



1 Identification

- **Product identifier**
- **Trade name:** 2800 Series Low VOC Rust Shield
- **Article number:**
28061, 28064, 28081, 28091, 28094, 28101, 28104, 28111, 28114, 28121, 28131, 28134, 28141, 28151, 28154, 28161, 28164, 28171, 28181, 28191, 28194
- **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 identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 2

H225 Highly flammable liquid and vapour.



GHS08 Health hazard

Germ Cell Mutagenicity - Category 1B

H340 May cause genetic defects.

Carcinogenicity - Category 1A

H350 May cause cancer.

Reproductive Toxicity - Category 2

H361 Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure - Category 2

H371 May cause damage to organs.

Specific Target Organ Toxicity - Repeated Exposure - Category 2

H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Skin Irritation - Category 2

H315 Causes skin irritation.

Eye Irritation - Category 2A

H319 Causes serious eye irritation.

Specific Target Organ Toxicity - Single Exposure - Category 3

H335 May cause respiratory irritation.

- **Label elements**

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

(Contd. on page 2)



Trade name: 2800 Series Low VOC Rust Shield

(Contd. of page 1)

· **Hazard pictograms**



GHS02 GHS07 GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

Alkyd Resin
Quartz (SiO₂)
Solvent naphtha (petroleum), light arom.
toluene

· **Hazard statements**

H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H340 May cause genetic defects.
H350 May cause cancer.
H361 Suspected of damaging fertility or the unborn child.
H371 May cause damage to organs.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
P242 Use non-sparking tools.
P243 Take actions to prevent static discharges.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P321 Specific treatment (see on this label).
P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P370+P378 In case of fire: Use for extinction: CO₂, powder or water spray.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 3)



Printing date 06/20/2017

Reviewed on 06/20/2017

Trade name: 2800 Series Low VOC Rust Shield

(Contd. of page 2)

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

Health = 1

Fire = 3

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = *1

Fire = 3

Reactivity = 0

3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**· **Description:**

Mixture: consisting of the following components.

Weight percentages

· **Dangerous components:**

	Alkyd Resin	15-40% w/w
14807-96-6	Talc	10-30% w/w
67-64-1	acetone	7-13% w/w
107-87-9	pentan-2-one	5-10% w/w
1330-20-7	xylene	3-7% w/w
14808-60-7	Quartz (SiO ₂)	1-5% w/w
98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene	1-5% w/w
64742-95-6	Solvent naphtha (petroleum), light arom.	1-5% w/w
1333-86-4	Carbon black	1-5% w/w
108-88-3	toluene	1-5% w/w
111-76-2	2-butoxyethanol	0.5-1.5% w/w
112926-00-8	precipitated Silica (Silica-Amorphous)	0.5-1.5% w/w
8052-41-3	Stoddard solvent	≤ 1% w/w
100-41-4	ethylbenzene	≤ 1% w/w

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.· **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.

(Contd. on page 4)

CA



Printing date 06/20/2017

Reviewed on 06/20/2017

Trade name: 2800 Series Low VOC Rust Shield

(Contd. of page 3)

- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting 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).
Dispose contaminated material as waste according to item 13.
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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
No special measures required.
Ensure good ventilation/exhaustion at the workplace.
- **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:** 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.
- **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.

(Contd. on page 5)



Trade name: 2800 Series Low VOC Rust Shield

(Contd. of page 4)

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

67-64-1 acetone

EL Short-term value: 500 ppm
Long-term value: 250 ppm

EV Short-term value: 750 ppm
Long-term value: 500 ppm

107-87-9 pentan-2-one

EL Short-term value: 250 ppm
Long-term value: 150 ppm

EV Short-term value: 150 ppm

1330-20-7 xylene

EL Short-term value: 150 ppm
Long-term value: 100 ppm

EV Short-term value: 650 mg/m³, 150 ppm
Long-term value: 435 mg/m³, 100 ppm

14808-60-7 Quartz (SiO₂)

EL Long-term value: 0.025 mg/m³
ACGIH A2; IARC 1

EV Long-term value: 0.10* mg/m³
*respirable fraction

1333-86-4 Carbon black

EL Long-term value: 3 mg/m³
IARC 2B

EV Long-term value: 3.5 mg/m³

108-88-3 toluene

EL Long-term value: 20 ppm
R

EV Long-term value: 20 ppm

111-76-2 2-butoxyethanol

EL Long-term value: 20 ppm

EV Long-term value: 20 ppm
Skin

112926-00-8 precipitated Silica (Silica-Amorphous)

