

The option classes listed below will begin trading on the MIAX Emerald Options Exchange at the start of trading on **Friday, April 29, 2022**. All option classes on MIAX Emerald have an allocation style of Pro-Rata and billing style of Maker-Taker.

Security Symbol	Security Name	Option Class	Penny Pilot	Exchange for Opening	Closing	PLMM	Cloud
					Time		
ABSI	ABSCI CORPORATION	ABSI	No	NASDAQ	4:00	Susquehanna Securities	1
AMLX	AMLYX PHARMACEUTICALS, INC.	AMLX	No	NASDAQ	4:00	Citadel Securities, LLC	1
ATC	ATOTECH LIMITED	ATC	No	NYSE	4:00	Susquehanna Securities	1
AVAH	AVEANNA HEALTHCARE HOLDINGS	AVAH	No	NASDAQ	4:00	Citadel Securities, LLC	1
AWRE	Aware Inc.	AWRE	No	NASDAQ	4:00	Wolverine Trading, LLC	1
BIOX	BIOCERES CROP SOLUTIONS CORP.	BIOX	No	NASDAQ	4:00	Susquehanna Securities	2
CENN	Cenntro Electric Group Limited	CENN	No	NASDAQ	4:00	Wolverine Trading, LLC	2
CGEM	CULLINAN ONCOLOGY, INC.	CGEM	No	NASDAQ	4:00	Citadel Securities, LLC	2
CISO	CERBERUS CYBER SENTINEL CORP	CISO	No	NASDAQ	4:00	Citadel Securities, LLC	2
CNM	CORE & MAIN INC	CNM	No	NYSE	4:00	Citadel Securities, LLC	2
CRAI	CRA International, Inc.	CRAI	No	NASDAQ	4:00	Susquehanna Securities	2
DJP	iPath Bloomberg Commodity Index Total Return ETN	DJP	No	NYSE Arca	4:00	Citadel Securities, LLC	3
ETAC	E.MERGE TECHNOLOGY ACQUISITION CORP	ETAC	No	NASDAQ	4:00	Wolverine Trading, LLC	3
FENY	Fidelity MSCI Energy Index ETF	FENY	No	NYSE Arca	4:00	Citadel Securities, LLC	3
FLYW	FLYWIRE CORPORATION COM VTG	FLYW	No	NASDAQ	4:00	Wolverine Trading, LLC	3
FMNB	Farmers National Banc Corp.	FMNB	No	NASDAQ	4:00	Wolverine Trading, LLC	3
FORG	FORGEROCK INC	FORG	No	NYSE	4:00	Wolverine Trading, LLC	3
FPE	First Trust Preferred Securities and Income Fund	FPE	No	NYSE Arca	4:00	Wolverine Trading, LLC	3
FTCI	FTC SOLAR, INC	FTCI	No	NASDAQ	4:00	Wolverine Trading, LLC	3
GAME	Engine Gaming and Media, Inc.	GAME	No	NASDAQ	4:00	Susquehanna Securities	4

