

**Safety Data Sheet****Prepared in Accordance with HCS 29
C.F.R. 1910.1200****1. Identification of the Substance/Mixture and the Company/Undertaking**

- 1.1 Product Identifier** 1017B1NL **Revision Date:** 06/06/2023
Product Name: CARBOGUARD 691 **Supersedes Date:** 12/06/2022
PART B
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Component of multicomponent industrial coatings - Industrial use.
- 1.3 Details of the supplier of the safety data sheet**
- Manufacturer:** Carboline Global Inc.
2150 Schuetz Road
St. Louis, MO USA 63146
- Regulatory / Technical Information:
Contact Carboline Technical Services at
1-800-848-4645
- Datasheet Produced by:** Schlereth, Ken - regulatory@carboline.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 3
Carcinogenicity, category 1A
Flammable Liquid, category 2
Reproductive Toxicity, category 2
Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

TOLUENE, MICROCRYSTALLINE SILICA, HYDROCARBON RESIN

HAZARD STATEMENTS

Flammable Liquid, category 2	H225	Highly flammable liquid and vapour.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Carcinogenicity, category 1A	H350-1A	May cause cancer.
Reproductive Toxicity, category 2	H361	Suspected of damaging fertility or the unborn child.
Hazardous to the aquatic environment, Chronic, category 3	H412	Harmful to aquatic life with long lasting effects.

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.
P235	Keep cool.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
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.
P308+313	IF exposed or concerned: Get medical advice/attention
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P403+233	Store in a well-ventilated place. Keep container tightly closed.

ADDITIONAL INFORMATION

Note_P 64742-95-6	Note P : The classification as a carcinogen or mutagen need not apply; the substance, CAS 64742-95-6, contains less than 0,1 % w/w benzene
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2.3 Other hazards

No Information

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>Name According to EEC</u>	<u>EINEC No.</u>	<u>CAS-No.</u>	<u>%</u>	<u>Classifications</u>
TALC	238-877-9	14807-96-6	25 - <50	

TITANIUM DIOXIDE	236-675-5	13463-67-7	10 - <25		
HYDROCARBON POLYMER	262-975-0	PROPRIETARY	2.5 - <10	H411	
TOLUENE	203-625-9	108-88-3	2.5 - <10	H225-304-315-319-332-335-336-361-370-412	Acute Tox. 4 Inhalation, Aquatic Chronic 3, Asp. Tox. 1, Eye Irrit. 2, Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 1, STOT SE 3 NE, STOT SE 3 RTI
HYDROCARBON RESIN	615-276-3	PROPRIETARY	2.5 - <10	H317-331-412	
ALKYLATED POLYAMINE		PROPRIETARY	1.0 - <2.5		
META-XYLENE	203-576-3	108-38-3	1.0 - <2.5	H312-315-332	Acute Tox. 4 Dermal, Acute Tox. 4 Inhalation, Skin Irrit. 2
AROMATIC HYDROCARBON	265-199-0	64742-95-6	1.0 - <2.5	H226-304-315-319-331-335-336-351-411	Acute Tox. 3 Inhalation, Aquatic Chronic 2, Asp. Tox. 1, Carc. 2, Eye Irrit. 2, Flam. Liq. 3, Skin Irrit. 2, STOT SE 3 NE, STOT SE 3 RTI
ETHYL BENZENE	202-849-4	100-41-4	0.1 - <1.0	H225-304-315-319-332-351-373-412	Acute Tox. 4 Inhalation, Aquatic Chronic 3, Asp. Tox. 1, Carc. 2, Eye Irrit. 2, Flam. Liq. 2, Skin Irrit. 2, STOT RE 2
MICROCRYSTALLINE SILICA	238-878-4	14808-60-7	0.1 - <1.0	H350-372	Carc. 1A, STOT RE 1
BENZENE-1, 3-DIMETHANAMINE	216-032-5	1477-55-0	0.1 - <1.0	H302-314-317-332-412	Acute Tox. 4 Inhalation, Acute Tox. 4 Oral, Aquatic Chronic 3, Skin Corr. 1, Skin Sens. 1

CAS-No.	M-Factors
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14807-96-6	0
13463-67-7	0
PROPRIETARY	0
108-88-3	0
PROPRIETARY	0
PROPRIETARY	0
108-38-3	0
64742-95-6	0
100-41-4	0
14808-60-7	0
1477-55-0	0

Remarks: CAS No 13463-67-7: Note 10

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.

