Tier II Emergency and Hazardous Chemical Inventory
Facility Name: Engineered Materials Solutions, LLC Facility ID: 3873
Reporting Period From January 1, 2019 to December 31, 2019
☑ Annual □ Update □ Revised □ Facility Information has changed from the last submission

Bittication	-)			Owner/Ope	erator Details		
Facility Name: Maximum Occupants:	So/3 Engineered Materials Solutions, LLC 200	Lat/Long:	41.94989/-71.2721		Engineered Materials Solutions LLC	olutions LLC	
il Location:	39 Perry Avenue, Attleboro, MA 02703	Nature of Business:	Clad metals	Phone:	703, Ur	nited States Email: solutions@emsclad.com	3
	Bristol County	NAICS Code:	331221	Parent Cor	Parent Company Details		
Phone:	508-342-2100	SIC Code:)	Name:	Engineered Materials Solutions, LLC	olutions. LLC	
nned 🔲 Unman	ned	EIN ID(Tax Number):): 002316342	Dun and Br Address:	Dun and Brad No: 002316342 Address: 39 Perry Avenue		
Email:	solutions@emsclad.com	FTE	300	Phone:	.703, U	nited States Email: solutions@emsclad.com	.
Subject to EPCRA Section	Subject to EPCRA Section 312 (Annual Inventory)?		₹ \		mation Contact	-	
Subject to Emergency P	Subject to Emergency Planning under Section 302 of EPCRA (40 CFR part 355)?	\ (40 CFR part 355)?			Michael Karavolis		
Subject to Section 112r of Clean Air Act (CAA)?	of Clean Air Act (CAA)?				Safety and Health Manager		
RMP Facility ID: Subject to EPCRA Section	RMP Facility ID: Subject to EPCRA Section 313 (Toxic Release Inventory - TRI)?	ય)?		Email:	508-342-2115 mkaravolis@emsclad.com	24 Hr.Phone: 508-954-3490 m	4-3490
TRI Facility ID:	02703NGNRD39PER		E ES E	NO			
Mailing Address				Facility En	Pergency Planning Coordinator		
Company Name:	Engineered Materials Solutions 11 C			· aviny Li	acility Emergency riallilling Coordinator		
	Safety and Health Manager			2			
	39 Perry Avenue			Title:	Safety and Health Manage		
Oireet Address 7:		1		Phone:	508-342-2115	3/ E- Dhana:	
	Atheboro	State: MA	>	Email:	mkaravolis@emsclad com	m 24 HI.FIIOHE. 506-954-3490	1-3490
ntry:	United States	Phone: 50	508-342-2100		(;	
Emergency Contacts							
Name	Title		Phone	24	Hr.Phone	Email	
Michael Karavolis	Safet	Safety and Health Manager	508-342-2115	OT .	0	mkaravolis@emsclad com	
red Hall	Facil	Facilities Manager	508-342-2273	50)8-328-5934	hall@omooled.com	
Certification: I certify und inquiry of those individua	Certificatior: I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 8, and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate and complete.	nation, I believe that the s	iliar with the information sub submitted information is true	mitted in pages one, accurate and com	ugh 8, and that based on i	ny Optional Attachments	ts
Name and official title of owner/operator or aut	Name and official title of owner/operator or authorized representation	2/	2/15/2020 10:59:10 AM	508-342-2115	Michael Karavolis	☐ Site Coordinate Abbreviations	Abbreviations
	omionoporami or aumonized repres		Date Signed	Telephone Number	Signature	Other Safeguard measures	d measures
						☐ Facility Emergen	Facility Emergency Response Plan