EL Long-term value: 4* 1.5** mg/m³
Precipitated and gel; *total; **respirable

EV Long-term value: 10 mg/m³

8052-41-3 Stoddard solvent

EL Short-term value: 580 mg/m³
Long-term value: 290 mg/m³

EV Long-term value: 525 mg/m³

(Contd. on page 6)

CA



Trade name: 2800 Series Low VOC Rust Shield

(Contd. of page 5)

100-41-4 ethylbenzene

EL	Long-term value: 20 ppm IARC 2B
EV	Short-term value: 540 mg/m ³ , 125 ppm Long-term value: 435 mg/m ³ , 100 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.

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.

· **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 through 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 basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Liquid

Color: According to product specification

· **Odor:** Characteristic

· **Odor threshold:** Not determined.

(Contd. on page 7)

Safety Data Sheet
according to HPR, Schedule 1



Printing date 06/20/2017

Reviewed on 06/20/2017

Trade name: 2800 Series Low VOC Rust Shield

(Contd. of page 6)

· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	55.8-56.6 °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 %
· Vapor pressure at 20 °C:	233 hPa
· Density at 20 °C:	1.06493 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:	39.9 %
VOC content:	23.2 %
	309.0 g/l / 2.58 lb/gal
Solids content:	59.4 %
· 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.

CA

(Contd. on page 8)



Trade name: 2800 Series Low VOC Rust Shield

(Contd. of page 7)

11 Toxicological information

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

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

64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	LD50	>6800 mg/kg (rat)
Dermal	LD50	>3400 mg/kg (rab)
Inhalative	LC50/4 h	>10.2 mg/l (rat)

- **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
The product can cause inheritable damage.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

14807-96-6	Talc	3
1330-20-7	xylene	3
14808-60-7	Quartz (SiO ₂)	1
1333-86-4	Carbon black	2B
108-88-3	toluene	3
111-76-2	2-butoxyethanol	3
100-41-4	ethylbenzene	2B
98-82-8	cumene	2B

- **NTP (National Toxicology Program)**

14808-60-7	Quartz (SiO ₂)	K
98-82-8	cumene	R

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:**

Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 9)

Safety Data Sheet

according to HPR, Schedule 1



Printing date 06/20/2017

Reviewed on 06/20/2017

Trade name: 2800 Series Low VOC Rust Shield



(Contd. of page 8)

· **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, TDG, IMDG, IATA** UN1263
- **UN proper shipping name**
- **DOT** Paint
- **TDG** 1263 Paint, special provision 640D
- **IMDG, IATA** PAINT
- **Transport hazard class(es)**
- **DOT**
- 
- **Class** 3 Flammable liquids
- **Label** 3
- **TDG, IMDG, IATA**
- 
- **Class** 3 Flammable liquids
- **Label** 3
- **Packing group**
- **DOT, TDG, IMDG, IATA** II
- **Environmental hazards:**
- **Marine pollutant:** No
- **Special precautions for user** Warning: Flammable liquids
- **EMS Number:** F-E, S-E
- **Stowage Category** B
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

(Contd. on page 10)

CA

Safety Data Sheet

according to HPR, Schedule 1



Printing date 06/20/2017

Reviewed on 06/20/2017

Trade name: 2800 Series Low VOC Rust Shield

(Contd. of page 9)

· **Transport/Additional information:**

· **DOT**

· **Quantity limitations**

On passenger aircraft/rail: 5 L

On cargo aircraft only: 60 L

· **TDG**

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **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":**

UN 1263 PAINT, SPECIAL PROVISION 640D, 3, II

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):**

14807-96-6 Talc

1330-20-7 xylene

Acrylic Resin

108-88-3 toluene

111-76-2 2-butoxyethanol

95-63-6 1,2,4-trimethylbenzene

67-56-1 methanol

100-41-4 ethylbenzene

COBALT CARBOXYLATE

111-77-3 2-(2-methoxyethoxy)ethanol

98-82-8 cumene

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

14807-96-6 Talc

67-64-1 acetone

107-87-9 pentan-2-one

1330-20-7 xylene

14808-60-7 Quartz (SiO₂)

98-56-6 4-chloro-alpha,alpha,alpha-trifluorotoluene

64742-95-6 Solvent naphtha (petroleum), light arom.

