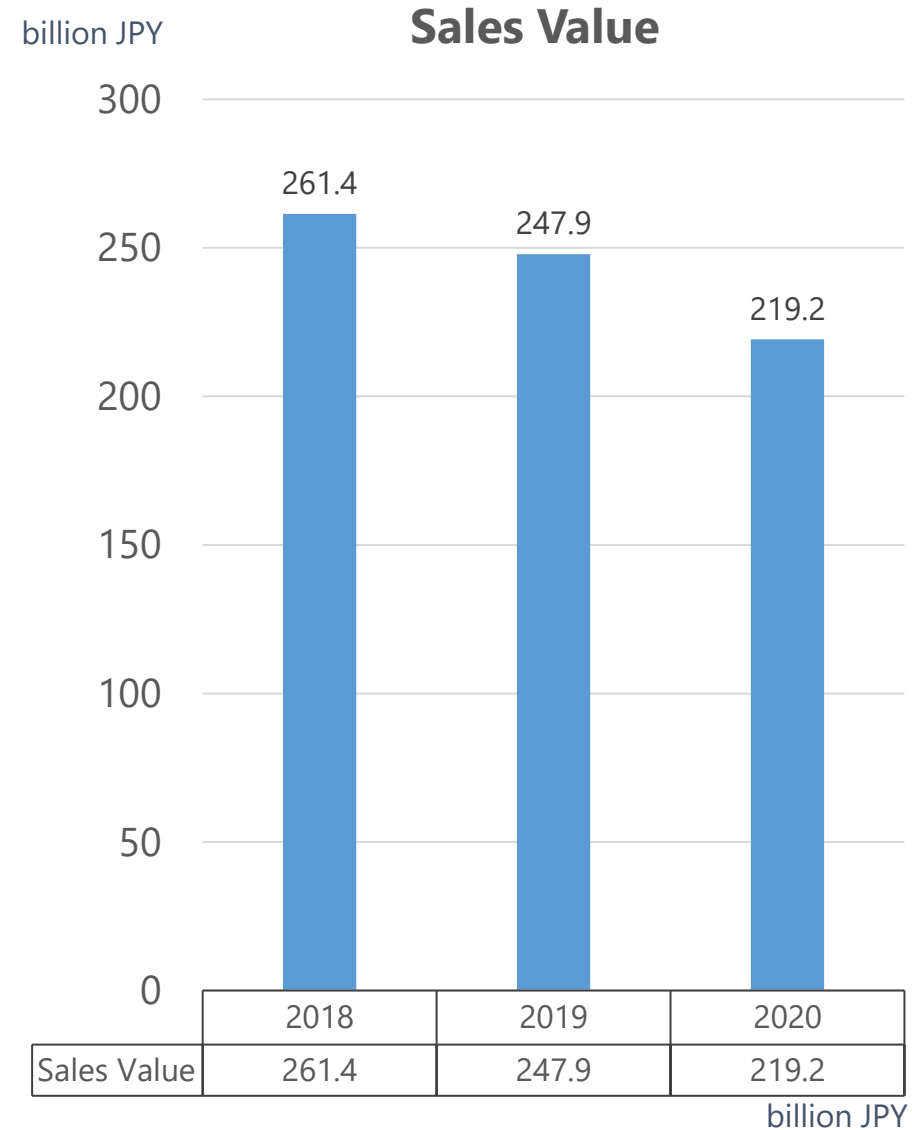
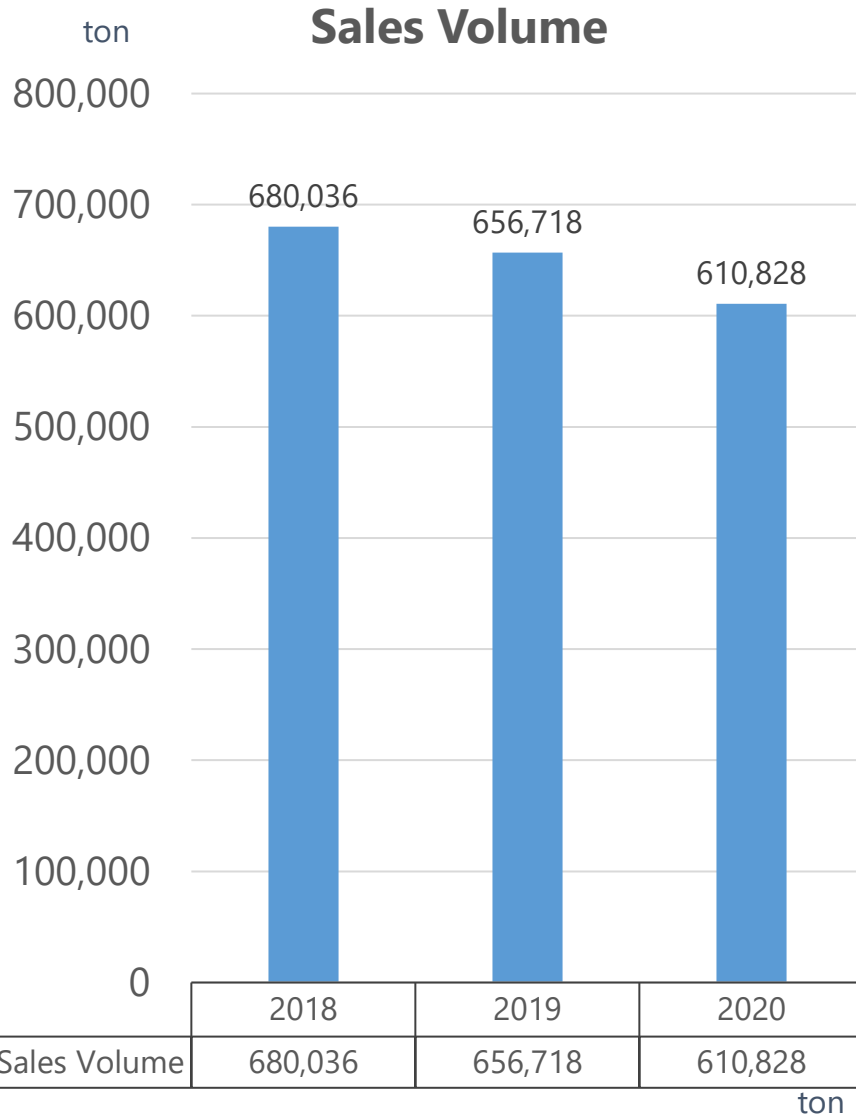
 A light gray map of Japan is visible in the background, centered behind the title text.