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GASS	StealthGas Inc.	GASS	No	NASDAQ	4:00	Susquehanna Securities	4
GSBD	GOLDMAN SACHS BDC, INC	GSBD	No	NYSE	4:00	Wolverine Trading, LLC	4
HUMA	Humacyte, Inc.	HUMA	No	NASDAQ	4:00	Wolverine Trading, LLC	4
HUSA	HOUSTON AMERICAN ENERGY CORPORATION	HUSA	No	AMEX	4:00	Citadel Securities, LLC	4
ICVX	ICOSAVAX, INC	ICVX	No	NASDAQ	4:00	Susquehanna Securities	5
IGIB	iSharesTrustiShares 5-10 Yr Inv Grade Corp Bond ETF	IGIB	No	NASDAQ	4:00	Wolverine Trading, LLC	5
IIN	Intricon Corp	IIN	No	NASDAQ	4:00	Susquehanna Securities	5
IMXI	INTERNATIONAL MONEY EXPRESS, INC.	IMXI	No	NASDAQ	4:00	Susquehanna Securities	5
IOT	SAMSARA, INC	IOT	No	NYSE	4:00	Wolverine Trading, LLC	5
ISPO	INSPIRATO INCORPORATED	ISPO	No	NASDAQ	4:00	Susquehanna Securities	5
JJN	IPATH SERIESB BLOOMBERG NICKEL SUBINDEX	JJN	No	NYSE Arca	4:00	Wolverine Trading, LLC	5
LAZY	LAZYDAYS HOLDINGS, INC	LAZY	No	NASDAQ	4:00	Susquehanna Securities	5
LIQT	LIQTECH INTERNATIONAL, INC	LIQT	No	NASDAQ	4:00	Susquehanna Securities	5
LZ	LEGALZOOM.COM, INC	LZ	No	NASDAQ	4:00	Wolverine Trading, LLC	5
MASS	908 DEVICES INC	MASS	No	NASDAQ	4:00	Susquehanna Securities	6
MCG	MEMBERSHIP COLLECTIVE GROUP, INC	MCG	No	NYSE	4:00	Citadel Securities, LLC	6
MMX	MAVERIX METALS INC	MMX	No	AMEX	4:00	Susquehanna Securities	6
MRAI	MARPAI, INC.	MRAI	No	NASDAQ	4:00	Susquehanna Securities	6
NBR	NABORS INDUSTRIES LTD.	NBR	No	NYSE	4:00	Susquehanna Securities	6
NFTZ	DEFIANCE DIGITAL REVOLUTION ETF	NFTZ	No	NYSE Arca	4:00	Wolverine Trading, LLC	6
NRGV	EnergyVault Holdings, Inc.	NRGV	No	NYSE	4:00	Citadel Securities, LLC	6
NRIX	NURIX THERAPEUTICS, INC	NRIX	No	NASDAQ	4:00	Citadel Securities, LLC	6
ORIC	ORIC PHARMACEUTICALS INC	ORIC	No	NASDAQ	4:00	Susquehanna Securities	7
PAX	PATRIA INVESTMENT LTD	PAX	No	NASDAQ	4:00	Citadel Securities, LLC	7

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PHAT	PHATHOM PHARMACEUTICALS, INC	PHAT	No	NASDAQ	4:00	Susquehanna Securities	7
PLAN	ANAPLAN INC	PLAN	No	NYSE	4:00	Susquehanna Securities	7
PMVP	PMV PHARMACEUTICALS, INC	PMVP	No	NASDAQ	4:00	Citadel Securities, LLC	7
POST	Post Holdings, Inc.	POST	No	NYSE	4:00	Susquehanna Securities	7
PRVA	PRIVIA HEALTH GROUP INC	PRVA	No	NASDAQ	4:00	Wolverine Trading, LLC	7
RPTX	REPARE THERAPEUTICS INC	RPTX	No	NASDAQ	4:00	Citadel Securities, LLC	7
RVPH	REVIVA PHARMACEUTICALS HOLDINGS, INC	RVPH	No	NASDAQ	4:00	Citadel Securities, LLC	7
RYAN	RYAN SPECIALITY GROUP	RYAN	No	NYSE	4:00	Wolverine Trading, LLC	7
SDIG	STRONGHOLD DIGITAL MINING, INC	SDIG	No	NASDAQ	4:00	Susquehanna Securities	8
SLGC	SOMALOGIC, INC	SLGC	No	NASDAQ	4:00	Susquehanna Securities	8
SMHI	SEACOR MARINE HOLDINGS INC	SMHI	No	NYSE	4:00	Citadel Securities, LLC	8
TH	TARGET HOSPITALITY CORP.	TH	No	NASDAQ	4:00	Citadel Securities, LLC	8
TKAT	TAKUNG ART LTD	TKAT	No	AMEX	4:00	Citadel Securities, LLC	8
TMCI	TREACE MEDICAL CONCEPTS, INC	TMCI	No	NASDAQ	4:00	Citadel Securities, LLC	8
TRIN	TRINITY CAPITAL, INC.	TRIN	No	NASDAQ	4:00	Wolverine Trading, LLC	8
VRAR	GLIMPSE GROUP INC	VRAR	No	NASDAQ	4:00	Citadel Securities, LLC	9
WHD	Cactus Inc.	WHD	No	NYSE	4:00	Susquehanna Securities	10
XGN	EXAGEN, INC	XGN	No	NASDAQ	4:00	Citadel Securities, LLC	10
Y	Alleghany Corporation	Y	No	NYSE	4:00	Susquehanna Securities	10

Please contact MIAX Options Listings with any questions.

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