



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	NC10S1NL	Revision Date:	11/03/2023
Product Name:	THERMO-LAG 270	Supersedes Date:	12/06/2022
1.2 Relevant identified uses of the substance or mixture and uses advised against	Monocomponent industrial coating - Industrial use.		
1.3 Details of the supplier of the safety data sheet	<p>Manufacturer: Carboline Global Inc. 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, Chronic, category 2
 Carcinogenicity, category 1A
 Reproductive_ToxicityFD_category_1B
 Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

TRI-CRESYL PHOSPHATE, BARIUM METABORATE MONOHYDRATE, MICROCRYSTALLINE SILICA

HAZARD STATEMENTS

Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Carcinogenicity, category 1A	H350-1A	May cause cancer.
Reproductive_ToxicityFD_category_1B	H360FD	May damage fertility. May damage the unborn child.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic 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.
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
P308+P313	IF exposed or concerned: Get medical advice/attention
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P391	Collect spillage.
P501	Dispose of contents/container to waste treatment/disposal facility in accordance with local, state, and federal regulations.

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>
TRI-CRESYL PHOSPHATE	215-548-8	1330-78-5	2.5 - <10	H317-332-361-373-400-410
BARIUM METABORATE MONOHYDRATE	237-222-4	13701-59-2	1.0 - <2.5	H301-332-360FD Acute Tox. 3 Oral, Acute Tox. 4 Inhalation, Repr. 1B

SODIUM TETRABORATE	603-411-9	1303-96-4	1.0 - <2.5	H319-330-361	Acute Tox. 2 Inhalation, Eye Irrit. 2, Repr. 2
SOLVENT NAPHTHA	265-149-8	64742-47-8	1.0 - <2.5	H304-315-335-336	Asp. Tox. 1, Skin Irrit. 2, STOT SE 3 NE, STOT SE 3 RTI
OCTYLPHENOXY	618-541-1	9036-19-5	0.1 - <1.0	H302-318-412	Acute Tox. 4 Oral, Aquatic Chronic 3, Eye Dam. 1
TITANIUM DIOXIDE	236-675-5	13463-67-7	0.1 - <1.0		
MICROCRYSTALLINE SILICA	238-878-4	14808-60-7	0.1 - <1.0	H350-372	Carc. 1A, STOT RE 1

CAS-No.**M-Factors**

1330-78-5
 13701-59-2
 1303-96-4
 64742-47-8
 9036-19-5
 13463-67-7
 14808-60-7

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

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.

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: None known.

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. The product is not flammable.

SPECIAL FIREFIGHTING PROTECTION EQUIPMENT: No Information

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

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

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 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: 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)

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>
TRI-CRESYL PHOSPHATE	1330-78-5	NE	N/E	N/E
BARIUM METABORATE MONOHYDRATE	13701-59-2	N/E	N/E	N/E
SODIUM TETRABORATE	1303-96-4	2 MGM3	6 MGM3	N/E
SOLVENT NAPHTHA	64742-47-8	100.0 PPM	N/E	N/E
OCTYLPHENOXY	9036-19-5	N/E	N/E	N/E
TITANIUM DIOXIDE	13463-67-7	10 mg/m3	N/E	N/E
MICROCRYSTALLINE SILICA	14808-60-7	0.025 MGM3	N/E	N/E

<u>Name</u>	<u>CAS-No.</u>	<u>OSHA PEL</u>	<u>OSHA STEL</u>
TRI-CRESYL PHOSPHATE	1330-78-5	NE	N/E

BARIUM METABORATE MONOHYDRATE	13701-59-2	0.5 mg/m ³	N/E
SODIUM TETRABORATE	1303-96-4	10 MG/M ³	N/E
SOLVENT NAPHTHA	64742-47-8	500.0 PPM	N/E
OCTYLPHENOXY	9036-19-5	N/E	N/E
TITANIUM DIOXIDE	13463-67-7	15 MGM ³	N/E
MICROCRYSTALLINE SILICA	14808-60-7	0.05 MGM ³	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:	Grey To White Paste
Physical State	Paste
Odor	Ammoniacal
Odor threshold	N/D
pH	N/D
Melting point / freezing point (°C)	N/D
Boiling point/range (°C)	162 F (72 C) - 491 F (255 C)
Flash Point (°C)	300F (148C)
Evaporation rate	Slower Than Ether
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	0.6 - 100.0
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:	29
Specific Gravity (g/cm³)	1.21

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

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>
1330-78-5	TRI-CRESYL PHOSPHATE	>20,000 MG/ KG, ORAL , RAT		11.1 MG/L, RAT, INH	0.000	0.000
13701-59-2	BARIUM METABORATE MONOHYDRATE	Not Available		Not Available	0.000	0.000
1303-96-4	SODIUM TETRABORATE	5560 mg/kg, oral, rat	>2000 m/kg	2.0 mg/l, Inh, rat	0.000	0.000
64742-47-8	SOLVENT NAPHTHA	Not Available	Not Available	Not Available	0.000	0.000
9036-19-5	OCTYLPHENOXY	1700 mg/kg, oral, rat		Not Available	0.000	0.000
13463-67-7	TITANIUM DIOXIDE	25000 mg/kg, oral (rat)	No Information	No Information	No Information	No Information
14808-60-7	MICROCRYSTALLINE SILICA	22500 mg/kg	No Information	No Informaiton	No Information	No Information

Additional Information:

Constituents of this product may include crystalline silica which, if inhalable, may cause silicosis, a form or 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 dei minimus 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>
1330-78-5	TRI-CRESYL PHOSPHATE	No information	No information	No information
13701-59-2	BARIUM METABORATE MONOHYDRATE	No information	No information	No information
1303-96-4	SODIUM TETRABORATE	No information	No information	No information
64742-47-8	SOLVENT NAPHTHA	No information	No information	No information
9036-19-5	OCTYLPHENOXY	No information	No information	No information
13463-67-7	TITANIUM DIOXIDE	No information	No information	No information
14808-60-7	MICROCRYSTALLINE SILICA	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	N/A
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:

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>
BARIUM METABORATE MONOHYDRATE	13701-59-2	1.95

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:

<u>Chemical Name</u>	<u>CAS-No.</u>
ALKANES, C20-28, CHLORO	2097144-43-7

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>
WATER	7732-18-5
ALUMINUM HYDROXIDE	21645-51-2
ACRYLIC EMULSION	TRADE SECRET
VERMICULITE	1318-00-9
FULLERS EARTH	8031-18-3

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>
WATER	7732-18-5
ALUMINUM HYDROXIDE	21645-51-2
ACRYLIC EMULSION	TRADE SECRET
VERMICULITE	1318-00-9
FULLERS EARTH	8031-18-3

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:

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H350	May cause cancer.
H360FD	May damage fertility. May damage the unborn child.
H361	Suspected of damaging fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
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.
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.