# Adhesive Market in Japan

Oct. 2021  
Japan Adhesive Industry Association (JAIA)

# 1-1. Sales Volume & Value by Adhesive

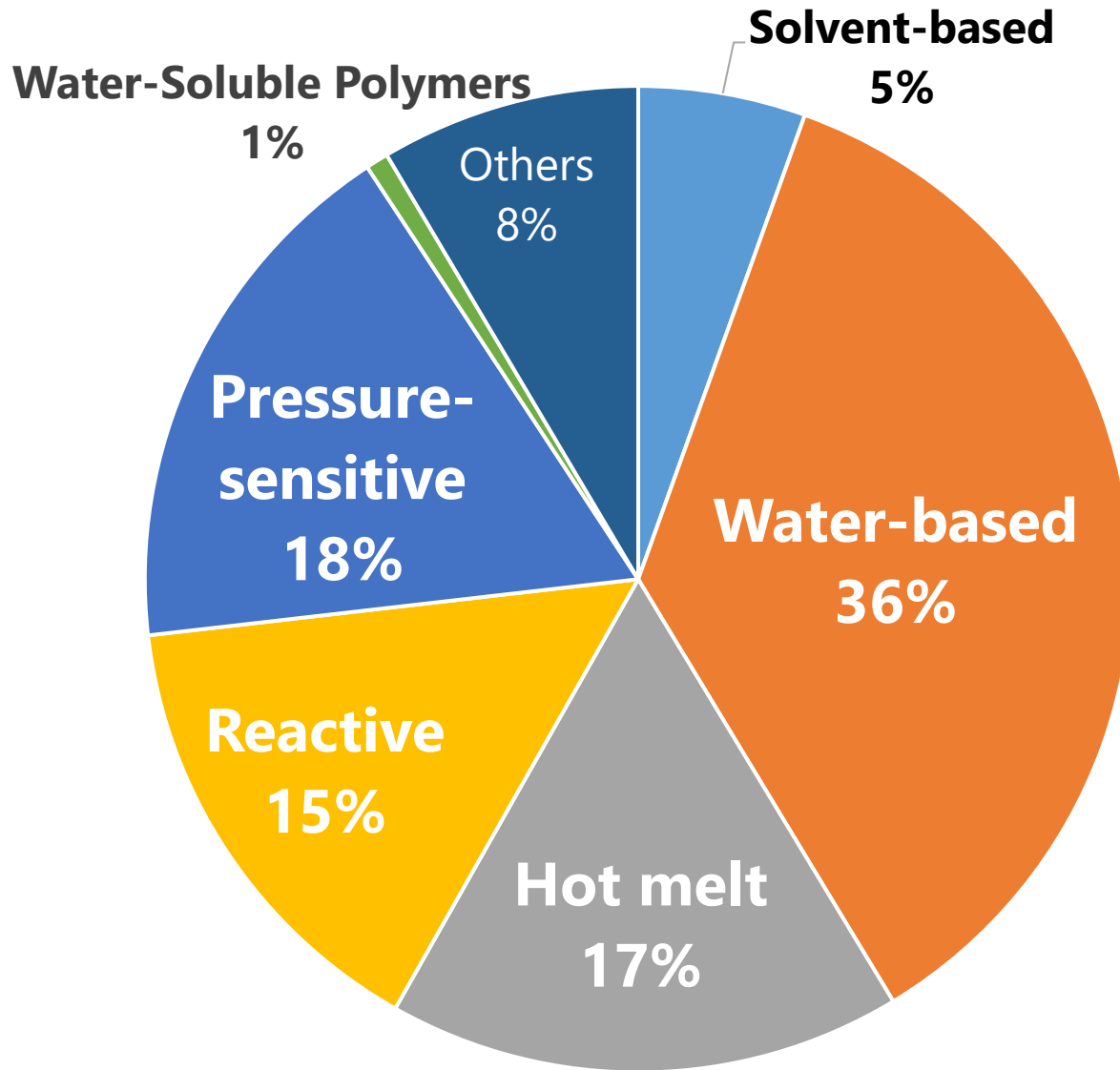
※2018 ~ 2020 : excluding the formaldehyde resins adhesive



