Safety Data Sheet
acc. to OSHA HCS

Printing date 08/14/2014 *Reviewed on 08/14/2014*

1 Identification

· **Product identifier**

· **Trade name: 39691, 39694 Low VOC Etch Primer Green RTS**

· **Article number:** 39691, 39694
· **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
· **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

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2 Hazard(s) identification

· **Classification of the substance or mixture**

GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

GHS08 Health hazard

Carc. 1A H350 May cause cancer.
Repr. 2 H361 Suspected of damaging fertility or the unborn child.
STOT SE 1 H370 Causes damage to organs.

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 GHS08

· **Signal word** Danger

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· **Hazard-determining components of labeling:**
toluene
Quartz (SiO2)
tris(methylphenyl) phosphate
titanium dioxide
· **Hazard statements**
H225 Highly flammable liquid and vapor.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H350 May cause cancer.
H361 Suspected of damaging fertility or the unborn child.
H370 Causes damage to organs.
· **Precautionary statements**
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P303+P361+P353 IF ON SKIN (or hair): Remove/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.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 4
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = *4
Fire = 3
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:**		
540-88-5	tert-butyl acetate	40 - 60%
67-64-1	acetone	13 - 30%
108-88-3	toluene	7 - 10%

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78-93-3	butanone	5 - 7%
64742-94-5	Solvent naphtha (petroleum), heavy arom.	1.5 - 5%
9004-70-0	CELLULOSE NITRATE	1.5 - 5%
	Resin NJTSRN 6784	
14808-60-7	Quartz (SiO2)	1.5 - 5%
123-86-4	n-butyl acetate	1.5 - 5%
110-19-0	isobutyl acetate	1.5 - 5%
67-63-0	propan-2-ol	1-1.5%
1330-20-7	xylene	1-1.5%
1330-78-5	tris(methylphenyl) phosphate	1-1.5%

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4 First-aid measures

· **Description of first aid measures**
· **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:** Immediately call a 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.

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5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:** CO2, sand, extinguishing powder. Do not use water.
· **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:** Mouth respiratory protective device.

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).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

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Do not flush with water or aqueous cleansing agents

· **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.

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7 Handling and storage

· **Precautions for safe handling**
No special measures required.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
· **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect from heat.
Protect against electrostatic charges.
Keep respiratory protective device available.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** *Store in a cool location.*
· **Information about storage in one common storage facility:** *Not required.*
· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
· **Specific end use(s)** *No further relevant information available.*

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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:**	
540-88-5 tert-butyl acetate	
PEL	Long-term value: 950 mg/m³, 200 ppm
REL	Long-term value: 950 mg/m³, 200 ppm
TLV	Long-term value: 950 mg/m³, 200 ppm
67-64-1 acetone	
PEL	Long-term value: 2400 mg/m³, 1000 ppm
REL	Long-term value: 590 mg/m³, 250 ppm
TLV	Short-term value: (1782) NIC-1187 mg/m³, (750) NIC-500 ppm Long-term value: (1188) NIC-594 mg/m³, (500) NIC-250 ppm BEI

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108-88-3 toluene	
PEL	Long-term value: 200 ppm Ceiling limit value: 300; 500* ppm *10-min peak per 8-hr shift
REL	Short-term value: 560 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm
TLV	Long-term value: 75 mg/m³, 20 ppm BEI
78-93-3 butanone	
PEL	Long-term value: 590 mg/m³, 200 ppm
REL	Short-term value: 885 mg/m³, 300 ppm Long-term value: 590 mg/m³, 200 ppm
TLV	Short-term value: 885 mg/m³, 300 ppm Long-term value: 590 mg/m³, 200 ppm BEI
14808-60-7 Quartz (SiO2)	
PEL	see Quartz listing
REL	Long-term value: 0.05* mg/m³ *respirable dust; See Pocket Guide App. A
TLV	Long-term value: 0.025* mg/m³ *as respirable fraction
123-86-4 n-butyl acetate	
PEL	Long-term value: 710 mg/m³, 150 ppm
REL	Short-term value: 950 mg/m³, 200 ppm Long-term value: 710 mg/m³, 150 ppm
TLV	Short-term value: 950 mg/m³, 200 ppm Long-term value: 713 mg/m³, 150 ppm
110-19-0 isobutyl acetate	
PEL	Long-term value: 700 mg/m³, 150 ppm
REL	Long-term value: 700 mg/m³, 150 ppm
TLV	Long-term value: 713 mg/m³, 150 ppm
67-63-0 propan-2-ol	
PEL	Long-term value: 980 mg/m³, 400 ppm
REL	Short-term value: 1225 mg/m³, 500 ppm Long-term value: 980 mg/m³, 400 ppm
TLV	Short-term value: 984 mg/m³, 400 ppm Long-term value: 492 mg/m³, 200 ppm BEI
1330-20-7 xylene	
PEL	Long-term value: 435 mg/m³, 100 ppm
REL	Short-term value: 655 mg/m³, 150 ppm Long-term value: 435 mg/m³, 100 ppm
TLV	Short-term value: 651 mg/m³, 150 ppm Long-term value: 434 mg/m³, 100 ppm BEI

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· **Ingredients with biological limit values:**

67-64-1 acetone

BEI	50 mg/L Medium: urine Time: end of shift Parameter: Acetone (nonspecific)

108-88-3 toluene

BEI	0.02 mg/L Medium: blood Time: prior to last shift of workweek Parameter: Toluene 0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene 0.3 mg/g creatinine Medium: urine Time: end of shift Parameter: o-Cresol with hydrolysis (background)

78-93-3 butanone

BEI	2 mg/L Medium: urine Time: end of shift Parameter: MEK

67-63-0 propan-2-ol

BEI	40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific)

1330-20-7 xylene

BEI	1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids

· **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.
Store protective clothing separately.
Avoid contact with the eyes and skin.
· **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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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

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9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Liquid
Color:	According to product specification
· **Odor:**	Characteristic
· **Odour threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	55 °C
· **Flash point:**	-18 °C
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	465 °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:	2.6 Vol %
Upper:	13.0 Vol %

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· **Vapor pressure at 20 °C:**	233 hPa
· **Density at 20 °C:**	0.94 g/cm³
· **Relative density**	Not determined.
· **Vapour 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:	79.7 %
VOC content:	25.7 % 291.3 g/l / 2.43 lb/gl
Solids content:	20.3 %
· **Other information**	No further relevant information available.