Chamical Description			America (1970) (
CHOINICAL DE	Physical Hazards	azards	Heal	Health Hazards
Check if Chemical Information is	☐ Combustible dust		☐ Acute toxicity (any route of exposure)	e of exposure)
d from the last submission:	☑ Corrosive to metal		☑ Aspiration hazard	,
Trade Secret: 7647-01-0	☐ Explosive		☐ Carcinogenicity	
iical Name: HYDROC	☐ Flammable (gases, aerosols, liquids, or solids)	s, liquids, or solids)	Germ cell mutagenicity	
EHS: Contains EHS: Exceeds TPQ:	☐ Gas under pressure		☐ Hazard Not Otherwise Classified (HNOC)	Classified (HNOC)
] 	☐ Hazard Not Otherwise Classified (HNOC)	sified (HNOC)	☐ Reproductive toxicity	
☐ Fure ≥ Mix ☐ Solid ☑ Liquid ☐ Gas MSDS	☐ In contact with water emits flammable gas	flammable gas	☐ Respiratory or skin sensitization	sitization
	☐ Organic peroxide		☑ Serious eye damage or eye irritation	eye irritation
Check if the chemical is below ☑	Oxidizer (liquid, solid or gas)		☐ Simple asphyxiant	
	Pyrophoric (liquid or solid)		Skin corrosion or irritation	on
	☐ Pyrophoric gas		☐ Specific target organ toxicity (single or repeated	xicity (single or repeated
	☐ Self-heating		exposure)	
	☐ Self-reactive		***************************************	
Inventory		Storage Co	Storage Codes & Location	
//ax Daily Amt (lbs): 7750 //ax Daily Amt Code: 05	Container Type Pressure	Temperature	Storage Description	Max Amt At
wg Daily Arnt (lbs): 3500	[A]Above ground [1]Ambient tank pressure	[4]Ambient At temperature wa	At waste water	
wg Daily Amt Code: 04			treatment plant	
do of days onsite: 365				

5192 5		7732-18-5	67		Water
EHS Name Max Daily Max Daily Amount (lbs) Amount Code	EHS EH	CAS#	%		Chemical Name
	į.	Routes of Travel:			
5000 Carrier Phone: 888-711-3445 Carrier 24 Hr 888-711-3445	Average Annual Shipment Quantity:	Average Ann Quantity:		Liquid	Physical State In Transit:
ssel: 7750 Carrier: PVS Minibulk ty at 7000 Carrier Address: 3134 Post Road, Warwick, RI 02886-	Maximum Capacity Per Vessel: 7750 Maximum Shipment Quantity at 7000 One Time:	Maximum Ca Maximum Sh One Time:		Tank Trucks 1 Month	Mode of Shipment: Shipment Frequency Count: Shipment Frequency Period:
SHIPMENT DETAILS	SHIPM			, market	

Chemical Description	Physical Hazards	zards		Healt	Health Hazards
				taniako (ano anuka	
Check if Chemical Information is	La compustible dust		L Acute	Acute toxicity (any route of exposure)	of exposure)
d from the last submission:	☐ Corrosive to metal		☐ Aspira	Aspiration hazard	
CAS#: 1333-74-0] [
Trade Secret:	LI Explosive		☐ Carcin	I Carcinogenicity	
Chemical Name: HYDROGEN, [REFRIGERATED	☑ Flammable (gases, aerosols, liquids, or solids)	, liquids, or solids)	☐ Germ	Germ cell mutagenicity	
LIQUID]	☑ Gas under pressure		☐ Hazan	Hazard Not Otherwise Classified (HNOC)	lassified (HNOC)
EHS Name:	☐ Hazard Not Otherwise Classified (HNOC)	ified (HNOC)	☐ Repro	Reproductive toxicity	
DIPUTE THE MIX THE Solid THE LIGHT TO GET METER	☐ In contact with water emits flammable gas	ammable gas	☐ Respir	Respiratory or skin sensitization	tization
	☐ Organic peroxide		☐ Seriou	I Serious eye damage or eye irritation	eye irritation
	☐ Oxidizer (liquid, solid or gas)		☑ Simple	☑ Simple asphyxiant	
reporting threshold:	Pyrophoric (liquid or solid)		☐ Skin c	Skin corrosion or irritation	_
	☐ Pyrophoric gas		☐ Specif	ic target organ toxi	I Specific target organ toxicity (single or repeated
	☐ Self-heating		exposure)		
	☐ Self-reactive				
Inventory		Storage C	Codes & Location	tion	
Max Daily Amt (lbs): 5350	Container Type Pressure	Temperature	Storage	Description	Max Amt At
Max Daily Amt Code: 05	3		L		Location(lbs)
Avg Daily Amt (lbs): 2500	tank than ambient	conditions by	External to building		
Avg Daily Amt Code: 04	pressure				
Max Amt in Largest Container (lbs): 5350					
No of days onsite: 365					
THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TO THE PERSON NAMED					