# 1-2. Sales Volume & Value by Adhesive Types

Adhesive Type	Sales Volume by Types (ton)			Sales Value (Billion JPY)
	2018	2019	2020	2020
Formaldehyde Resins	-	-	-	-
Solvent-based	37,303	37,314	<b>33,503</b>	<b>19.1</b>
Water-based	243,309	236,564	<b>219,079</b>	<b>42.6</b>
Hot Melt	115,737	108,415	<b>102,889</b>	<b>41.5</b>
Reactive	100,064	99,283	<b>91,552</b>	<b>71.5</b>
Pressure-sensitive	124,912	112,545	<b>107,269</b>	<b>32.8</b>
Water-Soluble Polymers	3,663	9,222	<b>4,538</b>	<b>2.1</b>
Others	55,048	53,379	<b>51,999</b>	<b>9.5</b>
<b>TOTAL</b>	<b>680,036</b>	<b>656,718</b>	<b>610,828</b>	<b>219.2</b>

# 1-3. Sales Volume by Adhesive Types



# 1-4. Sales Volume by Adhesive Application

※2018 ~ 2020 : excluding the formaldehyde resins adhesive

Application 7 Categories	Application Old 11 Categories	Sales Volume by Application (ton)		
		2018	2019	2020
Woodworking and Joinery	Plywood/Woodwork	60,646	52,276	53,338
Building/Construction/Civil Engineering/Craftsmen	Construction	161,342	159,227	151,581
Paper, Board and Related Products	Paper & Book Binding	33,145	30,569	28,829
	Packaging	103,878	100,730	99,585
	Textile	48,759	41,186	40,155
	<b>SUB TOTAL</b>	<b>185,782</b>	<b>172,485</b>	<b>168,569</b>
Transportation	Transportation	58,025	54,860	48,989
Footwear and Leather	Shoes, rubber & Leather	2,118	1,848	1,543
Consumer/DIY (Retail)	Household	4,452	7,239	5,585
Assembly Operations	Assembly Operations	17,182	18,098	16,008
	Electric Machinery	47,189	44,996	39,638
	<b>SUB TOTAL</b>	<b>64,371</b>	<b>63,094</b>	<b>55,646</b>
Others		87,525	97,284	71,970
<b>DOMESTIC SUB TOTAL</b>		<b>624,261</b>	<b>608,313</b>	<b>557,221</b>
Export		55,775	48,405	53,607
<b>TOTAL</b>		<b>680,036</b>	<b>656,718</b>	<b>610,828</b>
Import		17,057	16,728	16,080

# 1-5. Production Volume by Adhesive Types

Adhesive Type	Production Volume (ton)		
	2018	2019	2020
Formaldehyde resins	-	-	-
Solvent-based	37,160	37,544	33,310
Water-based	246,962	236,919	217,413
Hot Melt	116,520	112,513	103,303
Reactive	103,673	101,887	92,221
Pressure-sensitive	147,648	137,909	126,026
Water-Soluble Polymers	3,730	8,700	3,683
Others	54,556	54,259	52,349
<b>TOTAL</b>	<b>710,248</b>	<b>689,731</b>	<b>628,306</b>

