

CHEMICAL PRODUCT SAFETY DATA SHEET

Prepared in accordance with GB/T 16483 and GB/T 17519.



Product name: RHEOTEMP 700

Issue date: December-06-2022

Revision date: June-11-2025

Version #: 04

SDS No: RHEOTEMP 700

SECTION 1 Chemical product and company identification

Product Name RHEOTEMP 700
Product Code RHEOTEMP 700
Company name Nye Lubricants, Inc.
A Member of the FUCHS Group
Address 12 Howland Road
Fairhaven, MA 02179
Country USA
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Access code 334212
Website www.nyelubricants.com

Recommended use and Limitations on use

Recommended use Lubricating Grease
Issue date December-06-2022
Revision date June-11-2025
Supersedes date September-26-2024

SECTION 2 Hazards identification

Emergency overview May cause damage to organs through prolonged or repeated exposure. Causes mild skin irritation. May cause an allergic skin reaction. Possible reproductive hazard. Dangerous for the environment if discharged into watercourses.

GHS hazard categories

Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation	Category 3
	Sensitization, skin	Category 1
	Reproductive toxicity (fertility, the unborn child)	Category 2
	Specific target organ toxicity, repeated exposure	Category 2 (adrenal gland)
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 1

Label elements

Pictograms



Signal word

Warning

Hazard statement

H316	Causes mild skin irritation.
H317	May cause an allergic skin reaction.
H361	Suspected of damaging the unborn child.
H361	Suspected of damaging fertility.
H373	May cause damage to organs (adrenal gland) through prolonged or repeated exposure.
H402	Harmful to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement**Prevention**

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P260 Do not breathe dust/fume/gas/mist/vapors/spray.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P308 + P313 IF exposed or concerned: Get medical advice/attention.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
 P362 + P364 Take off contaminated clothing and wash it before reuse.
 P391 Collect spillage.

Safety storage

P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Physical and chemical hazards

The product is stable and non-reactive under normal conditions of use, storage and transport. No unusual fire or explosion hazards noted.

Health hazards

Prolonged inhalation may be harmful. Causes mild skin irritation. May cause an allergic skin reaction. Expected to be a low ingestion hazard. Direct contact with eyes may cause temporary irritation.

Environmental hazards

Very toxic to aquatic life with long lasting effects.

Other hazards

This product contains components considered to have endocrine disrupting properties for environment, according to REACH Article 57(f), Regulation (EU) 2018/605 or Regulation (EU) 2017/2100.

Supplemental information

None.

SECTION 3 Composition/information on ingredients

Substance/mixture	Mixture		
Chemical name	Concentration (%)	CAS Number	
氨基二硫代酸二丁酯 CARBAMODITHIOIC ACID, DIBUTYL-, METHYLENE ESTER	3 - < 5	10254-57-6	
异丙基化苯酚磷酸酯(3:1) PHENOL, ISOPROPYLATED, PHOSPHATE (3:1)	3 - < 5	68937-41-7	
妥尔油脂脂肪酸与硼酸(H ₃ BO ₃)和二乙醇胺的反应产物 FATTY ACIDS, TALL-OIL, REACTION PRODUCTS WITH BORIC ACID (H ₃ BO ₃) AND DIETHANOLAMINE	1 - < 3	91770-03-5	
二壬基萘磺酸钡 NAPHTHALENESULFONIC ACID, DINONYL-, BARIUM SALT	1 - < 3	25619-56-1	
1H-苯三唑-1-甲烷胺, N,N-双(2-乙基己基)-ar-甲基- 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-ar-methyl-	< 1	94270-86-7	
Other components below reportable levels	90 - 100		

SECTION 4 First aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms and health effects	Mild skin irritation. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.
Personal protection for first-aid responders	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

Notes to physician Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

SECTION 5 Fire-fighting measures

Extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Extinguishing media to avoid Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards During fire, gases hazardous to health may be formed.

Special fire fighting procedures Use water spray to cool unopened containers.

Protection of fire-fighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

General fire hazards No unusual fire or explosion hazards noted.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

For emergency responders Keep unnecessary personnel away. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Environmental precautions Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Clean-up methods and materials and containment measures Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Following product recovery, flush area with water.

Small Spills: Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Prevention of secondary hazards Not available.

SECTION 7 Handling and storage

Handling Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Storage Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).
Storage class (TRGS 510): 11 (Combustible solids that cannot be assigned to any of the above storage classes)

SECTION 8 Exposure controls/personal protection

Exposure limits

Occupational Exposure Limits for Hazardous Agents in the Workplace, Chemical Hazardous Agents (GBZ 2.1-2019)

Components	Type	Value
NAPHTHALENESULFONIC ACID, DINONYL-, BARIUM SALT (CAS 25619-56-1)	PC-STEL	1.5 mg/m ³
	PC-TWA	0.5 mg/m ³

Biological limit values No biological exposure limits noted for the ingredient(s).

Monitoring methods Follow standard monitoring procedures.

Engineering measures Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal protective equipment

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection	Wear appropriate chemical resistant gloves.
Eye protection	If contact is likely, safety glasses with side shields are recommended.
Skin and body protection	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.



