CANUSA-CPS
A SHAWCOR COMPANY

Product Data Sheet

Canusa E Primer

Force-cure epoxy for superior 3-layer corrosion protection

Description: Canusa E Primer is a specially formulated 100% volume solids (solventless) two component epoxy.

Recommended use: As a primer in a 3 layer coating system for superior corrosion protection of field welded joints of steel pipes. Usage of Canusa's proven method of force curing the E Primer to the steel enables the installer to "pre-inspect" the joint prior to sleeve application. This provides the assurance that the pipe is fully protected and it will not be displaced and exposed to corrosive contaminants during the aligning & shrinking stages of the sleeve installation.

Color: Black

Volume Solids: 100%

Weight Solids: 100%

Mixing Ratio: (by volume) - 4 parts of base to 1 part of cure
(by weight) - 6.1 parts of base to 1 part of cure

Typical Coverage: 20 sq.m./US gallon (215 sq.ft/US gallon) or 5.3 sq.m/litre (57 sq.ft/litre). This coverage is based on 6 mils of thickness & assuming 20% waste factor

Specific Gravity: E Primer Base - 1.58 ± 0.03 (ASTM D 1475)
E Primer Cure - 1.04 ± 0.02 (ASTM D 1475)

Viscosity: E Primer Base - 14,000 ± 2,000 cps at 60°C, #7 Spindle at 10rpm
E Primer Cure - 30 ± 3 seconds (ASTM D1200 #4 Ford cup @ 25°C)

Typical Thickness: 4-6 mils (100-150 microns)

Number of Coats: One

Pot Life: 20 minutes @ 23°C (73°F)

Shelf Life: 3 years @ 23°C, out of direct sunlight. Shelf life will be lesser at higher temperatures.

Flash point: E Primer Base - 93°C (200°F)
E Primer Cure - 92°C (198°F)

Thinner: Do not dilute.

Minimum Curing Temperature: 10°C (50°F)

Safety: Handle with care. Before and during use, observe all safety labels on packaging and paint containers, consult CANUSA Material Safety Data Sheets and follow all local or national safety regulations. Harmful or fatal if swallowed; immediately seek medical assistance if swallowed. Avoid inhalation if possible solvent vapors or paint mist, as well as paint contact with skin and eyes. Apply only in well ventilated areas and ensure that adequate forced ventilation exists when applying paint in confined spaces or when the air is stagnant. Always take precautions against the risks of fire and explosions.

Applications


Oil & Gas


Offshore Pipelines


Repair & Rehab


High Temp


Girth-Weld Joints

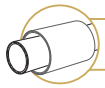
Configurations


Force-Cure Epoxy


Brush Application


Pad Application


3-Layer


Sleeve Compatible

Temperature Range


up to 80°C *(176°F)*

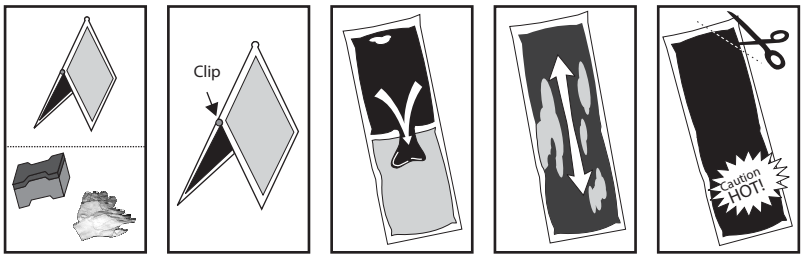
The product selection chart shown here is intended as a guide for standard products.
Consult your Canusa representative for specific projects or unique applications.
Below are typical values based on Heavy Duty (L-thickness) Sleeves.

Canusa E Primer

Application

1) Prepare the pipe surface as recommended in the product specific Installation Guide.
2) Follow the mixing instructions that are contained within the epoxy packaging.

Epoxy BP



3) With a gloved hand, pour the combined mixture onto the pipe...
4) ...and begin spreading the epoxy primer (to a uniform thickness) circumferentially around the pipe surface using the applicator pad.
5) Use a wet film thickness gauge to ensure a correct, uniform thickness has been achieve all around the pipe.