<b>Sealant ( kℓ )</b>	<b>88,190</b>	<b>91,265</b>	<b>82,753</b>
-----------------------	---------------	---------------	---------------

# 1-6. Production Volume by Adhesive Items /1

ITEMS		2019	2020	Change %
Solvent Based	PVAc solvent-type	1,238	1,032	83.4
	Other solvent-type resin	8,660	7,682	88.7
	C R solvent-type	8,201	7,070	86.2
	Other synthetic rubber	14,228	11,869	83.4
	Natural rubber solvent-type	917	661	72.1
	Polyurethanes	2,050	2,331	113.7
	Acrylic	712	1,293	181.6
	Silicone	3	3	100.0
	PVC copolymers	1,534	1,370	89.3
<b><i>SUB TOTAL</i></b>		<b><i>37,544</i></b>	<b><i>33,310</i></b>	<b><i>88.7</i></b>

# 1-6. Production Volume by Adhesive Items /2

ITEMS		2019	2020	Change %
Water-based Adhesives	PVAc Emulsion	82,102	75,890	92.4
	PVAc Copolymer Emulsion	5,995	5,683	94.8
	EVA Emulsion	37,694	34,537	91.6
	Acrylic Emulsion	60,852	55,497	91.2
	Other resin Emulsion	11,686	10,264	87.8
	Isocyanate	25,438	23,646	93.0
	Synthesized Rubber	4,143	3,615	87.3
	Synthetic Rubber Latex	1,993	1,860	93.3
	Natural Rubber Latex	637	386	60.6
	Other Water-based	6,380	6,036	94.6
<b><i>SUB TOTAL</i></b>		<b><i>238,938</i></b>	<b><i>217,413</i></b>	<b><i>91.0</i></b>



# 1-6. Production Volume by Adhesive Items /3

ITEMS		2019	2020	Change %
Hot Melt	EVA	31,271	25,312	80.9
	Rubber	58,992	56,310	95.5
	Polyolefin (PE_PP_APP)	15,534	14,540	93.6
	Polyamide (PA)	14	10	71.4
	Saturated Polyester (SP)	0	20	-
	Polyurethane	1,780	2,061	115.8
	Others	4,922	5,051	102.6
<b><i>SUB TOTAL</i></b>		<b><i>112,513</i></b>	<b><i>103,303</i></b>	<b><i>91.8</i></b>

# 1-6. Production Volume by Adhesive Items /4

ITEMS		2019	2020	Change %
Reactive	Epoxy	18,603	17,150	92.2
	Cyanoacrylate	812	762	93.8
	Polyurethane	48,378	45,047	93.1
	Modified Silicone	29,543	26,112	88.4
	Acryl	2,428	2,066	85.1
	Unsaturated Polyester (UP)	4	5	125.0
	Others	2,120	1,080	50.9
<b><i>SUB TOTAL</i></b>		<b><i>101,887</i></b>	<b><i>92,221</i></b>	<b><i>90.5</i></b>

# 1-6. Production Volume by Adhesive Items /5

ITEMS		2019	2020	Change %
PSA	Acryl	123,862	113,994	92.0
	Rubber	13,865	11,923	86.0
	Others	182	109	59.9
<b><i>SUB TOTAL</i></b>		<b><i>137,909</i></b>	<b><i>126,026</i></b>	<b><i>91.4</i></b>
Natural Polymers	Vegetable	29,313	26,527	90.5
	Protein	0	0	-
	Animal glues etc.	140	48	34.3
<b><i>SUB TOTAL</i></b>		<b><i>29,453</i></b>	<b><i>26,575</i></b>	<b><i>90.2</i></b>

# 1-6. Production Volume by Adhesive Items /6

ITEMS		2019	2020	Change %
Water-Soluble Polymers	Polyvinyl Alcohol	1,754	1,702	97.0
	Cellulose Ethers	1,224	1,195	97.6
	Methylcellulose	316	377	119.3
	Carboxymethylcellulose	0	0	-
	Polyvinylpyrrolidone	0	0	-
	Others	5,406	409	7.6
<b><i>SUB TOTAL</i></b>		<b><i>8,700</i></b>	<b><i>3,683</i></b>	<b><i>42.3</i></b>
Other adhesives		4,480	6,948	155.1
Industrial-use Sealants		20,324	18,826	92.6
<b><i>GRAND TOTAL</i></b>		<b><i>689,731</i></b>	<b><i>628,306</i></b>	<b><i>91.1</i></b>

A faint, light-colored world map is visible in the background of the slide, centered behind the text.

**THANK YOU VERY MUCH!**

**謝謝**

**감사합니다!**

**有難うございました**