



SIR INDUSTRIALE SpA

EPOSIR® / EPONAC® - Epoxy Resins

LIQUID GRADES

EPOSIR®

BPA based

PRODUCT	EPOXY EQUIVALENT WEIGHT (g/eq.)	EPOXY GROUP CONTENT (mmol/kg)	VISCOSITY at 25°C (mPa.s)	DESCRIPTION
7120	182-192	5208-5494	10000-13000	Standard liquid epoxy resin. General purpose
7120 BC	182-189	5291-5494	10000-13000	Lower hydrolyzable chlorine content version of EPOSIR 7120
7127	182-196	5102-5494	8000-10000	Low viscosity resin; unmodified
7120/40	190-210	4762-5263	1300-1600	Low viscosity modified with aliphatic reactive diluent
7120/42	195-215	4651-5128	850-1100	Low viscosity modified with aliphatic reactive diluent
7120/46	195-215	4651-5128	400-700	Low viscosity modified with aliphatic reactive diluent
7120/48	200-230	4347-5000	850-110	Low viscosity modified with aliphatic reactive diluent
7120/43	180-195	5128-5555	400-700	Low viscosity modified with aromatic reactive diluent
7214	175-195	5128-5714	950-1350	Low viscosity modified with bi-functional aliphatic reactive diluent
7219	175-195	5128-5714	700-1000	Low viscosity modified with bi-functional aliphatic reactive diluent
7221	175-195	5128-5714	600-800	Low viscosity modified with bi-functional aliphatic reactive diluent
7134	230-270	3703-4347	400-1000	Low molecular weight BPA based; semi-solid at room temperature. Suitable for ambient curing protective coatings, high solid and coal-tar epoxy systems

BPA/BPF based

PRODUCT	EPOXY EQUIVALENT WEIGHT (g/eq.)	EPOXY GROUP CONTENT (mmol/kg)	VISCOSITY at 25°C (mPa.s)	DESCRIPTION
F556	170-185	5405-5882	6000-8000	Medium viscosity unmodified DGEBA/DGEBF blend
F598	169-179	5263-5714	3500-5500	BPF-based resin
F599	170-185	5405-5882	8000-12000	Polyfunctional low viscosity epoxy novolac (2,5 functionality)
F 602/IM	175-190	5263-5714	5000-7000	Medium viscosity unmodified DGEBA/DGEBF blend. Lower viscosity than F 556
F730	175-185	5405-5714	4000-5000	Medium viscosity unmodified DGEBA/DGEBF
F740	190-210	4761-5263	800-1100	Low viscosity modified with aliphatic reactive diluent
F740 LV	190-210	4761-5263	500-900	Lower viscosity version of F 740
F745	175-190	5263-5714	500-700	Low viscosity modified with bi-functional aliphatic reactive diluent

REACTIVE DILUENTS

EPOSIR®

PRODUCT	EPOXY EQUIVALENT WEIGHT (g/eq.)	EPOXY GROUP CONTENT (mmol/kg)	VISCOSITY at 25°C (mPa.s)	DESCRIPTION
7103	350-450	2222-3125	30-110	Polypropylenglycol diglycidyl ether (bi-functional aliphatic)
7105	170-190	5263-6882	45572	O-cresyl glycidyl ether (monofunctional aromatic)
7106	300-340	2941-3333	42186	C12-C14 alkyl glycidyl ether (monofunctional aliphatic)
7107	130-145	6897-7692	15-25	1,4 butanediol diglycidyl ether (bi-functional aliphatic)
7109	150-170	5882-6666	20-30	1,6-hexanediol diglycidyl ether (bi-functional aliphatic)
7110	1000-1300	769-1000	150-400	Polypropyleneglycol-2000 diglycidyl ether (bi-functional aliphatic)
8103	130-150	6666-7693	120-200	Trimethylolpropane triglycidyl ether (polifunctional aliphatic)
8106	330-370	2702-3030	42217	C13-C15 alkyl glycidyl ether (monofunctional aliphatic). Lower crystallization tendency

SIRION®

CYCLOALIPHATIC GRADES

PRODUCT	EPOXY EQUIVALENT WEIGHT (g/eq.)	EPOXY GROUP CONTENT (mmol/kg)	VISCOSITY at 25°C (mPa.s)	DESCRIPTION
CE 2304	160-190	5263-6250	60-120	Cyclohexane-dimethanol diglycidyl ether, modifier for epoxy systems. It provides excellent cured state resistance to creep or deformation under stress in epoxy reinforced systems
CE 2308	230-260	3846-4348	4000-8000	Hydrogenated BPA (HBPADGE). Very good outdoor exposure resistance
CE 2310	130-150	6666-7692	200-450	3,4-epoxycyclohexyl methyl – 3,4-epoxy cyclohexyl carboxylate. Suitable for cationic UV coatings

