

Durastream™

CPVC COMPOUND



A decorative graphic on the left side of the page consists of a blue wave-like shape that curves upwards from the bottom left towards the top right. The wave is composed of several layers of blue, with the top layer being a lighter shade. Scattered along the curve of the wave are numerous small, white, circular shapes, some of which appear to be in motion, creating a sense of flow and movement.

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MEET DURASTREAM; A Reliable Source for a Bright Future

SEKISUI CHEMICAL is a CPVC supplier that undertakes every step from PVC polymerization to the manufacturing and selling of finished final products, such as pipes. Durastream is the brand for SEKISUI's new CPVC compound.

SEKISUI began producing CPVC some 40 years ago. Its CPVC is a high-quality, stable product achieved as a result of the sophisticated technologies and quality controls that SEKISUI has accumulated over that long history. We also pride ourselves on providing the optimum advice from the perspective of pipe-makers.

A brand that pursues advanced technologies and services that are of genuine value in any era, and which is capable of sharing the same dreams as pipe-makers — that is Durastream.

WHY CHOOSE CPVC PIPES?

✓ Quality advantages

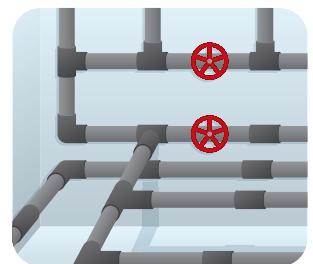
CPVC pipes have an established reputation for their strong heat-resisting properties compared to mainstream PVC and even cast-iron pipes. Additionally, CPVC products boast strong insulation properties and are strongly resistant to rust and corrosion, and based on a track record of extended use stretching 50 years they enjoy a high level of trust from the market.

✓ Construction cost advantages

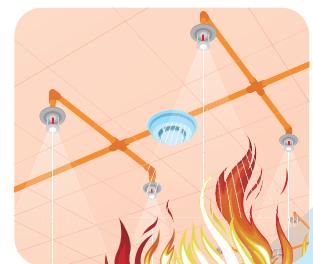
Thanks to the characteristics of the material, when compared to cast-iron pipes and other plastic materials CPVC pipes can be joined at low cost and extremely easily and quickly. This is more appealing for shortening the total construction period and thus helping to hold down construction costs as well.

✓ Wide-ranging uses

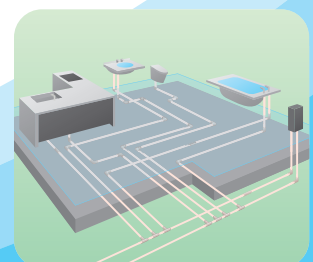
CPVC pipes are highly superior on both the quality and performance fronts, and are highly effective in various applications that require heat resistance, flame resistance, chemical resistance and mechanical strength. CPVC compounds are attracting attention as the mainstream heat-pipe material of the future.



Industrial pipes



Sprinklers



Hot-water supply pipes

WHY CHOOSE DURASTREAM?

CREDIBILITY

Durastream (SP & SF grade) is a compound that has received certification from NSF, an international product certification institution. In addition to its physical properties, NSF also verified its safety to humans, and its credibility as a pipe material is guaranteed. (Certified to NSF 61/NSF 14 standard)

PERFORMANCE

Because it uses highly thermostable CPVC arising from SEKISUI's unique chlorination process, and a combination design that uses SEKISUI's technologies, Durastream boasts superior formability and high productivity. Additionally, it also displays highly stable performance in terms of heat resistance, flame resistance and mechanical strength.



CONSULTATION

Our staff members provide comprehensive support that adopts the customer's standpoint in response to every request, including not only full technical support on everything from the design, development and shaping of CPVC products, but also with regard to sales promotions for developers and design consultants.



DURASTREAM

CPVC Resin



Additives

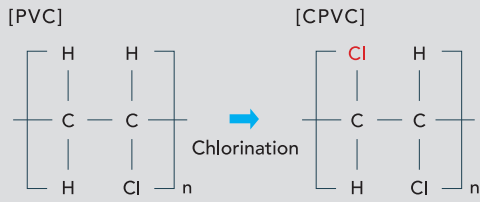
- Heat Stabilizer
- Lubricant
- Impact Modifier
- Filler, Pigment

+

Durastream seeks to provide pipe-makers with a formulation that best suits their needs.

Only highly reliable components that suit our customers' needs are selected for the formulated design of SEKISUI's CPVC Resin.

