



# Preliminary SSAB CR440Y780T-DP Zero

## Preliminary Product Sheet

Preliminary Product Sheets describe information for products that still are under development or in a trial delivery phase.

SSAB Zero™ steel is made using recycled steel and fossil-free energy.

The SSAB Zero™ EPDs and Certificate of Carbon Emissions is available on [ssab.com](http://ssab.com). The availability of SSAB Zero™ products is subject to limitations and conditions of delivery have to be agreed upon separately.

## General Product Description

SSAB CR440Y780T-DP Zero metal coated dual-phase steel offer good formability for the production of safety details in cars. The steel undergoes special heat treatment, producing mainly two phase structure. Ferrite that imparts unique forming properties represents one phase, and martensite that accounts for the strength represents the other phase. Bainite may be present as complementary phase.

## Dimension Range

SSAB CR440Y780T-DP Zero is available in thicknesses of 0.40-1.60 mm and widths up to 1520 mm as coils.

Slit strip and cut to length sheets are available upon request.

Grade and coating specific restrictions on available dimensions may occur.

## Mechanical Properties

	Standard	Coating	Test direction	Yield strength $R_{p0.2}$ (MPa)	Tensile strength $R_m$ (MPa)	Elongation $A_{80}$ <sup>1)</sup> (min %)	BH <sub>2</sub> (min MPa)
SSAB CR440Y780T-DP Zero	VDA 239-100	GI	L	440 - 550	780 - 900	14	30

<sup>1)</sup>  $A_{80}$  value applies for thicknesses < 3.00 mm.

## Chemical Composition (ladle analysis)

	Coating	C (max %)	Si (max %)	Mn (max %)	P (max %)	S (max %)	Al (%)	Nb+Ti (max %)	Cr+Mo (max %)	B (max %)	Cu (max %)
SSAB CR440Y780T-DP Zero	GI	0.18	0.80	2.50	0.050	0.010	0.015 - 1.00	0.15	1.40	0.005	0.20

## Tolerances

Hot-dip galvanized (GI): Tolerances in accordance to EN 10143.

Customized dimensional and shape tolerances are available upon request.

## Coatings

The metal coating options for SSAB CR440Y780T-DP Zero product include:

**Hot-dip zinc coating (GI)** consists almost entirely of zinc (>99%). It is lead free, resulting in a small zinc spangle size. The coating provides good corrosion protection.

Grade specific availability of metal coatings for SSAB CR440Y780T-DP Zero product is given in the Mechanical properties table (Coating).

Coating type	Coating class	Standard	Closest in EN 10346, informative	Coating mass per side, single spot test (g/m <sup>2</sup> )	Thickness per side informative (μm)
GI	40/40	VDA 239-100	Z100	40 - 60	5.6 - 8.5
GI	50/50	VDA 239-100	—	50 - 70	7.0 - 9.9
GI	60/60	VDA 239-100	Z140	60 - 90	8.5 - 12.7
GI	70/70	VDA 239-100	—	70 - 100	9.9 - 14.1
GI	85/85	VDA 239-100	—	85 - 115	12.0 - 16.2
GI	115/115	VDA 239-100	Z275	115 - 155	16.2 - 21.8

SSAB CR440Y780T-DP Zero metal coated product is available with surface quality for unexposed applications.

In addition to these coating masses, OEM specific coatings are available upon request.

## Surface Treatments

Hot-dip galvanized (GI): available as oiled and/or chemically passivated.

All surface treatments are in accordance with RoHS directive (2011/65/EU) and do not contain Chromium VI (Cr<sup>6+</sup>). Surface treatments provide only temporary surface protection during transportation and storage. In order to avoid corrosion damages, care must be taken to keep the products dry during transportation and storage. If they become wet, they must be separated and situated so that they are dried quickly.

## **Fabrication and Other Recommendations**

For information concerning fabrication, see SSAB's brochures on [www.ssab.com](http://www.ssab.com) or consult Tech Support.

Appropriate health and safety precautions must be taken when bending, welding, cutting, grinding or otherwise working on the products.

## **Contact Information**

[www.ssab.com/contact](http://www.ssab.com/contact)