

ACKREDITERINGSCERTIFIKAT/ACCREDITATION CERTIFICATE



Ackred. nr 1083

Provning

ISO/IEC 17025

SSAB EMEA AB

Kemiskt laboratorium

Organisationsnummer 556313-7933

är ackrediterat som provningslaboratorium för uppgifter enligt bilaga 1 i beslut daterat 2022-05-20/
accredited as a testing laboratory for the scope specified in appendix 1 to decision dated 2022-05-20

Laboratoriet är ackrediterat enligt den internationella standarden ISO/IEC 17025:2017. Ackrediteringen innebär att det ackrediterade laboratoriet har bedömts ha erforderlig kompetens och att opartiskt och konsekvent utföra ackrediterade tjänster inom de områden som definieras i bilaga 1 enligt ovan. Det ackrediterade laboratoriet ansvarar för resultat av utförd provning./*This laboratory is accredited to the International Standard ISO/IEC 17025:2017. The accreditation is a recognition of the competence for and consistent performance and impartiality in the provision of the services defined in appendix 1. The accredited laboratory is responsible for the outcome of performed testing.*

Ackrediteringen gäller tillsvidare. Styrelsen för ackreditering och teknisk kontroll (Swedac) genomför regelbundet tillsyn, och vart fjärde år en förnyad bedömning, för att bekräfta att gällande krav för ackrediteringen kontinuerligt uppfylls./*The accreditation is valid until further notice. The Swedish Board for Accreditation and Conformity Assessment (Swedac) regularly carries out surveillance, and a full reassessment every fourth year, in order to verify that the applicable requirements for accreditation are continually fulfilled.*

Detta ackrediteringscertifikat utfärdades 2022-05-20/*This accreditation certificate was issued 2022-05-20*

Bente Zettergren,

Tf. Enhetschef enheten för miljö och hälsa/*Acting Division Manager of the Health and Environment Division*

Beslutet om ackreditering utfärdades med stöd av artikel 5.1 i Europaparlamentets och rådets förordning (EG) nr 765/2008 om krav för ackreditering och marknads kontroll m.m. och lagen (2011:791) om ackreditering och teknisk kontroll. Swedac är nationellt ackrediteringsorgan ansvarigt för bedömning av certifieringsorgan, kontrollorgan, laboratorier, miljökontrollanter, verifierings-/valideringsorgan och arrangörer av program för kompetensprövning som ansöker om ackreditering. Den här ackrediteringen har utfärdats under EA:s MLA-avtal och kan därmed betraktas som likvärdig andra ackrediteringar under EA:s MLA-avtal med samma ackrediteringsomfattning. /*Accreditation was granted in accordance with Article 5 (1) of Regulation (EC) No 765/2008 regarding accreditation and market surveillance etc. and the Act (SFS 2011:791) concerning Accreditation and Conformity Assessment. Swedac is the Swedish national accreditation body responsible for the assessment of certification bodies, inspection bodies, laboratories, environmental verifiers, validation and verification bodies and bodies for providing programme for proficiency testing applying for accreditation. This accreditation has been issued under the EA MLA and is therefore recognised as equivalent to other accreditations with the same scope of accreditation issued under the EA MLA.*