		SHIPMENT DETAILS		
Mode of Shipment: To Shipment Frequency Count: 2 Shipment Frequency Period: N	Tank Trucks Maximum 2 Maximum One Time:	Capacity F Shipment	Carrier: Merrer Canada Carrier Address: 1980 Rue StP	Merrer Canada 1980 Rue StPatrice E Magog
		Average Annual Shipment 2500	Carrier Phone: 800-232-4726	Quebec Canada, Magog 800-232-4726
	Quantity:	H	Carrier 24 Hr 905-510-0802	802
	Todies of Havel	Street to EMS at 39 Perry	Phone:	
		Avenue		
Chemica	Chemical Description	Physical Hazards	Шор	th Carardo
Chemical ID:	165764]]	i calui i azai us
Check if Chemical Information is	Q	☐ Combustible dust	☐ Acute toxicity (any route of exposure)	te of exposure)
changed from the last submission:		☐ Corrosive to metal	☐ Aspiration hazard	
Trade Secret:	772-37-9	☐ Explosive	☐ Carcinogenicity	
Chemical Name:	NITROGEN, [REFRIGERATED	☐ Flammable (gases, aerosols, liquids, or solids)	☐ Germ cell mutagenicity	
]	LIQUIDI	☑ Gas under pressure	☐ Hazard Not Otherwise Classified (HNOC)	Classified (HNOC)
List. Contains Ens.	S Exceeds IPQ:	Hazard Not Othonuiso Classified (UNOC)	Deproductive toxicity	

Chemical Description		Physical Hazards	rde	_	E	ML UI
Chemical ID: 165764					Пеа	nealui nazarus
mical Information is	LI Combustible dust	st		☐ Acut	Acute toxicity (any route of exposure)	te of exposure)
d from the last submission:	Corrosive to metal	<u> </u>		∏ Aspir	Aspiration hazard	
CAS #: 7727-37-9		Ì] [and i ideal d	
Trade Secret:	☐ Explosive			☐ Carc	l Carcinogenicity	
Chemical Name: NITROGEN, [REFRIGERATED	☐ Flammable (gases, aerosols, liquids, or solids)	ses, aerosois, li	quids, or solids)	Gem	Germ cell mutagenicity	
	☑ Gas under pressure	sure		☐ Haza	rd Not Otherwise	Hazard Not Otherwise Classified (HNOC)
EHG Name:	☐ Hazard Not Otherwise Classified (HNOC)	erwise Classifi	ed (HNOC)	Repr	Reproductive toxicity	
J Mix J Solid EZ Liquid EZ Gas	☐ In contact with water emits flammable gas	vater emits flar	nmable gas	Resp	Respiratory or skin sensitization	sitization
	☐ Organic peroxide	ō		Seric	Serious eye damage or eye irritation	r eye irritation
Chemical Added On:	Oxidizer (liquid, solid or gas)	solid or gas)		☑ Simp	Simple asphyxiant	
reporting threshold:	Pyrophoric (liquid or solid)	id or solid)		Skin	Skin corrosion or irritation	ion
	☐ Pyrophoric gas			Spec	ific target organ to	Specific target organ toxicity (single or repeated
	☐ Self-heating			exposure)	9)	
	☐ Self-reactive					
Inventory			Storage	Codes & Location	ation	
Max Daily Amt (lbs): 79000 Max Daily Amt Code: 09	Container Type	Pressure	Temperature	Storage	Description	Max Amt At
Avg Daily Amt (lbs): 50000	[A]Above ground [2]Greater tank	ent	[7]Cryogenic conditions	Exterior to building		
Avg Daily Amt Code: 08				9		
Max Amt in Largest Container (lbs): 79000						
No of days onsite: 365						

	A THE REAL PROPERTY AND ASSESSMENT OF THE PROPERTY ASSESSMENT OF THE PROPER	SHIPMENT DETAILS	DETAILS		
Mode of Shipment:	Tank Trucks	Maximum Capacity Per Vessel:	48000	Carrier:	Messer America
Shipment Frequency Period:	Week	Maximum Shipment Quantity at One Time:	40000	Carrier Address:	200 Somerset Corporate
Physical State In Transit:	Liquid	Average Annual Shipment	33250		Bridgewater, NJ 08807
		Quantity: Routes of Travel:	Rt 95 to Rt 152 to Holden	Carrier Phone: Carrier 24 Hr	800-755-9277 800-232-4726
		Try and the second seco	Street to 39 Perry Avenue	Phone:	
					TABLE TO THE PARTY OF THE PARTY