FOR SAFETY REASONS NOT TO BE USED: Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

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

SPECIAL FIREFIGHTING PROTECTION EQUIPMENT: No Information

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. 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. For personal protection see section 8.

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

Prevent further leakage or spillage if safe to do so. 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

No 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. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation/personal protection. Wash thoroughly after handling.

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)

The mixing and application to be in accordance with the technical data sheets.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (US)

<u>Name</u>	<u>CAS-No.</u>	<u>ACGIH TWA</u>	<u>ACGIH STEL</u>	<u>ACGIH Ceiling</u>
TALC	14807-96-6	2 MGM3	N/E	N/E
TITANIUM DIOXIDE	13463-67-7	10 mg/m3	N/E	N/E
HYDROCARBON POLYMER	PROPRIETARY	N/E	N/E	N/E
TOLUENE	108-88-3	20 PPM	N/E	N/E
HYDROCARBON RESIN	PROPRIETARY	N/E	N/E	N/E
ALKYLATED POLYAMINE	PROPRIETARY	NE	NE	N/E
META-XYLENE	108-38-3	100 PPM	150 PPM	N/E
AROMATIC HYDROCARBON	64742-95-6	300.0 PPM	N/E	N/E
ETHYL BENZENE	100-41-4	20 PPM	125 ppm	
MICROCRYSTALLINE SILICA	14808-60-7	0.025 MGM3	N/E	N/E
BENZENE-1, 3-DIMETHANAMINE	1477-55-0	N/E	N/E	0.1 MGM3

<u>Name</u>	<u>CAS-No.</u>	<u>OSHA PEL</u>	<u>OSHA STEL</u>
TALC	14807-96-6	0.1 MGM3	N/E
TITANIUM DIOXIDE	13463-67-7	15 MGM3	N/E
HYDROCARBON POLYMER	PROPRIETARY	N/E	N/E
TOLUENE	108-88-3	200 ppm	560 MGM3, 150 PPM
HYDROCARBON RESIN	PROPRIETARY	N/E	N/E
ALKYLATED POLYAMINE	PROPRIETARY	NE	
META-XYLENE	108-38-3	100.00 PPM	N/E
AROMATIC HYDROCARBON	64742-95-6	500.0 PPM	N/E

ETHYL BENZENE	100-41-4	435 MGM3, 100 PPM	545 MGM3, 125 PPM
MICROCRYSTALLINE SILICA	14808-60-7	0.05 MGM3	N/E
BENZENE-1, 3-DIMETHANAMINE	1477-55-0	N/E	N/E

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation.

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. Lightweight protective clothing

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

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 Beige, Grey, Or Red
Physical State	Liquid
Odor	Solvent
Odor threshold	N/D
pH	N/D
Melting point / freezing point (°C)	N/D
Boiling point/range (°C)	150 F (66 C) - 523 F (273 C)
Flash Point (°C)	45F (7C)
Evaporation rate	Slower Than Ether
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	0.9 - 11.2
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:	170
Specific Gravity (g/cm3)	app. 1.88

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: Skin Sensitizer, category 1

