WPA Leak-Seal AG200

Technical Data Sheet ISSUED DECEMBER 2019

PRODUCT DESCRIPTION

WPA Leak-Seal AG200 is an ultra-low viscosity acrylic injection resin, based on Acrylic monomers.

After injection, the resin gels in a few seconds to a few minutes based on the amount of activator/initiator added just before use.

The final injected product is a soft and slightly sticky crosslinked gel which becomes more jelly like as water is added to the base acrylic resin.

FIELD OF APPLICATION

- Soil conditioning, stabilisation and coagulation.
- Curtain grouting behind existing structures.
- Filling of voids, hollow spaces and gaps behind structures.
- Filling and waterproofing gravel nests in concrete.
- Waterproofing of underground structures in concrete and masonry. (ex. basements, underground parking spaces, ...)
- Waterproofing cracks in rock formations.
- Injection of re-injectable injection hoses.
- Below grade expansion joints.

FEATURES & BENEFITS

- Non-toxic for the environment.
- Non flammable.
- No acrylamide.
- Very low viscosity.
- Durable in wet and dry conditions.

APPLICATION PROCEDURE

Note: the following are a few typical application descriptions. In case of other jobsite parameters, please contact our technical department.

PRELIMINARY ANALYSIS

Check the site groundwater levels to ensure the injected gel resin will remain moist. Below grade injections are recommended. Make sure the movement of the water table over time is not too large.

Check the soil conditions in the area to ensure the soil is porous enough. This is to confirm the resin will penetrate sufficiently into the substrate.

NOTE: Clay soil types cannot be injected.

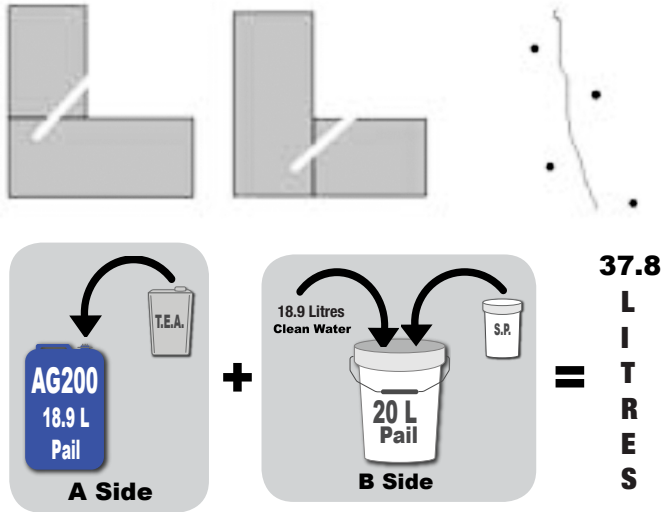
Consider all existing structural elements in the area and the possible consequences that may be caused by the injection works. If necessary, consult a geotechnical and / or structural engineer. Locate all existing utilities in the area and / or in the soil before the starting the application.

SURFACE PREPARATION

Depending on the application, drill the required holes with the correct diameter drill bit according to the type of injection needle, injection tube or packers being utilised.

Install the injection tubes in the correct position, according to the required distance, suitable tube length and the correct injection pattern. (This is to be determined by the Project Engineer). For soil injection, install the correct type of injection tubes required.

For cracks, joints and expansion joint, ensure all surfaces are clean and free from foreign materials and debris. Drill the required holes with the correct diameter drill bit according to the type of injection packer being utilised and install packers in position. The appropriate holes should be drilled into the crack or joint at a 45° angle.



For curtain grouting, a grid pattern of appropriate size must be observed (typically 500mm x 500mm). This configuration should resemble a Dimond pattern.

PRODUCT MIXING INSTRUCTIONS

Read the technical and safety data sheets prior to commencement of the injection works. The **WPA Leak-Seal AG200** injection resin needs to be prepared immediately before the injection process is to commence.

Depending on the type of application, set the appropriate reaction time by mixing the correct amounts of **WPA TEA Catalyst** and **WPA SP Initiator** into the respective A and B components.

Add the required quantity of **WPA TEA Catalyst** to the **WPA Leak-Seal AG200** component A resin and mix thoroughly.

Add the required quantity of **WPA SP initiator** to the part B container which is filled with 18.9 litres of clean water and mix thoroughly.

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Depending on the concentrations of **WPA TEA Catalyst** and **WPA SP Initiator** in their respective blends, varying gel times can be obtained. (Consult the mixing tables to achieve the required gel times).

Mix the **WPA Leak-Seal AG200** comp A resin+ **WPA TEA Catalyst** and comp B + **WPA SP Initiator** resin with a stainless-steel mixer, plastic or wooden stirrer.

Once the component A and B sides of the resins have been mixed, it is recommended to perform a "cup test". Take equal parts of A and B mixture in a small plastic cup and mix them by continuously pouring them from one cup into the other.

