



Safety Data Sheet

prepared to UN GHS Revision 3

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

- 1.1 Product Identifier** NC09S1NL
- Product Name:** THERMO-LAG 220 **Revision Date:** 05/30/2015
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Monocomponent industrial coating - 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, Oral, category 4
Reproductive Toxicity, category 1A

2.2 Label elements**Symbol(s) of Product****Signal Word**

Danger

Named Chemicals on Label

ETHYLENE GLYCOL, 2-PHENOXYETHANOL, 1H,3H,5H-OXAZOLO[3,4-C]OXAZOLE, POLY(OXYMETHYLENE) DERIV., CHLORINATED PARAFFIN

GHS HAZARD STATEMENTS

Acute Toxicity, Oral, category 4	H302	Harmful if swallowed.
Reproductive Toxicity, category 1A	H360-1A	May damage fertility or the unborn child.

GHS PRECAUTION PHRASES

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P284	Wear respiratory protection.
P308+P313	IF exposed or concerned: Get medical advice/attention

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>
13463-67-7	TITANIUM DIOXIDE	2.5-10
115-77-5	PENTAERYTHRITOL	2.5-10
107-21-1	ETHYLENE GLYCOL	2.5-10
63449-39-8	CHLORINATED PARAFFIN	2.5-10
122-99-6	2-PHENOXYETHANOL	1.0-2.5
84-74-2	DIBUTYL PHTHALATE	0.1-1.0
56709-13-8	1H,3H,5H-OXAZOLO[3,4-C]OXAZOLE, POLY(OXYMETHYLENE) DERIV.	<0.1
64742-65-0	AROMATIC HYDROCARBON	<0.1

<u>CAS-No.</u>	<u>GHS Symbols</u>	<u>GHS Hazard Statements</u>	<u>M-Factors</u>
13463-67-7			0
115-77-5			0
107-21-1			0
63449-39-8	GHS07	H302-312	0
122-99-6	GHS07	H302-319	0
84-74-2	GHS08-GHS09	H360-400	0

56709-13-8	GHS06	H300	0
64742-65-0	GHS08	H350	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

Irritating to eyes and skin. May be harmful if swallowed.

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.

5. Fire-fighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.

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. The product is not flammable.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Ensure adequate ventilation. Use personal protective equipment. Use personal protective equipment. Evacuate personnel to safe areas.

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

No Information

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: Do not freeze.

STORAGE CONDITIONS: Do not freeze. Keep containers tightly closed in a dry, cool and well-ventilated place.

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>
TITANIUM DIOXIDE	2.5-10	10 MGM3	N/E	10 MGM3	N/E	
PENTAERYTHRITOL	2.5-10	10 MG/M3	N/E	5 MGM3	N/E	
ETHYLENE GLYCOL	2.5-10	NE	N/E	NE	125 MGM3	
CHLORINATED PARAFFIN	2.5-10	NE	N/E	NE	NE	
2-PHENOXYETHANOL	1.0-2.5	25.0 PPM SKIN	N/E	N/E	N/E	
DIBUTYL PHTHALATE	0.1-1.0	5 MGM3	N/E	5 MGM3	N/E	
1H,3H,5H-OXAZOLO[3,4-C]OXAZOLE, POLY (OXYMETHYLENE) DERIV.	<0.1	N/E	N/E	N/E	N/E	
AROMATIC HYDROCARBON	<0.1	N/E	N/E	1600 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:	White Or Orange Viscous
Physical State	Liquid
Odor	Ammoniacal

Odor threshold

pH	N/D
Melting point / freezing point (°C)	32F (0C)
Boiling point/range (°C)	212 F (100 C) - 240 F (116 C)
Flash Point, (°C)	94
Evaporation rate	
Flammability (solid, gas)	
Upper/lower flammability or explosive limits	Not determined
Vapour Pressure, mmHg	N/A
Vapour density	
Relative density	
Solubility in / Miscibility with water	N/D
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:	178
Specific Gravity (g/cm3)	1.35

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

Do not freeze.

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>
13463-67-7	TITANIUM DIOXIDE	25000 mg/m3, oral (rat)		Not Available
115-77-5	PENTAERYTHRITOL	25500 mg/kg, oral, rat		Not Available
107-21-1	ETHYLENE GLYCOL	6140 mg/kg, oral, rat	9530 mg/kg, dermal, rabbit	Not Available
63449-39-8	CHLORINATED PARAFFIN	NOT AVAILABLE		NOT AVAILABLE
122-99-6	2-PHENOXYETHANOL	1400 mg/kg, oral, rat		
56709-13-8	1H,3H,5H-OXAZOLO[3,4-C]OXAZOLE, POLY (OXYMETHYLENE) DERIV.	.441 - 1.397 (4 hr, rat)		>2000 mg/kg, oral, rat

Additional Information:

Irritating to eyes and skin. May be harmful if swallowed.

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>
13463-67-7	TITANIUM DIOXIDE	No information	No information	No information
115-77-5	PENTAERYTHRITOL	No information	No information	No information
107-21-1	ETHYLENE GLYCOL	No information	No information	No information
63449-39-8	CHLORINATED PARAFFIN	No information	No information	No information
122-99-6	2-PHENOXYETHANOL	No information	No information	No information
84-74-2	DIBUTYL PHTHALATE	No information	No information	No information
56709-13-8	1H,3H,5H-OXAZOLO[3,4-C]OXAZOLE, POLY (OXYMETHYLENE) DERIV.	No information	No information	No information
64742-65-0	AROMATIC HYDROCARBON	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** None
- 14.2 UN proper shipping name** Not Regulated
- Technical name** N/A
- 14.3 Transport hazard class(es)** None
- Subsidiary shipping hazard** None
- 14.4 Packing group** N/A
- 14.5 Environmental hazards** Unknown
- 14.6 Special precautions for user** Unknown
- EmS-No.:** N/A
- 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:

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>
ETHYLENE GLYCOL	107-21-1
DIBUTYL PHTHALATE	84-74-2

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:

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

May be 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.

<u>Chemical Name</u>	<u>CAS-No.</u>
AMMONIUM POLYPHOSPHATE	68333-79-9
WATER	7732-18-5
VINYL ACRYLIC COPOLYMER EMULSION	TRADE SECRET
MELAMINE	108-78-1

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>
AMMONIUM POLYPHOSPHATE	68333-79-9
WATER	7732-18-5
VINYL ACRYLIC COPOLYMER EMULSION	TRADE SECRET
MELAMINE	108-78-1

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>
TITANIUM DIOXIDE	13463-67-7
MICROCRYSTALLINE SILICA	14808-60-7
FORMALDEHYDE	50-00-0
ETHYLENE OXIDE	75-21-8
1,4-DIOXANE	123-91-1
ACETALDEHYDE	75-07-0

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>
ETHYLENE OXIDE	75-21-8

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:

H300	Fatal if swallowed.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H319	Causes serious eye irritation.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H400	Very toxic to aquatic life.

Reasons for revision

No Information

No Information