10 Stability and reactivity

· **Reactivity**
· **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.

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11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

108-88-3 toluene

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12124 mg/kg (rabbit)
Inhalative	LC50/4 h	5320 mg/l (mouse)

· **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:
Harmful

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Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
108-88-3	toluene	3
14808-60-7	Quartz (SiO2)	1
13463-67-7	titanium dioxide	2B
67-63-0	propan-2-ol	3
1330-20-7	xylene	3
14807-96-6	Talc	2B
1333-86-4	Carbon black	2B
7631-86-9	silicon dioxide, chemically prepared	3
91-20-3	naphthalene	2B
100-41-4	ethylbenzene	2B

· **NTP (National Toxicology Program)**		
14808-60-7	Quartz (SiO2)	K
91-20-3	naphthalene	R

· **OSHA-Ca (Occupational Safety & Health Administration)**	
68911-87-5	ALKYL QUATERNARY AMMONIUM MONTMORILLONITE

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
· **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.

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

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14 Transport information

· **UN-Number**
· **DOT, ADR, IMDG, IATA** UN1263

· **UN proper shipping name**
· **DOT** Paint
· **ADR** 1263 Paint, special provision 640D
· **IMDG, IATA** PAINT

· **Transport hazard class(es)**

· **DOT**

· **Class** 3 Flammable liquids
· **Label** 3

· **ADR, IMDG, IATA**

· **Class** 3 Flammable liquids
· **Label** 3

· **Packing group**
· **DOT, ADR, IMDG, IATA** II

· **Environmental hazards:**
· **Marine pollutant:** No

· **Special precautions for user** Warning: Flammable liquids
· **EMS Number:** F-E,S-D

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **DOT**
· **Quantity limitations** On passenger aircraft/rail: 5 L
On cargo aircraft only: 60 L
· **Remarks** ORM-D 409CFR 173-150,156,306

· **ADR**
· **Excepted quantities (EQ)** Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

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· **IMDG**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **UN "Model Regulation":**	UN1263, Paint, special provision 640D, 3, II

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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):**

108-88-3	toluene
78-93-3	butanone
67-63-0	propan-2-ol
1330-20-7	xylene
14807-96-6	Talc
91-20-3	naphthalene
	ACRYLIC RESIN
100-41-4	ethylbenzene
95-63-6	1,2,4-trimethylbenzene

· **TSCA (Toxic Substances Control Act):**

540-88-5	tert-butyl acetate
67-64-1	acetone
108-88-3	toluene
78-93-3	butanone
64742-94-5	Solvent naphtha (petroleum), heavy arom.
9004-70-0	CELLULOSE NITRATE
14808-60-7	Quartz (SiO2)
123-86-4	n-butyl acetate
13463-67-7	titanium dioxide
110-19-0	isobutyl acetate
67-63-0	propan-2-ol
1330-20-7	xylene
1330-78-5	tris(methylphenyl) phosphate
14807-96-6	Talc
18268-70-7	Tetraethylene Glycol Di 2-ethylhexoate

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· **Proposition 65**

· **Chemicals known to cause cancer:**	
14808-60-7	Quartz (SiO2)
13463-67-7	titanium dioxide
1330-20-7	xylene
1333-86-4	Carbon black
91-20-3	naphthalene
100-41-4	ethylbenzene
95-63-6	1,2,4-trimethylbenzene

· **Chemicals known to cause reproductive toxicity for females:**	
108-88-3	toluene

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**	
108-88-3	toluene

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**		
67-64-1	acetone	I
108-88-3	toluene	II
78-93-3	butanone	I
1330-20-7	xylene	I
91-20-3	naphthalene	C, CBD
100-41-4	ethylbenzene	D

· **TLV (Threshold Limit Value established by ACGIH)**		
67-64-1	acetone	A4
108-88-3	toluene	A4
14808-60-7	Quartz (SiO2)	A2
13463-67-7	titanium dioxide	A4
67-63-0	propan-2-ol	A4
1330-20-7	xylene	A4
14807-96-6	Talc	A4
1333-86-4	Carbon black	A4
91-20-3	naphthalene	A4
100-41-4	ethylbenzene	A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**	
14808-60-7	Quartz (SiO2)
13463-67-7	titanium dioxide
1333-86-4	Carbon black

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

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· **Hazard pictograms**

GHS02 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
toluene
Quartz (SiO2)
tris(methylphenyl) phosphate
titanium dioxide

· **Hazard statements**
H225 Highly flammable liquid and vapor.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H350 May cause cancer.
H361 Suspected of damaging fertility or the unborn child.
H370 Causes damage to organs.

· **Precautionary statements**

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P303+P361+P353	IF ON SKIN (or hair): Remove/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.
P405	Store locked up.
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:** Steve Gaver
· **Date of preparation / last revision** 08/14/2014 / 1
· **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 Organization
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)
HMIS: Hazardous Materials Identification System (USA)

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VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
Carc. 1A: Carcinogenicity, Hazard Category 1A
Repr. 2: Reproductive toxicity, Hazard Category 2
STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1
· **** Data compared to the previous version altered.***