Epoxy Usage: 300mm (12") cutback and 150µm (6mils) epoxy thickness

Outside Pipe Diameter mm	Outside Pipe Diameter in	Volume (mL) Required Base	Volume (mL) Required Cure	Joints per US Gal of Base[1]	Joints per 170mL Kit[2]
115	4½	16	4	195	8
170	6⅝	24	6	130	5¼
230	8⅝	32	8	97	4
280	10¾	40	10	78	3¼
315	12¾	44	11	70	3
355	14	52	13	69	2½
400	16	56	14	60	2¼
450	18	64	16	55	2
500	20	72	18	43	1¾
610	24	88	22	35	1½
760	30	108	27	28	1¼
915	36	132	33	23	1
1060	42	152	38	20	¾
1220	48	172	43	18	¾
1420	56	200	50	15	⅝
1520	60	216	54	14	½

Epoxy required for 300 mm / 12" cutback. For other cutbacks, divide by 12 and multiply by new cutback in inches

Example:
200 mm (8") cutback on 610 mm diameter pipe

base: 88 ml x $\frac{8}{12}$ = 60 ml base

cure: 22 ml x $\frac{8}{12}$ = 15 ml cure

[1] Mixing ratio by volume of base to cure is 4 : 1. Therefore, for 1 US gallon of Base, 0.25 US gallons of cure will be required.
[2] Due to pot life limitations, it may be impractical to coat multiple joints with the same epoxy kit.

How to Order

Epoxy BP Unit:	BP Units include pre-measured quantities of E Primer Base and E Primer Cure in a bubble pak. Application Accessories (gloves and application pad) must be purchased separately.
Epoxy BP Kit:	BP Kits include pre-measured quantities of E Primer Base and E Primer Cure in a bubble pak, a pair of latex gloves and an application pad.
Bulk Epoxy:	Bulk epoxy is available in US gallon quantities. The mixing ratio by volume of BASE to CURE is 4 : 1.
Bulk Accessories:	Bulk accessories (i.e. appl. access. kits, dispensing pump, etc.) are available for easier field mixing and preparation.

Ordering Options

Product Designation[3]	Package Contents*
E Primer BP Unit - 170mL	136mL of E Primer Base, 34mL of E Primer Cure
E Primer BP Kit - 170mL	136mL of E Primer Base, 34mL of E Primer Cure, latex gloves, application pad
E Primer Base - 1 US Gal	1 US gallon (3.79 L) of E Primer Base
E Primer Base - 5 US Gal	5 US gallon (18.9 L) of E Primer Base
E Primer Cure - ¼ US Gal	¼ US gallon (0.95 L) of E Primer Cure
E Primer Cure - 1 US Gal	1 US gallon (3.79 L) of E Primer Cure
Primer Appl. - BP Units Small ø	100 application pads, 2 pairs of latex gloves
Primer Appl. - BP Units Large Ø	200 application pads, 4 pairs of latex gloves
Primer Appl. Acces. - Bulk Small ø	100 12oz cups, 100 4oz cups, 2 pairs of latex gloves, 100 application pads, 100 mixing sticks
Primer Appl. Acces. - Bulk Large Ø	100 26oz cups, 100 12oz cups, 2 pairs of latex gloves, 200 application pads, 100 mixing sticks
Epoxy Dispensing Pump - 5 US Gal	Dispensing Pump designed for the 5 US gallon container of E Primer Base

[3] Small diameter ø represents joints completed with one installer. As a general rule, only one installer is required up to 18" (450mm) pipe sizes.
* Latex gloves associated with Bulk Accessories are heavy duty and can be used for more than one joint.
** For large projects, joint specific pre-measured epoxy quantities (other than standard 170mL) will be considered.

CANUSA-CPS
A SHAWCOR COMPANY

Speccoats Paint (Pty)Ltd • Speccoats Equipment (Pty)Ltd

Address: 9 Covora Street, Jet Park, Boksburg, Gauteng, South Africa
International Tel: 00 27 11 397 2140
Within South Africa Tel: 0861 37 2468
International Fax : 00 27 11 397 3420
Within South Africa Fax: 011 397 3420
Email: info@speccoats.co.za
Web: www.speccoats.co.za