Measure the time when gelling starts to occur. The reaction time should be close to the times mentioned in the reaction table. If the gelling time deviates too much from the values in the reaction times table, change the concentration of **WPA TEA Catalyst** and **WPA SP Initiator** in the A and B side respectively in order to adjust the reaction time.

Appearance

Product	WPA Leak-Seal AG200	WPA TEA Catalyst	WPA SP Initiator
Appearance	Amber liquid	Colourless	White powder
Active content	42%	29%	99%
PH	6.5–7.0	10-12	-
Density	1.2g/ml	1.05-1.10	-
Viscosity	20-30cP	< 300cP	

Reaction Times

Part A: **WPA Leak-Seal AG200** + **WPA TEA Catalyst**. (from 2 to 8%)

Part B: **WPA SP Initiator** diluted in water. (between 2% and 5%)

	AG 200 kg	TEA grams	SP grams	H2O kg	Gel Time Seconds	"Material Temp (C)"
Full TEA	22.7	908	945	18.9	29	10
	22.7	908	472	18.9	56	10
	22.7	908	236	18.9	129	10
Full SP	22.7	454	945	18.9	64	10
	22.7	227	945	18.9	223	10
Full TEA	22.7	908	945	18.9	13	21
	22.7	908	472	18.9	19	21
	22.7	908	236	18.9	33	21
Full SP	22.7	454	945	18.9	25	21
	22.7	227	945	18.9	61	21
Full TEA	22.7	908	945	18.9	6	32
	22.7	908	472	18.9	10	32
	22.7	908	236	18.9	15	32
Full SP	22.7	454	945	18.9	11	32
	22.7	227	945	18.9	24	32

PRODUCT CONSUMPTION

Consumption must be assessed on site and is influenced by the amount of water leaking, thickness of the concrete slab or wall, presence of voids in and around the concrete etc.

Packaging

WPA Leak-Seal AG200	22.7 kg = (18.9lt)	Plastic pail
WPA TEA Catalyst	1 kg	Plastic bottle
WPA Initiator	0.5 kg	Plastic container

LIMITATIONS:

Low temperatures will increase viscosity making product more difficult to pump. Low temperatures or cold water will slow down the reaction time. PH of reaction water should be between 3 and 10 for optimum foaming. Keep lid tightly closed.

CLEAN UP

Flush injection equipment with the appropriate pump flush product when necessary. Clean off skin with soap and water.

DISPOSAL

Cured material is chemically inert and safe to dispose in landfill. Clean up any spilled liquid resin and place in a suitable sealed container. Dispose of in accordance with applicable environmental regulations.

STORAGE AND SHELF LIFE

Store between 10° - 26° C. The minimum shelf life when stored under these conditions is 12 months.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126).

Inhalation

Remove person to fresh air and keep comfortable for breathing. Immediately call a poison centre or doctor. If not breathing, give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc). If breathing is difficult, oxygen should be administered by qualified personnel.

Acute and delayed symptoms: Fatal if inhaled.

Skin Contact

Remove from skin immediately with soap and plenty of water. Take off immediately all contaminated clothing while washing. Wash contaminated clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands. If skin irritation or rash occurs: Get medical advice/attention.

Acute and delayed symptoms and effects: Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching. May cause an allergic skin reaction.

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Eye Contact

Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention/advice.

Acute and delayed symptoms and effects: Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion

SEEK IMMEDIATE MEDICAL ATTENTION! DELAYED TREATMENT MAY RESULT IN FATALITY.

Do Not Induce Vomiting. Rinse mouth out with water. Aspiration of material into the lungs due to vomiting can cause chemical pneumonitis which can be fatal.

Notes To Physician

Treat symptomatically.

WARRANTY CONDITIONS

Bayset Pty Ltd trading as Waterproofing Products Australia (Bayset) offers a limited warranty in respect of this product, subject to certain terms and conditions set out in the warranty documentation which has been made available at www.wpa-aus.com.au. Please contact Bayset directly to obtain a copy of the warranty documentation relevant to this product.

DISCLAIMER

The technical information and application advice given in this Technical Data Sheet is based on the present state of Bayset Pty Ltd's best scientific and practical knowledge and is intended to give a fair description of the product and its capabilities. As the information contained herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness, either expressed or implied, is given other than those required by law. In practice, the substrate and environmental conditions vary widely, making it essential for the user to determine the product's suitability for a particular application and that the product is not used beyond its physical limitations. The user is responsible for checking the suitability of products for their intended use.

*NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by Waterproofing Products Australia either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Waterproofing Products Australia, are responsible for carrying out procedures appropriate to a specific application.

DOCUMENT CONTROL	
Product	WPA Leak-Seal AG200
Initial Issue	December 2019
Technical Amendment	N/A
Author	SR

Technical Data Sheets are subject to change without notice.
For latest revision, check website at www.wpa-aus.com.au

This is a CONTROLLED document under WPA's Quality System.

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