Scope of accreditation

Testing laboratory according to SS-EN ISO/IEC 17025:2018

SSAB EMEA AB

Oxelösund

Accreditation number

1083

Kemiskt laboratorium

A001897-001

Chemical analysis

<i>Technical area</i>	<i>Parameter</i>	<i>Method</i>	<i>Technique</i>	<i>Measure</i>	<i>Material</i>	<i>Field</i>	
Inorganic chemistry	Aluminium, Al	ASTM E415:2021 mod	OES	0,002-0,2 %	Steel	No	
	Antimony, Sb	ASTM E415:2021 mod	OES	0,003-0,1 %	Steel	No	
	Arsenic, As	ASTM E415:2021 mod	OES	0,002-0,1 %	Steel	No	
	Boron, B	ASTM E415:2021 mod	OES	0,0002-0,011 %	Steel	No	
	Cadmium, Cd	SS-EN ISO 11885:2009/SS-EN ISO 15587-2:2002	ICP-AES	> 0,003 mg/l	Drinking water	No	
			ICP-AES	> 0,003 mg/l	Fresh water	No	
			ICP-AES	> 0,003 mg/l	Sea water	No	
			ICP-AES	> 0,003 mg/l	Waste water/Leach water	No	
	Calcium, Ca	ASTM E415:2021 mod	OES	0,0003-0,012 %	Steel	No	
	Carbon, C	ASTM E1019:2018	Combustion	0,02 – 1 %	Steel	No	
			Combustion	1 – 6 %	Iron/Iron alloys	No	
			ASTM E415:2021 mod	OES	0,002-1 %	Steel	No
	Chromium, Cr	SS-EN ISO 11885:2009/SS-EN ISO 15587-2:2002	ASTM E415:2021 mod	OES	0,002-4,8 %	Steel	No
			ICP-AES	> 0,003 mg/l	Drinking water	No	
			ICP-AES	> 0,003 mg/l	Fresh water	No	
			ICP-AES	> 0,003 mg/l	Sea water	No	
ICP-AES			> 0,003 mg/l	Waste water/Leach water	No		
Cobalt, Co	ASTM E415:2021 mod	OES	0,001-0,2 %	Steel	No		

Date

Reference

2022-05-20

2020/2694

<i>Technical area</i>	<i>Parameter</i>	<i>Method</i>	<i>Technique</i>	<i>Measure</i>	<i>Material</i>	<i>Field</i>
Inorganic chemistry	Copper, Cu	ASTM E415:2021 mod	OES	0,002-1 %	Steel	No
		SS-EN ISO 11885:2009/SS-EN ISO 15587-2:2002	ICP-AES	> 0,003 mg/l	Drinking water	No
			ICP-AES	> 0,003 mg/l	Fresh water	No
			ICP-AES	> 0,003 mg/l	Sea water	No
			ICP-AES	> 0,003 mg/l	Waste water/Leach water	No
	Iron, Fe	SS-EN ISO 11885:2009/SS-EN ISO 15587-2:2002	ICP-AES	> 0,004 mg/l	Drinking water	No
			ICP-AES	> 0,004 mg/l	Fresh water	No
			ICP-AES	> 0,004 mg/l	Sea water	No
			ICP-AES	> 0,004 mg/l	Waste water/Leach water	No
	Lead, Pb	ASTM E415:2021 mod	OES	0,005-0,016 %	Steel	No
		SS-EN ISO 11885:2009/SS-EN ISO 15587-2:2002	ICP-AES	> 0,004 mg/l	Drinking water	No
			ICP-AES	> 0,004 mg/l	Fresh water	No
			ICP-AES	> 0,004 mg/l	Sea water	No
			ICP-AES	> 0,004 mg/l	Waste water/Leach water	No
	Manganese, Mn	ASTM E415:2021 mod	OES	0,002-3 %	Steel	No
		SS-EN ISO 11885:2009/SS-EN ISO 15587-2:2002	ICP-AES	> 0,003 mg/l	Drinking water	No
			ICP-AES	> 0,003 mg/l	Fresh water	No
			ICP-AES	> 0,003 mg/l	Sea water	No
			ICP-AES	> 0,003 mg/l	Waste water/Leach water	No
	Molybdenum, Mo	ASTM E415:2021 mod	OES	0,002-1 %	Steel	No
Nickel, Ni	ASTM E415:2021 mod	OES	0,002-3 %	Steel	No	