Chemical Description	0	weical Hazarde				
Chemical ID: 165765		i ilyaicai i iazai ua			Healu	Health Hazards
mical Information is	☐ Combustible dust		•	☐ Acute	Acute toxicity (any route of exposure)	of exposure)
changed from the last submission:	☐ Corrosive to metal			☐ Aspirat	Aspiration hazard	
Trade Secret:	☐ Explosive			☐ Carcin	Carcinogenicity	
Chemical Name: PROPANE	☑ Flammable (gases, aerosols, liquids, or solids)	i, aerosols, liquio	ls, or solids)	☐ Germ	Germ cell mutagenicity	
☐ Contains EHS: [☑ Gas under pressure	æ		☐ Hazard	Hazard Not Otherwise Classified (HNOC)	lassified (HNOC)
, P.	☐ Hazard Not Otherwise Classified (HNOC)	vise Classified (I	HNOC)	☐ Repro	Reproductive toxicity	
☑ Pure ☐ Mix ☐ Solid ☑ Liquid ☐ Gas MSDS	☐ In contact with water emits flammable gas	ter emits flamma	ble gas	☐ Respir	Respiratory or skin sensitization	tization
	☐ Organic peroxide			☐ Seriou	l Serious eye damage or eye irritation	eye irritation
Check if the chemical is below	Oxidizer (liquid, solid or gas)	lid or gas)		☑ Simple	☑ Simple asphyxiant	
choring uncorrors.	Pyrophoric (liquid or solid)	or solid)		☐ Skin co	Skin corrosion or irritation	a
	Pyrophoric gas			Specifi	ic target organ toxi	Specific target organ toxicity (single or repeated
	☐ Self-heating			exposure)		
	☐ Self-reactive					
Inventory			Storage C	Storage Codes & Location	tion	
Max Daily Amt (lbs): 3500 Max Daily Amt Code: 04	Container Type P	Tê	Temperature	Storage L Location	Description	Max Amt At Location(lbs)
Avg Daily Amt (lbs): 2000	tank tank [2]Greater	ent	[7]Cryogenic E conditions but	External to building		
Avg Daily Amt Code: 04 May Amt in agreet Container (Inc.), 2500	pres	pressure				
Max Amt in _argest Container (lbs): 3500 No of days ensite: 365						
	SHIPMENT DETAILS	DETAILS				
Mode of Shipment: Tank Trucks Maximum Shipment Frequency Count: 1 Maximum Shipment Frequency Count: 1 Maximum	Capacity P Shipment	2200 2000		Carrier: Carrier Address:	Propane Plus s: 177 Winthrop Street.	s Street
Liquid	Average Annual Shipment	1000		Carrier Phone:	: 508-252-3359 x	9 x
Routes of Travel:	Travel:	Rt 118 to Rt 12:	Engineered I	Phone:	508-252-3359 X	×
		Materials countions	CID			

Chemical Description			Physical Hazards	ards		Hes	Health Hazards	
Chemical ID: 165766		☐ Combustible dust	ble dust		☐ Acute to:	cicity (any rou	Acute toxicity (any route of exposure)	
₽		Corrosive to metal	to metal		☐ Aspiration hazard	n hazard		
Trade Secret:		☐ Explosive			☐ Carcinogenicity	enicity		
Chemical Name: SODIUM HYDROXIDE	DROXIDE	☐ Flammabl	Flammable (gases, aerosols, liquids, or solids)	liquids, or solids)	☐ Germ ce	Germ cell mutagenicity	¥	
(CORROSIV	(CORROSIVE LIQUID, BASIC,	☐ Gas under pressure	r pressure		☐ Hazard N	Not Otherwise	Hazard Not Otherwise Classified (HNOC)	
EHS: Contains EHS: Exceeds Exceeds	Exceeds TPQ:	☐ Hazard No	Hazard Not Otherwise Classified (HNOC)	ed (HNOC)	☐ Reprodu	Reproductive toxicity		
1		☐ In contact	In contact with water emits flammable gas	mmable gas	☐ Respirat	Respiratory or skin sensitization	nsitization	
☐ Pure ☑ Mix ☐ Solid ☑ Liquid ☐ Gas	MSDS	☐ Organic peroxide	eroxide		Serious	eye damage o	☑ Serious eye damage or eye irritation	
Chemical Added On:	/SDS	Oxidizer (Oxidizer (liquid, solid or gas)		☐ Simple a	Simple asphyxiant		
Check if the chemical is below		☐ Pyrophori	Pyrophoric (liquid or solid)		Skin con	Skin corrosion or irritation	tion	
		☐ Pyrophoric gas	c gas		☐ Specific	target organ t	☐ Specific target organ toxicity (single or repeated	
		☐ Self-heating	JG G		exposure)			
		☐ Self-reactive	ve					
Inventory				Storage	Storage Codes & Location	on		
//ax Daily Amt (lbs): 10500 //ax Daily Amt Code: 06		Container Type	pe Pressure	Temperature	Storage Des	Description	Max Amt At	
wg Daily Amt (lbs): 7500		tank	tank pressure	[4]Ambient temperature	Internally at WWT plant			
//ax Amt in Largest Container (lbs): 10500								
lo of days onsite: 365								
		HS	SHIPMENT DETAILS					
Shipment Frequency Count: Shipment Frequency Period: Month	Maximum C Maximum S One Time:	Maximum Capacity Per Vessel: Maximum Shipment Quantity at One Time:	/essel: 7500 ntity at 7500		Carrier: Carrier Address:	PVS Minibulk 3134 Post Ro	PVS Minibulk 3134 Post Road, Warwick, RI	
	Average An Quantity:	Average Annual Shipment Quantity:	ıt 5000		Carrier Phone:	888-711-3445	445	
	Routes of Travel:	ravel:	Rt 95 to Rt 123 to E Materials Solutions	Engineered	Phone:	000-7	Į	
		MIXT	MIXTURE COMPONENTS	3				
Chemical Name	% CAS#	EHS	EHS Name		Max Daily Amount (lbs)) 	Max Daily Amount Code	
Water	50 7732-18-5				5250	0	05	