Repeated dose toxicity: Unknown

Carcinogenicity: Carcinogenicity, category 1A

Mutagenicity: Unknown

Toxicity for reproduction: Reproductive Toxicity, category 2

STOT-single exposure: Unknown

STOT-repeated exposure: Unknown

Aspiration hazard: 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>	<u>Gas LC50</u>	<u>Dust/Mist LC50</u>
14807-96-6	TALC	No Information	No Information	No Information	No Information	No Information
13463-67-7	TITANIUM DIOXIDE	25000 mg/kg, oral (rat)	No Information	No Information	No Information	No Information
PROPRIETARY	HYDROCARBON POLYMER	>2000 mg/kg, oral, rat	>2000 mg/kg, dermal, rat	Not Available	0.000	0.000
108-88-3	TOLUENE	5000 mg/kg rat oral	12267 mg/kg, dermal, rabbit	8000 ppm/4 hrs, rat, inhalation	No Information	No Information
PROPRIETARY	HYDROCARBON RESIN	>2000 mg.kg, oral, rat	>2000 mg/kg	5 mg/L / 4hr Inh, rat	0.000	0.000
PROPRIETARY	ALKYLATED POLYAMINE	NOT AVAILABLE		NOT AVAILABLE	0.000	0.000
108-38-3	META-XYLENE	No Information	No Information	No Information	No Information	No Information
64742-95-6	AROMATIC HYDROCARBON	2001 mg/kg, rat	2001 mg/kg, rabbit	9 mg/l, rat, 4hr	0.000	0.000
100-41-4	ETHYL BENZENE	3500 mg/kg rat, oral	>5000 mg/l, dermal rabbit	17.2 mg/L Inh, Rat, 4Hr	No Information	No Information
14808-60-7	MICROCRYSTALLINE SILICA	22500 mg/kg	No Information	No Informaiton	No Information	No Information

1477-55-0	BENZENE-1, 3-DIMETHANAMINE	930 mg/kg, oral, rat	No Information	No Information	No Information	No Information
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Additional Information:

This product may contain Ethyl Benzene, which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals. Constituents of this product may include crystalline silica which, if inhalable, may cause silicosis, a form of progressive pulmonary fibrosis. Inhalable crystalline silica is listed by IARC as a group 1 carcinogen (lung) based on sufficient evidence in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a known human carcinogen. This classification is relevant when exposed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. Constituents may also include abestiform or non-asbestiform tremolite or other silicates as impurities, and above the minimum exposure to these impurities in inhalable form may be carcinogenic or cause other serious lung problems.

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>
14807-96-6	TALC	No information	No information	No information
13463-67-7	TITANIUM DIOXIDE	No information	No information	No information
PROPRIETARY	HYDROCARBON POLYMER	1 - 10 mg/L (daphnia)	3.14 mg/L (algae)	25.8 mg/L (fish)
108-88-3	TOLUENE	6 mg/l (Daphnia magna)	12.5 mg/L (Algae)	5.8 mg/L (Fish)
PROPRIETARY	HYDROCARBON RESIN	54 mg/L (daphnia)	>100 mg/L (algae)	25.8 mg/L (fish)
PROPRIETARY	ALKYLATED POLYAMINE	No information	No information	No information
108-38-3	META-XYLENE	No information	No information	No information
64742-95-6	AROMATIC HYDROCARBON	No information	No information	No information
100-41-4	ETHYL BENZENE	1.8 mg/l (Daphnia Magna)	4.6 mg/l (Green Algae)	4.2 mg/l (Rainbow Trout)
14808-60-7	MICROCRYSTALLINE SILICA	No information	No information	No information
1477-55-0	BENZENE-1, 3-DIMETHANAMINE	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	II
14.5	Environmental hazards	Unknown
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:

Flammable (gases, aerosols, liquids, or solids), Carcinogenicity, Reproductive toxicity, Respiratory or Skin Sensitization

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>	<u>%</u>
TOLUENE	108-88-3	4.35
META-XYLENE	108-38-3	1.88
N-BUTANOL	71-36-3	0.89
PARA-XYLENE	106-42-3	0.82
ORTHO-XYLENE	95-47-6	0.59
1,2,4 TRIMETHYLBENZENE	95-63-6	0.02
BENZENE	71-43-2	0

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:

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>
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BARITE
ALKYL PHENOL POLYAMINE

13462-86-7
TRADE SECRET

Pennsylvania Right-To-Know

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

Chemical Name

BARITE
ALKYL PHENOL POLYAMINE
SYNTHETIC RESIN

CAS-No.

13462-86-7
TRADE SECRET
PROPRIETARY

CALIFORNIA PROPOSITION 65

WARNING: Cancer and Reproductive Harm -- www.P65Warnings.ca.gov

International Regulations: As follows -

* Canadian DSL:

This product contains one or several components listed in the Canadian NDSL list.

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.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H350	May cause cancer.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Reasons for revision

No Information

The information contained herein is, to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.