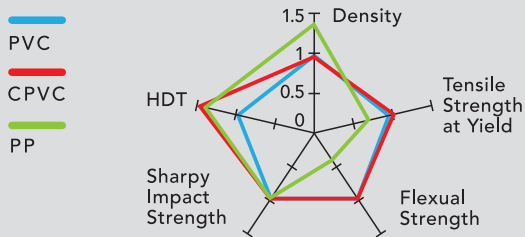
CPVC PERFORMANCE



SEKISUI's unique raw material resin manufacturing technologies

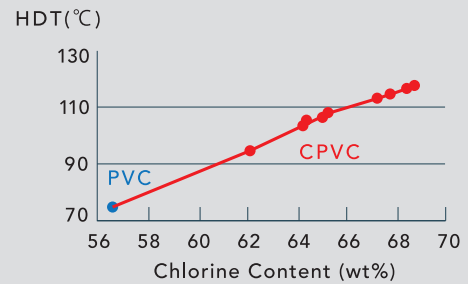
CPVC is obtained by adding chlorine to PVC. SEKISUI's unique PVC polymerization and chlorination technology (heat chlorination manufacturing method) make it possible to manufacture chlorinated polyvinyl chloride of superior quality.

Superior mechanical strength



CPVC can be used for hot-water supply pipes up to 90°C, and it boasts high tensile strength even under high temperatures.

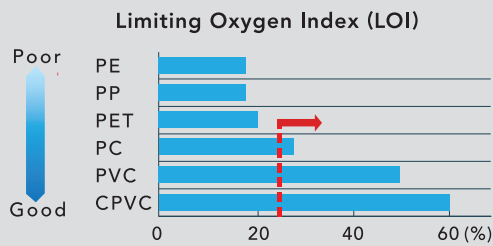
Heat resistance



CPVC's heat resistance is improved as a result of adding chlorine.

*HDT: Heat Deflection Temp.

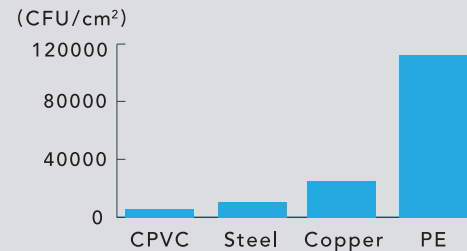
Superior flame resistance



CPVC is a self-extinguishing resin, and so compared to other plastic ingredients it is a highly flame resistant, low smoke-producing material.

*LOI is the percentage of oxygen needed in the atmosphere to support the combustion of a material. Source: Flammability Handbook for Plastics, 5th edition, C.J. Hildado, Technomic Publishing, 1998

Superior from a hygiene perspective



When compared to other pipe material products, CPVC inhibits bacterial growth the most (no bacterial growth in 120 days in water piping).

*Based on the study of Bonn University in the year 1989 "CPVC Piping supports the lowest bacterial growth compared with traditional piping systems" – Dr. George Tuschewitzki
*Source: Privatdozent am Hygiene-Institut der Universität Bonn; 23.10.1989

STANDARD SPECIFICATION

	Unit	Test Method	Standard	Pipe Grade	Fitting Grade
Suitable Application	-	-	-	Pipe	Fitting, Valve
Color	-	Visual Check	-	Grey / Cream	Grey / Cream
Figure	-	-	-	Powder	Pellet
Cell Classification	-	ASTM D1784	-	23447	23447
Specific Gravity	g/cm ³	ASTM D792	-	1.5	1.5
Volatiles	wt%	ASTM D3030	-	<0.3	<0.3
Heat Deflection Temp.	°C	ASTM D648	>100	109	106
Vicat Softening Temp.	°C	ISO 306	-	111	107
Tensile Strength	MPa	ASTM D638	>48.3	55	52
Tensile Modulus of Elasticity	MPa	ASTM D638	>2,480	2,650	2,800
Elongation	%	ASTM D638	-	40-60	40-60
Impact Strength (Izod)	J/m	ASTM D256	>80.1	170	100

NETWORK

- Head Office
- Sales Office
- Plant



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CONTACT

JAPAN Head Office

SEKISUI CHEMICAL CO., LTD.
SPECIALTY CHEMICALS DIVISION
2-3-17 Toranomon, Minato-ku, Tokyo 105-8450, Japan
TEL +81-3-5521-0929

JAPAN Sales Office

SEKISUI CHEMICAL CO., LTD.
SPECIALTY CHEMICALS SALES OFFICE
4560 Kaisei-cho, Shunan city, Yamaguchi 746-0006, Japan
TEL +81-384-63-0199

JAPAN Plant

TOKUYAMA SEKISUI CO., LTD.
4560 Kaisei-cho, Shunan city, Yamaguchi 746-0006, Japan
TEL +81-384-63-0188

THAILAND Sales Office

SEKISUI SPECIALTY CHEMICALS (THAILAND) CO., LTD.
968 12th Floor, U-Chu Liang Building,
Rama 4 Road, Silom, Bangrak, Bangkok, Thailand
TEL +66-2237-7933

SEKISUI