



Safety Data Sheet
 prepared to UN GHS Revision 3

1. Identification of the Substance/Mixture and the Company/Undertaking

- 1.1 Product Identifier** 1000A1NL
- Product Name:** CARBOGUARD 893 SG PART A **Revision Date:** 08/18/2015
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Component of multicomponent industrial coatings - Industrial use. **Supersedes Date:** 05/30/2015
- 1.3 Details of the supplier of the safety data sheet**
- Manufacturer:** Carboline Company
 2150 Schuetz Road
 St. Louis, MO USA 63146
- Regulatory / Technical Information:
 Contact Carboline Technical Services at
 1-800-848-4645
- Datasheet Produced by:** Burst, Chris - ehs@stoncor.com
- 1.4 Emergency telephone number:** CHEMTREC 1-800-424-9300 (Inside US)
 CHEMTREC +1 703 5273887 (Outside US)
 HEALTH - Pittsburgh Poison Control 1-412-681-6669

2. Hazard Identification

2.1 Classification of the substance or mixture

Hazardous to the aquatic environment, Chronic, category 2
 Carcinogenicity, category 1A
 Eye Irritation, category 2
 Flammable Liquid, category 3
 STOT, single exposure, category 1
 Skin Irritation, category 2
 Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

MICROCRYSTALLINE SILICA, EPOXY RESIN

GHS HAZARD STATEMENTS

| | | |
|---|---------|--|
| Flammable Liquid, category 3 | H226 | Flammable liquid and vapour. |
| Skin Irritation, category 2 | H315 | Causes skin irritation. |
| Skin Sensitizer, category 1 | H317 | May cause an allergic skin reaction. |
| Eye Irritation, category 2 | H319 | Causes serious eye irritation. |
| Carcinogenicity, category 1A | H350-1A | May cause cancer. |
| STOT, single exposure, category 1 | H370 | Causes damage to organs. |
| Hazardous to the aquatic environment, Chronic, category 2 | H411 | Toxic to aquatic life with long lasting effects. |

GHS PRECAUTION PHRASES

| | |
|--------------|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P210 | Keep away from heat/sparks/open flames/hot surfaces. - No smoking. |
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P264 | Wash hands thoroughly after handling. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P284 | Wear respiratory protection. |
| P302+352 | IF ON SKIN: Wash with plenty of soap and water. |
| P305+351+338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. |
| P307+311 | IF exposed, call a POISON CENTER or doctor/physician. |
| P308+313 | IF exposed or concerned: Get medical advice/attention |
| P314 | Get medical advice/attention if you feel unwell. |
| P332+313 | If skin irritation occurs: Get medical advice/attention. |
| P333+313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P391 | Collect spillage. |
| P403+233 | Store in a well-ventilated place. Keep container tightly closed. |

2.3 Other hazards

Not applicable

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

3. Composition/Information On Ingredients

3.2 Mixtures

Hazardous Ingredients

| <u>CAS-No.</u> | <u>Chemical Name</u> | <u>%</u> |
|----------------|------------------------------|----------|
| 14808-60-7 | MICROCRYSTALLINE SILICA | 25-50 |
| 13463-67-7 | TITANIUM DIOXIDE | 25-50 |
| 25036-25-3 | EPOXY RESIN | 10-25 |
| 25068-38-6 | EPOXY RESIN | 10-25 |
| 108-38-3 | META-XYLENE | 2.5-10 |
| 106-42-3 | PARA-XYLENE | 2.5-10 |
| 7779-90-0 | ZINC PHOSPHATE | 2.5-10 |
| 1333-86-4 | CARBON BLACK | 2.5-10 |
| 100-41-4 | ETHYL BENZENE | 2.5-10 |
| 108-65-6 | 1-METHOXY-2-PROPANOL ACETATE | 2.5-10 |
| 95-47-6 | ORTHO-XYLENE | 2.5-10 |
| 13517-08-3 | BARIUM PHOSPHATE | 0.1-1.0 |
| 1317-65-3 | LIMESTONE | <0.1 |