Chemical Description	Physical Hazards		U.S. W.	
Chemical ID: 165767]	i i i i dai i i	i realti i lazai US
	Combustible dust		Acute toxicity (any route of exposure)	f exposure)
7	☑ Corrosive to metal	⊠	☑ Aspiration hazard	
Trade Secret:	☐ Explosive		Carcinogenicity	
Chemical Name: Sulfuric acid	☐ Flammable (gases, aerosols, liquids, or solids)		Germ cell mutagenicity	
Contains EHS:	☐ Gas under pressure		Hazard Not Otherwise Classified (HNOC)	ssified (HNOC)
EHS Name: Sulfuric acid	☐ Hazard Not Otherwise Classified (HNOC)		Reproductive toxicity	•
☑ Pure ☐ Mix ☐ Solid ☑ Liquid ☐ Gas MSDS	☐ In contact with water emits flammable gas		Respiratory or skin sensitization	zation
Chemical Added On: 12/20/2019	☐ Organic peroxide	乜	Serious eye damage or eye irritation	/e irritation
Check if the chemical is below	☐ Oxidizer (liquid, solid or gas)		Simple asphyxiant	
reporting a medicular.	☐ Pyrophoric (liquid or solid)	区	Skin corrosion or irritation	
	☐ Pyrophoric gas		I Specific target organ toxicity (single or repeated	ity (single or repeated
	☐ Self-heating	exp	exposure)	
	☐ Self-reactive			
Inventory		Storage Codes &	odes & Location	
Max Daily Amt (lbs): 3000	Container Type Pressure Temp	Temperature Storage	ge Description	Max Amt At
Max Daily Amt Code: 04				Location(lbs)
Avg Daily Amt (lbs): 3000	Desc: Lead acid pressure temperature	ent Electric Fork	Acid is in eight separate lead	3000
Avg Daily Amt Code: 04	battery		acid batteries	
Max Amt in Largest Container (lbs): 680				
No of days onsite: 9				
	SHIPMENT DETAILS			
Mode of Shipment Trucks Maximum Shipment Frequency Count:	Maximum Capacity Per Vessel: 40000	Carrier:	NITCO	
: Year	maximum Shipment Quantity at 680 One Time:	Carrier /	Carrier Address: 3 Chalet Road, Middleboro,	1, Middleboro,
Liquid	Average Annual Shipment 680	Carrier		
Routes of Travel:		e 123 to Phone:	24 FT 800-489-8000	
	relly Avenue			

		Chemical Amount Range Code & Description
44	Code	Amount Range
	01	[01] 0-99
2	02	[02] 100-499
ω	03	[03] 500-999
4	04	[04] 1,000-4,999
ΟΊ	05	[05] 5,000-9,999
0	06	[06] 10,000-24,999
7	07	[07] 25,000-49,999
œ	08	[08] 50,000-74,999
9	09	[09] 75,000-99,999
10	10	[10] 100,000-499,999
1	11	[11] 500,000-999,999
12	12	[12] 1,000,000-9,999,999
13	13	[13] 10,000,000- Greater than 10 million