acc. to OSHA HCS

Printing date 03/14/2018 Reviewed on 06/28/2017

1 Identification

- · Product identifier
- · Trade name: A16085, A16088 Aerospace Sure Coat Silver
- · Article number: A16085, A16088
- · Application of the substance / the mixture Coating
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

SEM Products Inc.

1685 Overview Drive

Rock Hill, SC 29730

803 207 8225

· Information department:

cust_care@semproducts.com: SEM Products,Inc. 1685 Overview Dr. Rock Hill, SC 29730: phone 1-800-831-

1122, M - TH 7am - 4pm EDT

· Emergency telephone number: CHEMTREC 1-800-424-9300

2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS02

GHS07

- · Signal word Warning
- · Hazard statements

H226 Flammable liquid and vapor.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

Ground/bond container and receiving equipment. P240

P241 *Use explosion-proof electrical/ventilating/lighting/equipment.*

P242 *Use only non-sparking tools.*

P243 Take precautionary measures against static discharge.

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P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P321 Specific treatment (see on this label).

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P337+P313 If eye irritation persists: Get medical advice/attention.

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2 Fire = 3Reactivity = 0

· HMIS-ratings (scale 0 - 4)

HEALTH 2 Health = 2FIRE 3 Fire = 3REACTIVITY 0 Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable. · **vPvB**: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description:

Mixture: consisting of the following components.

Weight percentages

· Dangerous	components:	
	URETHANE POLYMER	13-30%
107-98-2	1-methoxy-2-propanol	5-7%
18268-70-7	Tetraethylene Glycol Di 2-ethylhexoate	1.5-5%
29911-28-2	Dipropylene glycol n-butyl ether	1-1.5%

4 First-aid measures

- · Description of first aid measures
- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.

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· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

<i>PAC-1</i> :		
107-98-2	1-methoxy-2-propanol	100 ppm
57-55-6	Methyl glycol	30 mg/m ³
112926-00-8	precipitated Silica (Silica-Amorphous)	18 mg/m ³
9036-19-5	Polyethylene glycol octylphenyl ether	13 mg/m ³
107-21-1	ethanediol	30 ppm
126-86-3	2,4,7,9-tetramethyldec-5-yne-4,7-diol	30 mg/m ²
124-68-5	2-amino-2-methylpropanol	17 mg/m ⁻
<i>PAC-2:</i>		
107-98-2	1-methoxy-2-propanol	160 ppm
57-55-6	Methyl glycol	1,300 mg/m ³
112926-00-8	precipitated Silica (Silica-Amorphous)	$200 \ mg/m^3$
9036-19-5	Polyethylene glycol octylphenyl ether	140 mg/m^3
107-21-1	ethanediol	150 ppm
126.06.2	2,4,7,9-tetramethyldec-5-yne-4,7-diol	330 mg/m^3

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124-68-5	2-amino-2-methylpropanol	(Contd. of page 3) 190 mg/m ³
· PAC-3:		,
107-98-2	1-methoxy-2-propanol	660 ppm
57-55-6	Methyl glycol	$7,900 \text{ mg/m}^3$
112926-00-8	precipitated Silica (Silica-Amorphous)	$1,200 \text{ mg/m}^3$
9036-19-5	Polyethylene glycol octylphenyl ether	830 mg/m^3
107-21-1	ethanediol	900 ppm
126-86-3	2,4,7,9-tetramethyldec-5-yne-4,7-diol	$2,000 \text{ mg/m}^3$
124-68-5	2-amino-2-methylpropanol	570 mg/m³

7 Handling and storage

- · Handling:
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

107-98-2 1-methoxy-2-propanol				
RE	L Short-term value: 540 mg/m³, 150 ppm Long-term value: 360 mg/m³, 100 ppm			
TL	Short-term value: 369 mg/m^3 , 100 ppm Long-term value: 184 mg/m^3 , 50 ppm			

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Breathing equipment: Not required.

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· Protection of hands:

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· Information on	hasic	nhysical	and	chemical	nronerties
· miormanon on	nasic	Duvsicai	una	cnemicai	vroverues

· General Information

· Appearance:

Form: Liquid

Color: According to product specification

Odor: CharacteristicOdor threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range:Undetermined.Boiling point/Boiling range:100 °C

· Flash point: $35 \, ^{\circ}C$

· Flammability (solid, gaseous): Not applicable.