| <u>CAS-No.</u> | <u>GHS Symbols</u> | <u>GHS Hazard Statements</u> | <u>M-Factors</u> |
|----------------|--------------------|------------------------------|------------------|
| 14808-60-7 | GHS08 | H350-370 | 0 |
| 13463-67-7 | | | 0 |
| 25036-25-3 | GHS07 | H315-317-319 | 0 |
| 25068-38-6 | GHS07-GHS09 | H315-317-319-335-411 | 0 |
| 108-38-3 | GHS02-GHS07 | H226-312-315-332 | 0 |
| 106-42-3 | GHS02-GHS07-GHS08 | H226-312-315-332-335-371 | 0 |
| 7779-90-0 | GHS09 | H332-400-410 | 0 |
| 1333-86-4 | GHS08 | H351 | 0 |
| 100-41-4 | GHS02-GHS07 | H225-332 | 0 |
| 108-65-6 | GHS02 | H226 | 0 |
| 95-47-6 | GHS02-GHS07 | H226-312-315-332 | 0 |
| 13517-08-3 | | | 0 |
| 1317-65-3 | GHS07 | H315-319 | 0 |

Additional Information: The text for GHS Hazard Statements shown above (if any) is given in Section 16.

4. First-aid Measures

4.1 Description of First Aid Measures

AFTER INHALATION: Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention.

AFTER SKIN CONTACT: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation persists, call a physician.

AFTER EYE CONTACT: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

AFTER INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed. Irritating to eyes and skin. Risk of serious damage to the lungs (by aspiration). Vapours may cause drowsiness and dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

When symptoms persist or in all cases of doubt seek medical advice.

5. Fire-fighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Flammable liquid. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Vapors may travel to areas away from work site before igniting/flashing back to vapor source. Provide adequate ventilation. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Keep away from heat/sparks/open

flames/hot surfaces. - No smoking. Electrical installations / working materials must comply with the technological safety standards. Wear shoes with conductive soles.

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Cool containers / tanks with water spray. Flammable.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

For personal protection see section 8. Ensure adequate ventilation. Evacuate personnel to safe areas. Evacuate personnel to safe areas. Remove all sources of ignition. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains.

6.3 Methods and material for containment and cleaning up

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

Please refer to disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

7. Handling and Storage

7.1 Precautions for safe handling

INSTRUCTIONS FOR SAFE HANDLING : Keep containers dry and tightly closed to avoid moisture absorption and contamination. Prepare the working solution as given on the label(s) and/or the user instructions. Do not breathe vapours or spray mist. Ensure all equipment is electrically grounded before beginning transfer operations. Do not use sparking tools. Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation/personal protection.

PROTECTION AND HYGIENE MEASURES : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Heat, flames and sparks.

STORAGE CONDITIONS: Keep container closed when not in use. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

No specific advice for end use available.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (US)

| Name | % | ACGIH TLV-TWA | ACGIH TLV-STEL | OSHA PEL-TWA | OSHA PEL-CEILING | OEL Note |
|------------------------------|---------|--------------------------|----------------|--------------|------------------|----------|
| MICROCRYSTALLINE SILICA | 25-50 | 0.025 MG/M3 (respirable) | N/E | 0.1 MG/M3 | N/E | |
| TITANIUM DIOXIDE | 25-50 | 10 MGM3 | N/E | 10 MGM3 | N/E | |
| EPOXY RESIN | 10-25 | N/E | N/E | N/E | N/E | |
| EPOXY RESIN | 10-25 | N/E | N/E | N/E | N/E | |
| META-XYLENE | 2.5-10 | 100 PPM | 150 PPM | 435 MG/M3 | N/E | |
| PARA-XYLENE | 2.5-10 | 100 PPM | 150 PPM | 435 MGM3 | N/E | |
| ZINC PHOSPHATE | 2.5-10 | 10 mg/m3 | 10 mg/m3 | N/E | N/E | |
| CARBON BLACK | 2.5-10 | 3.0 MG/M3 | N/E | 3.5 MG/M3 | N/E | |
| ETHYL BENZENE | 2.5-10 | 20 PPM | N/E | 435 MGM3 | N/E | |
| 1-METHOXY-2-PROPANOL ACETATE | 2.5-10 | N/E | N/E | N/E | N/E | |
| ORTHO-XYLENE | 2.5-10 | 100 PPM | 150 PPM | 435 MG/M3 | N/E | |
| BARIUM PHOSPHATE | 0.1-1.0 | N/E | N/E | N/E | N/E | |
| LIMESTONE | <0.1 | N/E | N/E | 5 MGM3 | N/E | |

FURTHER INFORMATION: Refer to the regulatory exposure limits for the workforce enforced in each country.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: In order to avoid inhalation of spray-mist and sanding dust, all spraying and sanding must be done wearing adequate respirator. Use only with ventilation to keep levels below exposure guidelines reported in this document. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use State or federally approved supplied air respirator. For silica containing coatings in a liquid state, and/or if no exposure limits are established above, air-supplied respirators are generally not required.

