

## Epoxy Hardeners Portfolio

| Hardeners                                     | Solids, % m/m | Viscosity @ 25 °C, mPa.s | Equivalent weight, g/Eq | Gel time <sup>a</sup> (100 g@23 °C), minutes | Uses and comments  |
|---|---------------|--------------------------|-------------------------|--|--|
| <b>Accelerators</b>                           |               |                          |                         |  |  |
| Q-RIT 054                                     | 100           | 100 - 300                | -                       | -  | 2,4,6-tris(dimethylaminomethyl)phenol. Accelerator for epoxy resin/amine systems. Gardner colour: 8 max. Use with epoxy resin (phr 5 - 15).  |
| <b>Amines and modified amines</b>             |               |                          |                         |  |  |
| Q-RIT 120                                     | 100           | 5 - 20                   | 43                      | 130 - 190                                    | For solventfree ambient and heat cure applications. Low viscosity. High reactivity. Also as accelerator for e.g. amidoamines. Use with liquid epoxy resin (phr 23, resin EEW 190).                                       |
| Q-RIT 130                                     | 100           | 5 - 15                   | 60                      | > 8 h  | For solventfree coatings, floorings, mortars, cements, adhesives. Long pot-life. Low viscosity allowing good impregnation, high fillers loadings. Flexible systems. Use with liquid epoxy resin (phr 32, resin EEW 190). |
| Q-RIT 154                                     | 100           | 20 - 80                  | 90                      | 15 - 20                                      | Modified cycloaliphatic polyamine. Universal use. Low viscosity, good impregnation, high filler loadings. Fast cure. Use with liquid epoxy resin (phr 50, resin EEW 190).  |
| Q-RIT 155                                     | 100           | 150 - 450                | 95                      | 30   | Modified cycloaliphatic amine for adhesives and mortars. Cost-effective curing agent. Use with liquid epoxy resin (phr 50, resin EEW 190).   |
| Q-RIT 180                                     | 100           | 900 - 1500               | 35                      | -  | For solventfree adhesives, putties, mortars, impregnation compounds. Very high reactivity. High temperature resistance. Use with liquid epoxy resin (phr 18, resin EEW 190).   |
| <b>Amine and cycloaliphatic amine adducts</b> |               |                          |                         |  |  |
| Q-RIT 304                                     | 100           | 250 - 500                | 115                     | 40   | For solventfree (self-leveling) floorings, coatings, adhesives. Resistance to light. Good chemical and mechanical resistance. Use with liquid epoxy (phr 60, resin EEW 190).   |
| Q-RIT 305                                     | 100           | 400 - 700                | 105                     | 30 - 35                                      | For solventfree (self-leveling) floorings, coatings, adhesives. Resistance to light. Good chemical and mechanical resistance. Use with liquid epoxy (phr 55, resin EEW 190).   |
| Q-RIT 306                                     | 100           | 550 - 850                | 115                     | 25   | Faster than Q-RIT 305. Resistance to light. Good mechanical, acids and solvents resistance. Use with liquid epoxy resin (phr 60, resin EEW 190).   |
| Q-RIT 357                                     | 100           | 150 - 450                | 93                      | 30 - 35                                      | For solventfree (self-leveling) floorings, coatings. Superior carbamation/waterspot resistance. Good colour retention. Good chemical resistance. Use with liquid epoxy resin (phr 50, resin EEW 190).                    |

a with liquid resin, EEW 190

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|--------------------------|---------------|----------------------------|-------------------------|--|---|
| Q-RIT 358                | 100           | 350 - 550                  | 93                      | 20 - 25                                      | For solventfree (self-leveling) floorings, coatings. Superior carbamation/waterspot resistance. Good colour retention. Good chemical resistance. Use with liquid epoxy resin (phr 50, resin EEW 190).                               |
| Q-RIT 380                | 100           | 1400 - 2400                | 75                      | 8 - 10                                       | For solventfree floorings. Very high reactivity. Low temperature cure. High chemical resistance. Accelerator for other hardeners. Alternative to Mannich bases. Use with liquid epoxy resin (phr 40, resin EEW 190).                |
| <b>Amidoamines</b>       |               |                            |                         |  |   |
| Q-RIT 431                | 100           | 400 - 800                  | 75                      | 55   | For solventfree concrete coatings, flooring, adhesives, mortars or patching compounds. Can be used on green concrete. Use with liquid epoxy (phr 40, resin EEW 190).  |
| <b>Polyamides</b>        |               |                            |                         |  |   |
| Q-RIT 515X70             | 70            | 800 - 1500                 | 340                     | Several hours                                | For solventborne anticorrosion coatings. 70% solids in xylene. Excellent flexibility and adhesion, good chemical and corrosion resistance, non critical mixing ratio. Use with solid epoxy resin (phr 70-75, resin EEW 450-500).    |
| Q-RIT 525                | 100           | 10000 - 14000 <sup>c</sup> | 130                     | 90   | For solventborne and solventfree anticorrosion coatings, adhesives. Good flexibility and adhesion, good chemical and corrosion resistance, non critical mixing ratio. Use with liquid epoxy resin (phr 70, resin EEW 190)           |
| Q-RIT 541                | 100           | 1000 - 3000 <sup>c</sup>   | 95                      | 140  | For solventfree anticorrosion coatings, adhesives, concrete repair. Flexibility and adhesion, temperature resistance, substrate impregnation. Low viscosity. Use with liquid epoxy resin (phr 50, resin EEW 190).                   |
| <b>Polyamide adducts</b> |               |                            |                         |  |   |
| Q-RIT 622XB70            | 70            | 4000 - 10000               | 350                     | Several hours                                | For solventborne anticorrosion coatings. 70% solids in xylene:butanol. Outstanding flexibility, humidity and corrosion resistance. Cures at up to 70% relative humidity. Use with solid epoxy resin (phr 70-75, resin EEW 450-500). |
| Q-RIT 623XB60            | 60            | 800 - 2400                 | 520                     | Several hours                                | For solventborne anticorrosion coatings. 60% solids in xylene:butanol. Outstanding flexibility, humidity and corrosion resistance. Cures at up to 60% relative humidity. Use with solid epoxy resin (phr 110, resin EEW 450-500).   |
| Q-RIT 635XB80            | 80            | Typical: 3000              | 190                     | Several hours                                | General purpose high-solids curing agent for heavy duty coatings. Low temperature/high humidity cure. Use with high-solids or solid resin (phr 40, resin EEW 450-500).  |
| Q-RIT 651                | 100           | 500 - 1500                 | 115                     | 40 - 45                                      | For solventfree concrete primers, coatings and adhesives. Good substrate impregnation, outstanding adhesion to humid substrates and very good corrosion protection. Use with liquid epoxy resin (phr 60, resin EEW 190).            |
| Q-RIT 652                | 100           | 800 - 1800                 | 100                     | 40 - 45                                      | For solventfree concrete primers, coatings and adhesives. Low VOC hardener. Very high tolerance to wet substrates, outstanding adhesion to concrete, even not well prepared. Use with liquid epoxy resin (phr 55, resin EEW 190).   |
| Q-RIT 655                | 90            | 2000 - 6000                | 190                     | Up to 2 hours                                | For high-solids anticorrosion coatings and adhesives. Excellent flexibility, good humidity and corrosion resistance. Adhesion on humid concrete. Underwater cure. Use with solid epoxy resin (phr 100, resin EEW 190).              |

a with liquid resin, EEW 190    b with solid resin, EEW 450-500    c measured at 40 °C