• Ignition temperature: 270 °C

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

• Danger of explosion: In use, may form flammable/explosive vapour-air mixture.

· Explosion limits:

Lower: Not determined.
Upper: Not determined.

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	(t	Contd. of page
· Vapor pressure at 20 °C:	23 hPa	
Density at 20 °C:	$1.03204 \ g/cm^3$	
· Relative density	Not determined.	
· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/	water): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	7.3 %	
Water:	45.6 %	
VOC content:	7.32 %	
	142.8 g/l / 1.19 lb/gl	
Solids content:	46.3 %	
· Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

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USA ·



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· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number

· DOT, ADR, IMDG, IATA UN1993

· UN proper shipping name

• **DOT** Flammable liquids, n.o.s. (1-Methoxy-2-propanol)

• ADR 1993 Flammable liquids, n.o.s. (1-Methoxy-2-propanol)
• IMDG, IATA 1993 Flammable LIQUID, N.O.S. (1-METHOXY-2-PROPANOL)

- · Transport hazard class(es)
- $\cdot DOT$



· Class 3 Flammable liquids

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Label	3
ADR, IMDG, IATA	
Class	3 Flammable liquids
Label	3
Packing group DOT, ADR, IMDG, IATA	III
	111
Environmental hazards: Marine pollutant:	No
Special precautions for user	Warning: Flammable liquids
EMS Number:	F-E,S-E
Stowage Category	A
Transport in bulk according to Annex I.	
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 60 L
	On cargo aircraft only: 220 L
ADR	
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per inner packaging: 50 ml Maximum net quantity per outer packaging: 1000 ml
IMDG	1
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN 1993 FLAMMABLE LIQUIDS, N.O.S. (1-METHOXY-
-	PROPANOL), 3, III

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

Acrylic	Resin

107-21-1 ethanediol

143-22-6 2-[2-(2-butoxyethoxy)ethoxy]ethanol

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	c Substances Control Act):
	1-methoxy-2-propanol
	Tetraethylene Glycol Di 2-ethylhexoate
	Dipropylene glycol n-butyl ether
57-55-6	Methyl glycol
	Polyethylene glycol octylphenyl ether
51200-87-4	4,4-dimethyl-1,3-oxizalidine
53320-86-8	CLAY
107-21-1	ethanediol
126-86-3	2,4,7,9-tetramethyldec-5-yne-4,7-diol
143-22-6	2-[2-(2-butoxyethoxy)ethoxy]ethanol
8042-47-5	White Mineral oil
124-68-5	2-amino-2-methylpropanol
7732-18-5	water
TSCA new (21st Century Act) (Substances not listed)
URETHANE	E POLYMER
Proposition	65
Chemicals k	nown to cause cancer:
107-21-1 et	hanediol
Chemicals k	nown to cause reproductive toxicity for females:
None of the	ingredients is listed.
Chemicals k	nown to cause reproductive toxicity for males:
None of the	ingredients is listed.
Chemicals k	nown to cause developmental toxicity:
107-21-1 et	hanediol
Cancerogen	ity categories
EPA (Envir	onmental Protection Agency)
None of the	ingredients is listed.
TLV (Thres	hold Limit Value established by ACGIH)
107-21-1 et	hanediol
NIOSH Ca	(National Institute for Occupational Safety and Health)

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS02 GHS07

- · Signal word Warning
- · Hazard statements

H226 Flammable liquid and vapor.

H315 Causes skin irritation.



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H319 Causes serious eye irritation.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P321 Specific treatment (see on this label).

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/

shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P337+P313 If eye irritation persists: Get medical advice/attention.

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environment protection department.
- · Contact: Rita Joiner (rjoiner@semproducts.com)
- · Date of preparation / last revision 03/14/2018 / 13
- · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

 ${\it HMIS: Hazardous\ Materials\ Identification\ System\ (USA)}$

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flam. Liq. 3: Flammable liquids – Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

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Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A ·* Data compared to the previous version altered.