EYE PROTECTION: Safety glasses with side-shields.

HAND PROTECTION: Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Impervious gloves. Request information on glove permeation properties from the glove supplier.

OTHER PROTECTIVE EQUIPMENT: Ensure that eyewash stations and safety showers are close to the workstation location. Lightweight protective clothing

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

| | |
|-------------------------------------|--------------------------------|
| Appearance: | Viscous Liquid, Various Colors |
| Physical State | Liquid |
| Odor | Solvent |
| Odor threshold | N/D |
| pH | N/D |
| Melting point / freezing point (°C) | N/D |
| Boiling point/range (°C) | 149 F (65 C) - 500 F (260 C) |
| Flash Point, (°C) | 24 |

| | |
|---|-------------------|
| Evaporation rate | Slower than Ether |
| Flammability (solid, gas) | Not determined |
| Upper/lower flammability or explosive limits | 0.9 - 13.1 |
| Vapour Pressure, mmHg | N/D |
| Vapour density | Heavier than Air |
| Relative density | Not determined |
| Solubility in / Miscibility with water | N/D |
| Partition coefficient: n-octanol/water | Not determined |
| Auto-ignition temperature (°C) | Not determined |
| Decomposition temperature (°C) | Not determined |
| Viscosity | Unknown |
| Explosive properties | Not determined |
| Oxidising properties | Not determined |

9.2 Other information

| | |
|--|-----------|
| VOC Content g/l: | 336 |
| Specific Gravity (g/cm³) | app. 1.47 |

10. Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: N/D

Inhalation LC50: N/D

Irritation: Unknown

Corrosivity: Unknown

Sensitization: Unknown

Repeated dose toxicity: Unknown

Carcinogenicity: Unknown

Mutagenicity: Unknown

Toxicity for reproduction: Unknown

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

| <u>CAS-No.</u> | <u>Chemical Name</u> | <u>Oral LD50</u> | <u>Dermal LD50</u> | <u>Vapor LC50</u> |
|----------------|------------------------------|-------------------------|-----------------------------|----------------------------|
| 14808-60-7 | MICROCRYSTALLINE SILICA | Not Available | | Not Available |
| 13463-67-7 | TITANIUM DIOXIDE | 25000 mg/m3, oral (rat) | | Not Available |
| 25036-25-3 | EPOXY RESIN | >2000 mg/kg, oral, rat | >2000 mg/kg, dermal, rat | Not Available |
| 25068-38-6 | EPOXY RESIN | 11400 mg/kg, rat, oral | 23000 mg/kg, dermal, rabbit | >20 mL/kg skin, sensitizer |
| 108-38-3 | META-XYLENE | Not Available | | Not Available |
| 106-42-3 | PARA-XYLENE | Not Available | | Not Available |
| 7779-90-0 | ZINC PHOSPHATE | 3846mg/kg, oral rat | Not Available | 11.54 mg/L, inh |
| 1333-86-4 | CARBON BLACK | 8000 mg/kg oral, rat | | Not Available |
| 100-41-4 | ETHYL BENZENE | 3500 mg/kg rat, oral | >5000 mg/l, dermal rabbit | 17.2 mg/L Inh, Rat, 4Hr |
| 108-65-6 | 1-METHOXY-2-PROPANOL ACETATE | 8532 mg/kg, oral (rat) | >5000 mg/kg | 101 ppm/4 hr, rat, inh |
| 95-47-6 | ORTHO-XYLENE | Not Available | | Not Available |
| 1317-65-3 | LIMESTONE | 6450 mg/kg, oral, rat | | Not Available |

Additional Information:

Harmful if swallowed. Irritating to eyes and skin. Risk of serious damage to the lungs (by aspiration). Vapours may cause drowsiness and dizziness.