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<i>Technical area</i>	<i>Parameter</i>	<i>Method</i>	<i>Technique</i>	<i>Measure</i>	<i>Material</i>	<i>Field</i>					
Inorganic chemistry	Nickel, Ni	SS-EN ISO 11885:2009/SS-EN ISO 15587-2:2002	ICP-AES	> 0,003 mg/l	Drinking water	No					
			ICP-AES	> 0,003 mg/l	Fresh water	No					
			ICP-AES	> 0,003 mg/l	Sea water	No					
			ICP-AES	> 0,003 mg/l	Waste water/Leach water	No					
	Niob, Nb	ASTM E415:2021 mod	OES	0,001-0,2 %	Steel	No					
	Nitrogen, N	ASTM E1019:2018	Combustion	0,0015-0,02%	Steel	No					
	Phosphorus, P	ASTM E415:2021 mod	OES	0,002-0,1 %	Steel	No					
	Silicon, Si	ASTM E415:2021 mod	OES	0,002-3 %	Steel	No					
	Sulfur, S	ASTM E415:2021 mod	OES	0,001-0,12 %	Steel	No					
	Tin, Sn	ASTM E415:2021 mod	OES	0,002-0,1 %	Steel	No					
	Titanium, Ti	ASTM E415:2021 mod	OES	0,001-0,25 %	Steel	No					
	Tungsten, W	ASTM E415:2021 mod	OES	0,002-0,5 %	Steel	No					
	Vanadium, V	ASTM E415:2021 mod	OES	0,001-0,5 %	Steel	No					
							SS-EN ISO 11885:2009/SS-EN ISO 15587-2:2002	ICP-AES	> 0,004 mg/l	Drinking water	No
								ICP-AES	> 0,004 mg/l	Fresh water	No
								ICP-AES	> 0,004 mg/l	Sea water	No
	ICP-AES	> 0,004 mg/l	Waste water/Leach water	No							
	Zinc, Zn	SS-EN ISO 11885:2009/SS-EN ISO 15587-2:2002	ICP-AES	> 0,004 mg/l	Drinking water	No					
							ICP-AES	> 0,004 mg/l	Fresh water	No	
							ICP-AES	> 0,004 mg/l	Sea water	No	
ICP-AES							> 0,004 mg/l	Waste water/Leach water	No		
Zirconium, Zr	ASTM E415:2021 mod	OES	0,002-0,1 %	Steel	No						
Sampling	Avloppsvatten, provtagning	SS 028148, utg 1				Yes					

Technical area	Parameter	Method	Technique	Measure	Material	Field
Sampling	Dricks- och badvatten, provtagning, kemi	SS 028185, utg 1/ISO 5667-5:2006				Yes
	Grundvatten, provtagning	ISO 5667-11:2009				Yes
	Marina vatten, provtagning	ISO 5667-9:1992				Yes
	Sjöar, provtagning	ISO 5667-4:2016				Yes
Water analysis	Ammonium as nitrogen	Std Methods 4500-NH3 B/E	Titration	5-120 mg/l	Waste water/Leach water	No
	Conductivity	SS-EN 27888, utg 1	Electrode	1 – 2000 mS/m	Drinking water	No
			Electrode	1 – 2000 mS/m	Fresh water	No
			Electrode	1 – 2000 mS/m	Sea water	No
			Electrode	1 – 2000 mS/m	Waste water/Leach water	No
	Cyanide, accessible	SS 028177, utg 1	Photometry	0,01 – 0,25 mg/l	Waste water/Leach water	No
	Cyanide, total	SS 028176, utg 1	Photometry	0,01 – 0,25 mg/l	Waste water/Leach water	No
	Nitrate nitrogen	Hach Lange LCK 339	Photometry	0,23 - 13,5 mg/l	Waste water/Leach water	No
		Hach Lange LCK 340	Photometry	5,0 - 35 mg/l	Waste water/Leach water	No
	Nitrite nitrogen	Hach Lange LCK 342	Photometry	0,6 - 6 mg/l	Waste water/Leach water	No
pH	Water quality - Determination of pH (ISO 10523:2008)	Electrode	4-10 pH-enheter	Drinking water	No	
		Electrode	4-10 pH-enheter	Fresh water	No	

<i>Technical area</i>	<i>Parameter</i>	<i>Method</i>	<i>Technique</i>	<i>Measure</i>	<i>Material</i>	<i>Field</i>
Water analysis	pH	Water quality - Determination of pH (ISO 10523:2008)	Electrode	4-10 pH-enheter	Sea water	No
			Electrode	4-10 pH-enheter	Waste water/Leach water	No
	Phenols	SS 028128, utg 1	Photometry	0,1-3,0 mg/l	Waste water/Leach water	No
	Suspended solids	SS-EN 872:2005	Gravimetry	> 1 mg/l	Fresh water	No
			Gravimetry	> 1 mg/l	Sea water	No
			Gravimetry	> 1 mg/l	Waste water/Leach water	No
	Tiocyant	SS 028177, utg 1	Photometry	0,05 – 0,4 mg/l	Waste water/Leach water	No
	Total organic carbon, TOC	Hach Lange LCK 385	Photometry	10 – 30 mg/l	Waste water/Leach water	No
		Hach Lange LCK 386	Photometry	30 – 300 mg/l	Waste water/Leach water	No

Changes in the scope of accreditation are in bold.