



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	0410A1NL	Revision Date:	01/05/2021
Product Name:	CARBOZINC 608 HB PART A	Supersedes Date:	01/24/2017
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	<p>Manufacturer: Carboline Company 2150 Schuetz Road St. Louis, MO USA 63146</p> <p>Regulatory / Technical Information: Contact Carboline Technical Services at 1-800-848-4645</p> <p>Datasheet Produced by: Schlereth, Ken - regulatory@carboline.com</p>		
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, Acute, category 1
 Hazardous to the aquatic environment, Chronic, category 1
 Eye Irritation, category 2
 Flammable Liquid, category 3
 Skin Irritation, category 2
 Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product



Signal Word

Warning

Named Chemicals on Label

BISPHENOL A EPOXY RESIN, 1,4-BUTANEDIOL DIGLYCIDYL ETHER

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.
Hazardous to the aquatic environment, Acute, category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment, Chronic, category 1	H410	Very toxic to aquatic life with long lasting effects.

PRECAUTION PHRASES

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

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>CAS-No.</u>	<u>Chemical Name</u>	<u>%</u>
7440-66-6	ZINC (DUST OR FUME)	50 - <75
110-43-0	METHYL N-AMYL KETONE	2.5 - <10
25068-38-6	BISPHENOL A EPOXY RESIN	2.5 - <10
13463-67-7	TITANIUM DIOXIDE	1.0 - <2.5
64742-95-6	AROMATIC HYDROCARBON	1.0 - <2.5
68457-74-9	HYDROXY MODIFIED RESIN	1.0 - <2.5
2425-79-8	1,4-BUTANEDIOL DIGLYCIDYL ETHER	1.0 - <2.5

<u>CAS-No.</u>	<u>GHS Symbols</u>	<u>GHS Hazard Statements</u>	<u>M-Factors</u>
7440-66-6	GHS09	H400-410	0
110-43-0	GHS02-GHS07	H226-302-332	0
25068-38-6	GHS07-GHS09	H315-317-319-411	0
13463-67-7			0
64742-95-6	GHS02-GHS07-GHS08-GHS09	H226-304-315-319-332-335-336-411	0
68457-74-9	GHS07-GHS08	H304-335-336-373	0
2425-79-8	GHS07	H302-312-315-317-319-332	0

Remarks: CAS No. 25068-38-6 identified as CAS No. 1675-54-3, EC No. 216-823-5 under REACH Registration

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: No Information

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: Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

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)

No specific advice for end use available.

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>
ZINC (DUST OR FUME)	7440-66-6	N/E	N/E	N/E
METHYL N-AMYL KETONE	110-43-0	50 PPM	N/E	N/E
BISPHENOL A EPOXY RESIN	25068-38-6	N/E	N/E	N/E
TITANIUM DIOXIDE	13463-67-7	10 mg/m ³	N/E	N/E
AROMATIC HYDROCARBON	64742-95-6	300.0 PPM	N/E	N/E
HYDROXY MODIFIED RESIN	68457-74-9	NE	N/E	N/E
1,4-BUTANEDIOL DIGLYCIDYL ETHER	2425-79-8	N/E	N/E	N/E

<u>Name</u>	<u>CAS-No.</u>	<u>OSHA PEL</u>	<u>OSHA STEL</u>
ZINC (DUST OR FUME)	7440-66-6	5.0 MG/M3	N/E
METHYL N-AMYL KETONE	110-43-0	465 MGM3, 100 PPM	N/E
BISPHENOL A EPOXY RESIN	25068-38-6	N/E	N/E
TITANIUM DIOXIDE	13463-67-7	15 MGM3	N/E
AROMATIC HYDROCARBON	64742-95-6	500.0 PPM	N/E
HYDROXY MODIFIED RESIN	68457-74-9	NE	N/E
1,4-BUTANEDIOL DIGLYCIDYL ETHER	2425-79-8	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 Liquid, Various Colors
Physical State	Liquid
Odor	Solvent
Odor threshold	Not Determined
pH	Not Determined
Melting point / freezing point (°C)	Not Determined
Boiling point/range (°C)	176 F (80 C) - 500 F (260 C)
Flash Point (°C)	48
Evaporation rate	Slower Than Ether
Flammability (solid, gas)	N/D
Upper/lower flammability or explosive	

	0.9 - 7.9
limits	
Vapour Pressure, mmHg	Not Determined
Vapour density	Heavier than Air
Relative density	N/D
Solubility in / Miscibility with water	Not Determined
Partition coefficient: n-octanol/water	N/D
Auto-ignition temperature (°C)	N/D
Decomposition temperature (°C)	N/D
Viscosity	Not Determined
Explosive properties	N/D
Oxidising properties	N/D
9.2 Other information	
VOC Content g/l:	211
Specific Gravity (g/cm3)	app. 3.01

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

STOT-single exposure: No Information

STOT-repeated exposure: No Information

Aspiration hazard: No Information

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>
7440-66-6	ZINC (DUST OR FUME)	>2000 mg/kg, oral, rat	Not Available	Not Available	0.000	>5.4 mg/L, / 4Hr ,rat, inh
110-43-0	METHYL N-AMYL KETONE	1670 mg/kg rat oral	Not Available	2000 ppm, 4 hours	0.000	0.000
25068-38-6	BISPHENOL A EPOXY RESIN	11400 mg/kg, rat, oral	23000 mg/kg, dermal, rabbit	>20 mL/kg skin, sensitizer		
13463-67-7	TITANIUM DIOXIDE	25000 mg/kg, oral (rat)	Not Available	Not Available	No Information	No Information
64742-95-6	AROMATIC HYDROCARBON	4700 mg/kg, oral, rat	Not Available	3670 ppm/8 hours, rat, inhalation	0.000	0.000
68457-74-9	HYDROXY MODIFIED RESIN	Not Available	Not Available	Not Available	0.000	0.000
2425-79-8	1,4-BUTANEDIOL DIGLYCIDYL ETHER	1410 mg/kg, oral, rat		NOT AVAILABLE	0.000	0.000

Additional Information:

No Information

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>
7440-66-6	ZINC (DUST OR FUME)	No information	No information	No information
110-43-0	METHYL N-AMYL KETONE	No information	No information	126 - 137 mg/L - Pimephales promelas
25068-38-6	BISPHENOL A EPOXY RESIN	2.1 mg/l (daphnia)	11 mg/l (algae)	1.3 mg/l (fish)
13463-67-7	TITANIUM DIOXIDE	No information	No information	No information
64742-95-6	AROMATIC HYDROCARBON	No information	No information	No information
68457-74-9	HYDROXY MODIFIED RESIN	No information	No information	No information
2425-79-8	1,4-BUTANEDIOL DIGLYCIDYL ETHER	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. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

- | | |
|--|----------|
| 14.1 UN number | UN1263 |
| 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 | N/A |
| 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), Skin Corrosion or Irritation, Respiratory or Skin Sensitization, Serious eye damage or eye irritation

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>
ZINC (DUST OR FUME)	7440-66-6	51.18

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>
HEMATITE	1317-60-8
ANHYDROUS ALUMINUM SILICATE	66402-68-4
NEPHELINE SYENITE	37244-96-5

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>
HEMATITE	1317-60-8
ANHYDROUS ALUMINUM SILICATE	66402-68-4
NEPHELINE SYENITE	37244-96-5

CALIFORNIA PROPOSITION 65

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

International Regulations: As follows -

* Canadian DSL:

All chemical ingredients included on inventory (DSL)

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:**

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
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.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
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

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.