12. Ecological Information

| | |
|---|--|
| 12.1 Toxicity: | |
| EC50 48hr (Daphnia): | Unknown |
| IC50 72hr (Algae): | Unknown |
| LC50 96hr (fish): | Unknown |
| 12.2 Persistence and degradability: | Unknown |
| 12.3 Bioaccumulative potential: | Unknown |
| 12.4 Mobility in soil: | Unknown |
| 12.5 Results of PBT and vPvB assessment: | The product does not meet the criteria for PBT/vPvB in accordance with Annex XIII. |
| 12.6 Other adverse effects: | Unknown |

| <u>CAS-No.</u> | <u>Chemical Name</u> | <u>EC50 48hr</u> | <u>IC50 72hr</u> | <u>LC50 96hr</u> |
|----------------|------------------------------|-------------------------------------|--|-------------------------------------|
| 14808-60-7 | MICROCRYSTALLINE SILICA | No information | No information | No information |
| 13463-67-7 | TITANIUM DIOXIDE | No information | No information | No information |
| 25036-25-3 | EPOXY RESIN | No information | No information | No information |
| 25068-38-6 | EPOXY RESIN | 2.1 mg/l (daphnia) | 11 mg/l (algae) | 1.3 mg/l (fish) |
| 108-38-3 | META-XYLENE | No information | No information | No information |
| 106-42-3 | PARA-XYLENE | No information | No information | No information |
| 7779-90-0 | ZINC PHOSPHATE | 0.04 - 0.86 mg/l (Daphnia Magna) | 0.136 - 0.150 mg/l (Selenastrum capricornutum) | 0.14 - 0.26 mg/l (Rainbow Trout) |
| 1333-86-4 | CARBON BLACK | No information | No information | No information |
| 100-41-4 | ETHYL BENZENE | No information | No information | No information |
| 108-65-6 | 1-METHOXY-2-PROPANOL ACETATE | No information | No information | No information |
| 95-47-6 | ORTHO-XYLENE | No information | No information | No information |
| 13517-08-3 | BARIUM PHOSPHATE | No information | No information | No information |
| 1317-65-3 | LIMESTONE | No information | No information | No information |

13. Disposal Considerations

- 13.1 WASTE TREATMENT METHODS:** Do not burn, or use a cutting torch on, the empty drum. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

| | | |
|------|--|-------------------------------------|
| 14.1 | UN number | UN 1263 |
| 14.2 | UN proper shipping name | Paint |
| | Technical name | N/A |
| 14.3 | Transport hazard class(es) | 3 |
| | Subsidiary shipping hazard | N/A |
| 14.4 | Packing group | III |
| 14.5 | Environmental hazards | Marine Pollutant: Yes (Epoxy Resin) |
| 14.6 | Special precautions for user | Unknown |
| | EmS-No.: | F-E, S-E |
| 14.7 | Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code | Unknown |

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation for the substance or mixture:

U.S. Federal Regulations: As follows -

CERCLA - Sara Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|----------------------|----------------|
| META-XYLENE | 108-38-3 |
| PARA-XYLENE | 106-42-3 |
| ZINC PHOSPHATE | 7779-90-0 |
| ETHYL BENZENE | 100-41-4 |
| ORTHO-XYLENE | 95-47-6 |

Toxic Substances Control Act:

All components of this product are either listed on the TSCA Inventory or are exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|----------------------|----------------|
|----------------------|----------------|

No TSCA 12(b) components exist in this product.

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|----------------------|----------------|
|----------------------|----------------|

No NJ Right-To-Know components exist in this product.

Pennsylvania Right-To-Know

The following non-hazardous ingredients are present in the product at greater than 3%.

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|----------------------|----------------|
| IRON OXIDE | 1309-37-1 |
| COLOR PIGMENT | 5567-15-7 |

California Proposition 65:

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|-------------------------|----------------|
| MICROCRYSTALLINE SILICA | 14808-60-7 |
| TITANIUM DIOXIDE | 13463-67-7 |
| CARBON BLACK | 1333-86-4 |
| ETHYL BENZENE | 100-41-4 |
| FORMALDEHYDE | 50-00-0 |
| METHYL ISOBUTYL KETONE | 108-10-1 |
| BENZENE | 71-43-2 |
| CUMENE | 98-82-8 |

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|------------------------|----------------|
| TOLUENE | 108-88-3 |
| METHYL ALCOHOL | 67-56-1 |
| METHYL ISOBUTYL KETONE | 108-10-1 |
| BENZENE | 71-43-2 |

International Regulations: As follows -*** Canadian DSL:**

No Information

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16. Other Information**Text for GHS Hazard Statements shown in Section 3 describing each ingredient:**

| | |
|------|---|
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H350 | May cause cancer. |
| H351 | Suspected of causing cancer. |
| H370 | Causes damage to organs. |
| H371 | May cause damage to organs. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |

Reasons for revision

No Information

No Information