



## Safety Data Sheet

prepared to UN GHS Revision 3

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

- 1.1 Product Identifier** 1039B1NL
- Product Name:** THERMALINE 450 NOVOLAC PART B **Revision Date:** 05/30/2015
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Component of multicomponent industrial coatings - Industrial use. **Supersedes Date:** 29/05/2015
- 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:** Schlereth, Ken - 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

Acute Toxicity, Inhalation, category 3  
Carcinogenicity, category 2  
Corrosive to Metals, category 1  
STOT, repeated exposure, category 2  
STOT, single exposure, category 3, RTI  
Skin Corrosion, category 1

## 2.2 Label elements

### Symbol(s) of Product



### Signal Word

Danger

### Named Chemicals on Label

FURFURYL ALCOHOL

### GHS HAZARD STATEMENTS

Corrosive to Metals, category 1	H290	May be corrosive to metals.
Acute Toxicity, Oral, category 4	H302	Harmful if swallowed.
Skin Corrosion, category 1	H314-1	Causes severe skin burns and eye damage.
Acute Toxicity, Inhalation, category 3	H331	Toxic if inhaled.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
Carcinogenicity, category 2	H351	Suspected of causing cancer.
STOT, repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.

### GHS PRECAUTION PHRASES

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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.
P308+313	IF exposed or concerned: Get medical advice/attention
P314	Get medical advice/attention if you feel unwell.
P390	Absorb spillage to prevent material damage.
P406	Store in corrosive resistant/... container with a resistant inner liner.

## 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>
TRADE	CYCLOALIPHATIC AMINE	50-75
SECRET		
98-00-0	FURFURYL ALCOHOL	25-50

<u>CAS-No.</u>	<u>GHS Symbols</u>	<u>GHS Hazard Statements</u>	<u>M-Factors</u>
TRADE			0
SECRET			
98-00-0	GHS06-GHS08	H302-312-319-330-335-351-373	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:** Cover wound with sterile dressing. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention. 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. Do not induce vomiting without medical advice. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately. If accidentally swallowed obtain immediate medical attention.

#### 4.2 Most important symptoms and effects, both acute and delayed

Toxic by inhalation. Toxic in contact with skin. Causes burns. May be harmful if swallowed. Corrosive after repeated contact with skin and mucous membranes.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Immediate medical attention is required.

### 5. Fire-fighting Measures

#### 5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Burning produces obnoxious and toxic fumes. Ammonia gas may be liberated at high temperatures. Do not allow run-off from fire fighting to enter drains or water courses. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Vapors may spread long distances and ignite.

#### 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. Face-shieldWear suitable protective equipment. Avoid contact with skin. Evacuate personnel to safe areas. Use NIOSH approved respiratory protection. Use water spray to cool unopened containers.

## 6. Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Ensure adequate ventilation. Evacuate personnel to safe areas. Remove all sources of ignition.

### 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).

### 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. 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. Avoid breathing vapors, mist or gas.

**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>%</u>	<u>ACGIH TLV- TWA</u>	<u>ACGIH TLV- STEL</u>	<u>OSHA PEL- TWA</u>	<u>OSHA PEL- CEILING</u>	<u>OEL Note</u>
CYCLOALIPHATIC AMINE	50-75	N/E	N/E	N/E	N/E	
FURFURYL ALCOHOL	25-50	10 PPM	15 PPM	40 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:** Face-shield. 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. Use only in an area equipped with explosion proof exhaust ventilation. Ensure adequate ventilation, especially in confined areas.

## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

Appearance:	Amber Liquid
Physical State	Liquid
Odor	Fishy
Odor threshold	
pH	Alkaline
Melting point / freezing point (°C)	N/D
Boiling point/range (°C)	324F (162C). - .
Flash Point, (°C)	95
Evaporation rate	
Flammability (solid, gas)	
Upper/lower flammability or explosive limits	Not determined
Vapour Pressure, mmHg	1.50 mmHg at 21C
Vapour density	
Relative density	
Solubility in / Miscibility with water	Insoluble
Partition coefficient: n-octanol/water	
Auto-ignition temperature (°C)	
Decomposition temperature (°C)	
Viscosity	Unknown
Explosive properties	
Oxidising properties	

### 9.2 Other information

VOC Content g/l:	240
Specific Gravity (g/cm3)	1.09

## 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 (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), 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>
TRADE SECRET	CYCLOALIPHATIC AMINE	>2000 MG/KG, ORAL, RAT		NOT AVAILABLE

**Additional Information:**

Toxic by inhalation. Toxic in contact with skin. Causes burns. May be harmful if swallowed. Corrosive after repeated contact with skin and mucous membranes.

**12. Ecological Information****12.1 Toxicity:**

EC50 48hr (Daphnia): Unknown

IC50 72hr (Algae): Unknown

LC50 96hr (fish): Unknown

<b>12.2 Persistence and degradability:</b>	Unknown
<b>12.3 Bioaccumulative potential:</b>	Unknown
<b>12.4 Mobility in soil:</b>	Unknown
<b>12.5 Results of PBT and vPvB assessment:</b>	The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.
<b>12.6 Other adverse effects:</b>	Unknown

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
TRADE SECRET	CYCLOALIPHATIC AMINE	No information	No information	No information
98-00-0	FURFURYL ALCOHOL	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

<b>14.1 UN number</b>	UN 2922
<b>14.2 UN proper shipping name</b>	Corrosive Liquid, Toxic, n.o.s.
<b>Technical name</b>	Cycloaliphatic Amine, Furfuryl Alcohol
<b>14.3 Transport hazard class(es)</b>	8
<b>Subsidiary shipping hazard</b>	6
<b>14.4 Packing group</b>	III
<b>14.5 Environmental hazards</b>	Unknown
<b>14.6 Special precautions for user</b>	Unknown
<b>EmS-No.:</b>	F-A, S-B
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code</b>	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:

Acute 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:

No Sara 313 components exist in this product.

**Toxic Substances Control Act:**

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. Clean Air Act:**

EPA Coating Category:

EPA VOC Content Limit (g/l):

Product VOC Content (g/l)

Thinning Recommendations:

Application Recommendations:

If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.  
May be fatal if swallowed. Harmful if swallowed.

**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.

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%.

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

**California Proposition 65:**

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

No Proposition 65 Carcinogens exist in this product.

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

No Proposition 65 Reproductive Toxins exist in this product.

**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:

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

### Reasons for revision

No Information

No Information