Hygiene measures	Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.
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SECTION 9 Physical and chemical properties

Appearance	Smooth
Physical state	Solid.
Form	Solid. Semi-solid
Color	Tan.
Odor	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Boiling point, initial boiling point, and boiling range	Not available.
Flash point	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Density	0.86 g/cm ³
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Flammability (solid, gas)	Not available.
Other data	
Dropping point	392 °F (200 °C)
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Shelf life	4 years

SECTION 10 Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11 Toxicological information

Acute toxicity

Components	Species	Test Results
1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-ar-methyl- (CAS 94270-86-7)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg
Oral		
LD50	Rat	3313 mg/kg
PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) (CAS 68937-41-7)		
Acute		
Inhalation		
LC50	Rat	50 mg/l/4h
Oral		
LD50	Rat	30000 mg/kg
Routes of exposure	Inhalation. Skin contact. Eye contact.	
Symptoms	Mild skin irritation. May cause an allergic skin reaction. Dermatitis. Rash.	
Skin corrosion/irritation	Causes mild skin irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitizer	May cause an allergic skin reaction.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Not available.	
Toxic to reproduction	Suspected of damaging fertility. Suspected of damaging the unborn child.	
Specific target organ toxicity following single exposure	Not classified.	
Specific target organ toxicity following repeated exposure	May cause damage to organs (adrenal gland) through prolonged or repeated exposure.	
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	Prolonged inhalation may be harmful. May cause damage to organs through prolonged or repeated exposure.	

SECTION 12 Ecological information

Ecotoxicity	Very toxic to aquatic life with long lasting effects.
Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.
Bioaccumulation	
Mobility in soil	No data available for this product.
Other hazardous effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13 Disposal considerations

Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
Local disposal regulations	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14 Transport information

CNDG	
UN number	UN3077

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PHENOL, ISOPROPYLATED, PHOSPHATE (3:1))

Transport hazard class(es)

Class 9

Subsidiary hazard -

Packing group III

Environmental hazards Yes

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

UN number UN3077

UN proper shipping name Environmentally hazardous substance, solid, n.o.s. (PHENOL, ISOPROPYLATED, PHOSPHATE (3:1))

Transport hazard class(es)

Class 9

Subsidiary hazard -

Packing group III

Environmental hazards Yes

ERG Code 9L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft Allowed with restrictions.

Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN3077

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PHENOL, ISOPROPYLATED, PHOSPHATE (3:1)), MARINE POLLUTANT (PHENOL, ISOPROPYLATED, PHOSPHATE (3:1), 1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-ar-methyl-)

Transport hazard class(es)

Class 9

Subsidiary hazard -

Packing group III

Environmental hazards

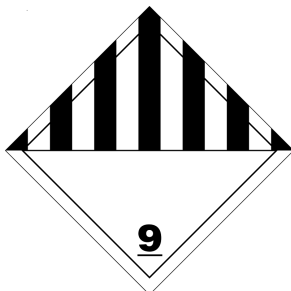
Marine pollutant Yes

EmS F-A, S-F

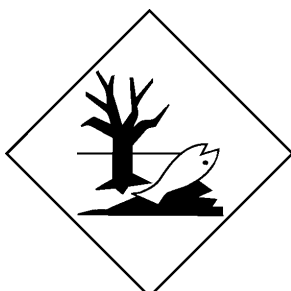
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

CNDG; IATA; IMDG



Marine pollutant



General information

IMDG Regulated Marine Pollutant.

SECTION 15 Regulatory information

Law of the People's Republic of China on Prevention and Control of Occupational Diseases

Classification of occupational disease hazards

Barium and its compounds (CAS 25619-56-1)

Regulations on the Control over Safety of Dangerous Chemicals

Not regulated.

Provision on the Environmental Administration of New Chemical Substances

China Inventory of Existing Chemical Substances

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

SPECIAL CASE

Not applicable.

Other regulations

This safety data sheet conforms to the following laws, regulations and standards:
Measures for the Safe Use of Chemicals in Workplaces
General Rules for Preparation of Precautionary Labels for Chemicals (GB15258-2009)
Regulations on Labor Protection in Workplaces Where Toxic Products Are Used
Packing Symbol of Dangerous Goods(GB190-2009)
Regulations on the Control over Safety of Dangerous Chemicals
Safety Data Sheet for Chemical Products - Content and Order of Sections (GB/T 16483-2008)
Packing - Pictorial Marking for Handling of Goods (GB/T191-2008)

China. National Catalogue of Hazardous Wastes

NAPHTHALENESULFONIC ACID, DINONYL-, BARIUM SALT (CAS 25619-56-1)

Regulatory information

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Montreal Protocol

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

SECTION 16 Other information

References

EPA: AQUIRE database
GB6944-2012: Classification and Code of Dangerous Goods.
GB12268-2012: List of Dangerous Goods.
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents

Disclaimer

Nye Lubricants, Inc. A Member of the FUCHS Group cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

Revision information

Product and Company Identification: Product and Company Identification
SECTION 2 Hazards identification: Environmental hazards
SECTION 2 Hazards identification: Other hazards
Composition / Information on Ingredients: Disclosure Overrides
SECTION 12 Ecological information: Ecotoxicity
Transport Information: Hazreg Values Transportation
GHS: Classification