



Safety Data Sheet
prepared to UN GHS Revision 3

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

- 1.1 Product Identifier** 1032B1NL
- Product Name:** PHENOLINE 353 PART B **Revision Date:** 06/16/2017
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Component of multicomponent industrial coatings - Industrial use. **Supersedes Date:** 07/27/2016
- 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 2
 Hazardous to the aquatic environment, Chronic, category 3
 Carcinogenicity, category 2
 Flammable Liquid, category 3
 Corrosive to Metals, category 1
 Respiratory Sensitizer, category 1
 Skin Corrosion, category 1
 Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product



Signal Word

danger

Named Chemicals on Label

TRIS-2,4,6- (DIMETHYLAMINOMETHYL)PHENOL, BENZYL ALCOHOL, DIETHYLENTRIAMINE, DIAMINOCYCLOHEXANE, CYCLOHEXANAMINE, 4,4'-METHYLENEBIS (O-ETHYLANILINE), AMINE POLYMER

HAZARD STATEMENTS

Flammable Liquid, category 3	H226	Flammable liquid and vapour.
Corrosive to Metals, category 1	H290	May be corrosive to metals.
Acute Toxicity, Oral, category 4	H302	Harmful if swallowed.
Acute Toxicity, Dermal, category 4	H312	Harmful in contact with skin.
Skin Corrosion, category 1	H314-1	Causes severe skin burns and eye damage.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Acute Toxicity, Inhalation, category 2	H330-2	Fatal if inhaled.
Respiratory Sensitizer, category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Carcinogenicity, category 2	H351	Suspected of causing cancer.
Hazardous to the aquatic environment, Chronic, category 3	H412	Harmful to aquatic life with long lasting effects.

PRECAUTION PHRASES

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.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P285	In case of inadequate ventilation wear respiratory protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302	IF ON SKIN:
P302+352	IF ON SKIN: Wash with plenty of soap and water.
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.
P308+313	IF exposed or concerned: Get medical advice/attention
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P341	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342+311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P352	Wash with plenty of soap and water.
P390	Absorb spillage to prevent material damage.
P403+233	

P406

Store in a well-ventilated place. Keep container tightly closed.
Store in corrosive resistant/... container with a resistant inner liner.

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>
100-51-6	BENZYL ALCOHOL	25-50
135108-88-2	AMINE POLYMER	25-50
19900-65-3	4,4'-METHYLENEBIS (O-ETHYLANILINE)	10-25
67-63-0	ISOPROPANOL	2.5-10
694-83-7	DIAMINOCYCLOHEXANE	2.5-10
111-40-0	DIETHYLENTRIAMINE	2.5-10
1761-71-3	CYCLOHEXANAMINE	2.5-10
90-72-2	TRIS-2,4,6- (DIMETHYLAMINOMETHYL)PHENOL	1.0-2.5

<u>CAS-No.</u>	<u>GHS Symbols</u>	<u>GHS Hazard Statements</u>	<u>M-Factors</u>
100-51-6	GHS07	H302-312-319-332	0
135108-88-2	GHS05-GHS07	H302-312-314	0
19900-65-3	GHS07-GHS08-GHS09	H302-312-315-317-319-332-334-351-400	0
67-63-0	GHS02-GHS07	H225-319-336	0
111-40-0	GHS05-GHS06	H302-312-314-317-330-335	0
694-83-7	GHS05-GHS07	H302-312-314-317	0
1761-71-3	GHS05-GHS07-GHS08-GHS09	H314-317-373-411	0
90-72-2	GHS07	H315-319-302	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. Causes burns. Risk of serious damage to the lungs (by aspiration). Corrosive after repeated contact with skin and mucous membranes. Vapours may cause drowsiness and dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

Immediate medical attention is required.

