

Ultrasound Gel with Carbopol®* ETD 2020 NF Polymer

This ultrasound gel features Carbopol® ETD 2020 NF polymer which imparts viscosity and clarity to the formulation. Carbopol® ETD 2020 NF polymer is an easy to disperse copolymer designed to produce aqueous dispersions which are less susceptible to agglomeration. The gel is intended to be used with medical ultrasound equipment to reduce the impedance between the electrode surface and the skin.

	Ingredient Name	%w/w
A	1. Carbopol® ETD 2020 NF Polymer	1.00
	2. Deionized Water	67.00
B	3. Sodium Carboxymethylcellulose Aqualon® CMC-9M31F PH	0.20
	4. Propylene Glycol	10.00
	5. Deionized Water	10.00
C	6. Disodium EDTA	0.05
	7. Sodium Methylparaben	0.20
	8. Sodium Propylparaben	0.02
	9. Deionized Water	8.00
D	10. Sodium Hydroxide (as 18% Solution)	q.s. to pH 6.8
	11. Deionized Water	q.s. to 100.00

Product Properties

Appearance	Clear gel
pH	6.8
Viscosity (cP)**	32,017

**Brookfield RVT @ 20 rpm, Spindle #6, measured at 24 hours

Stability

- Passed 3 freeze/thaw cycles
- Stable for a minimum of 6 months when stored under following ICH conditions:
 - Long term (25 ± 2°C / 60 ± 5% relative humidity)
 - Accelerated (40 ± 2°C / 75 ± 5% relative humidity)

Procedure

- Disperse Carbopol® ETD 2020 NF polymer in water (Part A).
{Refer to [TDS-187](#): Carbopol® ETD 2020 Polymer and [TDS-207](#): Carbopol® ETD Polymers – Formulation Tips}
- Disperse sodium carboxymethylcellulose in propylene glycol, add water and mix thoroughly until a clear, viscous solution is obtained (Part B).
- Add Part B ingredients to Part A ingredients, and mix thoroughly.
- Dissolve disodium EDTA and sodium parabens in water, and add the salt solution into the Part A + B mixture (Part C).
- Neutralize the above mixture with 18% sodium hydroxide solution and adjust to weight with deionized water (Part D).

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For more information or to request product samples, please visit www.pharma.lubrizon.com or contact your nearest Lubrizon Advanced Materials location.

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