WATERBORNE GRADES

EPOSIR®

Two-pack System

PRODUCT	EPOXY EQUIVALENT WEIGHT (g/eq.)	EPOXY GROUP CONTENT (mmol/kg)	VISCOSITY at 25°C (mPa.s)	DESCRIPTION
F728 NF	190-210	100	1200-1500	Modified with monofunctional reactive diluent. Ready to be dispersed in water. Nonylphenol ethoxylated-free
WD 733/67	185-195	66-68	200-3000	Low MW BPA/BPF-based. Solvent Free resin in water dispersion
WD 711/A	550-650	55-59	100-1000	Type-1 solid resin in water dispersion. VOC zero
WD 741/A	800-900	55-59	100-1000	Type-4 solid resin in water dispersion
WD 771/A	1600-2100	51-53	200-2000	Type-7 solid resin in water dispersion
WD 770/A	1500-2000	39-41	15-40	Special type-7 solid epoxy resin in water dispersion. Modifier of WD 705 enhanced flexibility

One-pack system (Formulated products)

PRODUCT	EPOXY EQUIVALENT WEIGHT (g/eq.)	EPOXY GROUP CONTENT (mmol/kg)	VISCOSITY at 25°C (mPa.s)	DESCRIPTION
WD 705	30'/180 °C – 15'/220 °C – 07'/220°C	39-41	15-40 sec. Ford 04 cup	High MW formulated epoxy-phenolic pre-condensate

Liquid hardeners
(Waterborne epoxy
resins)

PRODUCT	EPOXY EQUIVALENT WEIGHT (g/eq.)	EPOXY GROUP CONTENT (mmol/kg)	VISCOSITY at 25°C (mPa.s)	DESCRIPTION
EHW 2834	–	50	10000-30000	Amine based hardener
EHW 2852	71	74-76	8000-12000	Water soluble polyamidic hardener

SOLID GRADES

EPOSIR®

Advancement process

PRODUCT	EPOXY EQUIVALENT WEIGHT (g/eq.)	EPOXY GROUP CONTENT (mmol/kg)	VISCOSITY at 25°C (mPa.s)	DESCRIPTION
7161	460-520	1923-2174	F-I	Type-1. Low MW
7165	540-620	1612-1851	G-M	Higher MW version of 7161 with higher melting point
7166 PG	570-620	1612-1754	H-M	Low MW epoxy for powder coatings
7167 PG	600-660	1515-1667	H-P	Type-2. Low MW for powder coatings
7168 PG	650-720	1389-1538	K-R	Type-2,5. Low MW for powder coatings
7175 PG	710-780	1282-1408	M-U	Type-3. Low MW for powder coatings
7178 PG	770-840	1190-1298	O-U	Type-3,5 for powder coatings
7170 PG	800-900	1111-1250	Q-V	Type-4. Medium MW
7179	1100-1250	1100-1250	V-Z	Special grade. Higher MW. For coatings and cataphoresis. In powder coatings it is used in blend with standard epoxy for increasing flexibility and adhesion

EPONAC®

Taffy process

PRODUCT	EPOXY EQUIVALENT WEIGHT (g/eq.)	EPOXY GROUP CONTENT (mmol/kg)	VISCOSITY at 25°C (mPa.s)	DESCRIPTION
5007 HMP	500-550	1818-2000	F-J	Type-1 low MW epoxy. Higher melting point. Better syntherization epoxy
600	600-700	1428-1667	H-M	Type-2. Low MW
615	650-720	1389-1538	J-O	Type-2,5. Low MW
700	700-760	1316-1428	L-Q	Type-3. Low MW
825	730-830	1204-1370	N-T	Type-3. Low MW
945	820-950	1052-1220	Q-V	Type-4. Medium MW
2055	1300-1800	556-769	W-Z	Type-6. High MW
2065	1500-2000	500-666	X-Z	Type-7. High MW
3075	2000-2800	357-500	Z+1/2-Z3	Type-8. High MW
4085	2500-3500	286-400	Z2-Z5	Type-9. High MW