1333-86-4 Carbon black

(Contd. on page 11)

CA

Safety Data Sheet
according to HPR, Schedule 1



Printing date 06/20/2017

Reviewed on 06/20/2017

Trade name: 2800 Series Low VOC Rust Shield

(Contd. of page 10)

108-88-3	toluene
111-76-2	2-butoxyethanol
68911-87-5	montmorilontie clay complex
123-86-4	n-butyl acetate
8052-41-3	Stoddard solvent
95-63-6	1,2,4-trimethylbenzene
108-67-8	mesitylene
67-56-1	methanol
100-41-4	ethylbenzene
96-29-7	2-butanone oxime
111-77-3	2-(2-methoxyethoxy)ethanol
98-82-8	cumene
107-98-2	1-methoxy-2-propanol
149-57-5	2-ethylhexanoic acid
7732-18-5	water

· **Canadian substance listings:**· **Canadian Domestic Substances List (DSL)**

14807-96-6	Talc
67-64-1	acetone
107-87-9	pentan-2-one
1330-20-7	xylene
14808-60-7	Quartz (SiO ₂)
98-56-6	4-chloro-alpha,alpha,alpha-trifluorotoluene
64742-95-6	Solvent naphtha (petroleum), light arom.
1333-86-4	Carbon black
108-88-3	toluene
111-76-2	2-butoxyethanol
68911-87-5	montmorilontie clay complex
123-86-4	n-butyl acetate
8052-41-3	Stoddard solvent
95-63-6	1,2,4-trimethylbenzene
108-67-8	mesitylene
67-56-1	methanol
100-41-4	ethylbenzene
96-29-7	2-butanone oxime
98-82-8	cumene
107-98-2	1-methoxy-2-propanol
149-57-5	2-ethylhexanoic acid
7732-18-5	water

· **Canadian Ingredient Disclosure list (limit 0.1%)**

95-63-6	1,2,4-trimethylbenzene
---------	------------------------

(Contd. on page 12)

CA

Safety Data Sheet
according to HPR, Schedule 1



Printing date 06/20/2017

Reviewed on 06/20/2017

Trade name: 2800 Series Low VOC Rust Shield

(Contd. of page 11)

108-67-8	mesitylene
100-41-4	ethylbenzene
· Canadian Ingredient Disclosure list (limit 1%)	
67-64-1	acetone
107-87-9	pentan-2-one
14808-60-7	Quartz (SiO ₂)
1333-86-4	Carbon black
108-88-3	toluene
111-76-2	2-butoxyethanol

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



GHS02 GHS07 GHS08

- **Signal word** *Danger*
- **Hazard-determining components of labeling:**
Alkyd Resin
Quartz (SiO₂)
Solvent naphtha (petroleum), light arom.
toluene
- **Hazard statements**
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H340 May cause genetic defects.
H350 May cause cancer.
H361 Suspected of damaging fertility or the unborn child.
H371 May cause damage to organs.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.

- **Precautionary statements**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
P242 Use non-sparking tools.
P243 Take actions to prevent static discharges.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

(Contd. on page 13)

CA

Safety Data Sheet

according to HPR, Schedule 1



Printing date 06/20/2017

Reviewed on 06/20/2017

Trade name: 2800 Series Low VOC Rust Shield

(Contd. of page 12)

- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.*
- P308+P313 IF exposed or concerned: Get medical advice/attention.*
- P314 Get medical advice/attention if you feel unwell.*
- P321 Specific treatment (see on this label).*
- P332+P313 If skin irritation occurs: Get medical advice/attention.*
- P337+P313 If eye irritation persists: Get medical advice/attention.*
- P362+P364 Take off contaminated clothing and wash it before reuse.*
- P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.*
- P403+P235 Store in a well-ventilated place. Keep cool.*
- P405 Store locked up.*
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **National regulations:**

· **Additional classification according to Decree on Hazardous Materials:**

Carcinogenic hazardous material group III (dangerous).

· **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· **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 (sgaver@semproducts.com)

· **Date of preparation / last revision** 06/20/2017 / 6

· **Abbreviations and acronyms:**

ICAO: International Civil Aviation Organisation

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· *** Data compared to the previous version altered.**

CA