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. 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

For personal protection see section 8. Ensure adequate ventilation. Evacuate personnel to safe areas. Evacuate personnel to safe areas. Remove all sources of ignition. 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

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). 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
BENZYL ALCOHOL	25-50	N/E	N/E	N/E	N/E	
AMINE POLYMER	25-50	N/E	N/E	N/E	N/E	
4,4'-METHYLENEBIS (O-ETHYLANILINE)	10-25	N/E	N/E	N/E	N/E	
ISOPROPANOL	2.5-10	200 PPM	400 PPM	980 MGM3	N/E	
DIAMINOCYCLOHEXANE	2.5-10	N/E	N/E	N/E	N/E	
DIETHYLENETRIAMINE	2.5-10	1 PPM	N/E	4 MGM3	N/E	
CYCLOHEXANAMINE	2.5-10	N/E	N/E	N/E	N/E	
TRIS-2,4,6- (DIMETHYLAMINOMETHYL) PHENOL	1.0-2.5	N/E	N/E	N/E	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:	Brown Liquid
Physical State	Liquid
Odor	Ammoniacal
Odor threshold	N/D
pH	N/D
Melting point / freezing point (°C)	N/D
Boiling point/range (°C)	180 F (82 C) - 420 F (216 C)
Flash Point, (°C)	34
Evaporation rate	Slower Than Ether
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive	

	1.3 - 13.0
limits	
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:	206
Specific Gravity (g/cm³)	1.02

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>
100-51-6	BENZYL ALCOHOL	1230 mg/kg rat, oral	2000 mg/kg, dermal, rabbit	4176 mg/l / 4h, Inh, Rat
135108-88-2	AMINE POLYMER	2000 mg/kg, oral, rat		Not Available
19900-65-3	4,4'-METHYLENEBIS (O-ETHYLANILINE)	Not Available		Not Available
67-63-0	ISOPROPANOL	4720 mg/kg rat, oral	12800 mg/kg, dermal, rabbit	22500 ppm/8hrs rat, inhalation
111-40-0	DIETHYLENETRIAMINE	1080 mg/kg, oral, rat	1045 mg/kg, dermal, rabbit	0.07 mg/l, 4 hr, Inh, Rat
694-83-7	DIAMINOCYCLOHEXANE	1170 mg/kg, rat, oral	1870 mg/kg, dermal, rat	Not Available
1761-71-3	CYCLOHEXANAMINE	>2000 mg/kg oral, rat	2110 mg/kg, rat	Not Available
90-72-2	TRIS-2,4,6- (DIMETHYLAMINOMETHYL) PHENOL	2169 mg/kg oral	Not Available	Not Available

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>
100-51-6	BENZYL ALCOHOL	230 mg/l (Daphnia)	700 mg/l (Algae)	10 mg/l (Fish)
135108-88-2	AMINE POLYMER	15.4 mg/l (Daphnia Magna)	43.9 mg/l (Algae)	63 mg/l Guppy (Poecilia reticulata)
19900-65-3	4,4'-METHYLENEBIS (O-ETHYLANILINE)	No information	No information	No information
67-63-0	ISOPROPANOL	No information	No information	No information
694-83-7	DIAMINOCYCLOHEXANE	19.8 mg/l (Daphnia)	29.6 mg/l (Algae)	No information
111-40-0	DIETHYLENETRIAMINE	32 mg/l (Daphnia)	1164 mg/l (Algae)	430 mg/l (Fish)
1761-71-3	CYCLOHEXANAMINE	6.84 mg/l (Daphnia Magna)	140 mg/l (Algae)	>100 mg/l ((Leuciscus idus)
90-72-2	TRIS-2,4,6- (DIMETHYLAMINOMETHYL) PHENOL	No information	84 mg/l (Algae)	175 mg/l (Fish)

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 3469
14.2 UN proper shipping name	Paint, Flammable, Corrosive
Technical name	N/A
14.3 Transport hazard class(es)	3
Subsidiary shipping hazard	8
14.4 Packing group	III
14.5 Environmental hazards	Unknown
14.6 Special precautions for user	Unknown
EmS-No.:	F-E, S-C
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>
ISOPROPANOL	67-63-0

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>
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>
POLYAMINE	TRADE SECRET

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:

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
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.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
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.