

# CHEMICAL PRODUCT SAFETY DATA SHEET

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



Product name: FUCHS TIM GREASE 610

Issue date: February-28-2025

Revision date: April-29-2025

Version #: 02

SDS No: 9048

## SECTION 1 Chemical product and company identification

|                                   |                                                     |
|-----------------------------------|-----------------------------------------------------|
| <b>Product Name</b>               | <b>FUCHS TIM GREASE 610</b>                         |
| <b>Company name</b>               | Nye Lubricants, Inc.<br>A Member of the FUCHS Group |
| <b>Address</b>                    | 12 Howland Road<br>Fairhaven, MA 02179              |
| <b>Country</b>                    | USA                                                 |
| <b>Telephone</b>                  | +1 508 996 6721                                     |
| <b>E-mail</b>                     | sds@fuchs.com                                       |
| <b>Emergency telephone number</b> | +86 4001 2001 74                                    |
| <b>Access code</b>                | 334212                                              |
| <b>Website</b>                    | www.nyelubricants.com                               |

### Recommended use and Limitations on use

|                        |                  |
|------------------------|------------------|
| <b>Recommended use</b> | Thermal Grease   |
| <b>Issue date</b>      | February-28-2025 |
| <b>Revision date</b>   | April-29-2025    |
| <b>Supersedes date</b> | February-28-2025 |

## SECTION 2 Hazards identification

|                           |                                                                |
|---------------------------|----------------------------------------------------------------|
| <b>Emergency overview</b> | Dangerous for the environment if discharged into watercourses. |
|---------------------------|----------------------------------------------------------------|

### GHS hazard categories

|                              |                                                                                                                                    |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Physical hazards</b>      | Not classified.                                                                                                                    |
| <b>Health hazards</b>        | Not classified.                                                                                                                    |
| <b>Environmental hazards</b> | Hazardous to the aquatic environment, acute hazard Category 1<br>Hazardous to the aquatic environment, long-term hazard Category 1 |

### Label elements

#### Pictograms



|                    |         |
|--------------------|---------|
| <b>Signal word</b> | Warning |
|--------------------|---------|

### Hazard statement

|      |                                                       |
|------|-------------------------------------------------------|
| H400 | Very toxic to aquatic life.                           |
| H410 | Very toxic to aquatic life with long lasting effects. |

### Precautionary statement

|                       |                                         |
|-----------------------|-----------------------------------------|
| <b>Prevention</b>     |                                         |
| P273                  | Avoid release to the environment.       |
| <b>Response</b>       |                                         |
| P391                  | Collect spillage.                       |
| <b>Safety storage</b> | Store away from incompatible materials. |
| <b>Disposal</b>       |                                         |

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

|                                      |                                                                                                                                           |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Physical and chemical hazards</b> | The product is stable and non-reactive under normal conditions of use, storage and transport. No unusual fire or explosion hazards noted. |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|

|                                 |                                                                                                                                      |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <b>Health hazards</b>           | Prolonged inhalation may be harmful. Expected to be a low ingestion hazard. Direct contact with eyes may cause temporary irritation. |
| <b>Environmental hazards</b>    | Very toxic to aquatic life with long lasting effects.                                                                                |
| <b>Supplemental information</b> | None.                                                                                                                                |

### SECTION 3 Composition/information on ingredients

|                                                                                 |                          |                   |  |
|---------------------------------------------------------------------------------|--------------------------|-------------------|--|
| <b>Substance/mixture</b>                                                        | Mixture                  |                   |  |
| <b>Chemical name</b>                                                            | <b>Concentration (%)</b> | <b>CAS Number</b> |  |
| 氧化锌<br>ZINC OXIDE                                                               | 40 - < 50                | 1314-13-2         |  |
| N-甲基-N-[(9Z)-1-氧代-9-十八烯基]甘氨酸<br>Glycine, N-methyl-N-[(9Z)-1-oxo-9-octadecenyl]- | 1 - < 3                  | 110-25-8          |  |
| Other components below reportable levels                                        | 50 - < 60                |                   |  |

### SECTION 4 First aid measures

|                                                     |                                                                                                                  |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>                                   | Move to fresh air. Call a physician if symptoms develop or persist.                                              |
| <b>Skin contact</b>                                 | Wash off with soap and water. Get medical attention if irritation develops and persists.                         |
| <b>Eye contact</b>                                  | Rinse with water. Get medical attention if irritation develops and persists.                                     |
| <b>Ingestion</b>                                    | Rinse mouth. Get medical attention if symptoms occur.                                                            |
| <b>Most important symptoms and health effects</b>   | Headache. Nausea, vomiting. Coughing.                                                                            |
| <b>Personal protection for first-aid responders</b> | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |
| <b>Notes to physician</b>                           | Treat symptomatically.                                                                                           |

### SECTION 5 Fire-fighting measures

|                                         |                                                                                               |
|-----------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Extinguishing media</b>              | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).                                   |
| <b>Extinguishing media to avoid</b>     | Do not use water jet as an extinguisher, as this will spread the fire.                        |
| <b>Specific hazards</b>                 | During fire, gases hazardous to health may be formed.                                         |
| <b>Special fire fighting procedures</b> | Use water spray to cool unopened containers.                                                  |
| <b>Protection of fire-fighters</b>      | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| <b>General fire hazards</b>             | No unusual fire or explosion hazards noted.                                                   |
| <b>Specific methods</b>                 | Use standard firefighting procedures and consider the hazards of other involved materials.    |

### SECTION 6 Accidental release measures

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

|                                    |                                                                                                                                                                                                    |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>For non-emergency personnel</b> | Wear appropriate personal protective equipment.                                                                                                                                                    |
| <b>For emergency responders</b>    | 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. |

|                                  |                                                                                                                                                                                                                                              |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Environmental precautions</b> | 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. |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                |                                                                                                                                                                                                                         |
|----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Clean-up methods and materials and containment measures</b> | Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS. |
|----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                        |                |
|----------------------------------------|----------------|
| <b>Prevention of secondary hazards</b> | Not available. |
|----------------------------------------|----------------|

### SECTION 7 Handling and storage

|                 |                                                                                                                                                                                                                             |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Handling</b> | Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.                                        |
| <b>Storage</b>  | Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).<br>Storage class (TRGS 510): 13 (Non-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               |
|----------------------------|---------|---------------------|
| ZINC OXIDE (CAS 1314-13-2) | PC-STEL | 5 mg/m <sup>3</sup> |
|                            | PC-TWA  | 3 mg/m <sup>3</sup> |

### 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

Wear safety glasses with side shields (or goggles).

#### Skin and body protection

Wear suitable protective clothing.



### Hygiene measures

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.

## SECTION 9 Physical and chemical properties

### Appearance

#### Physical state

Solid.

#### Form

Solid. Semi-solid

#### Color

White.

### 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

Not available.

### 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

#### Explosive properties

Not explosive.

#### Oxidizing properties

Not oxidizing.

#### Shelf life

5 years

Specific gravity 2.9

## 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                                             | Not available.                                                                                                   |
| Routes of exposure                                         | Inhalation.                                                                                                      |
| Symptoms                                                   | Headache. Nausea, vomiting. Coughing.                                                                            |
| Skin corrosion/irritation                                  | Prolonged skin contact may cause temporary 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                                            | This product is not expected to cause skin sensitization.                                                        |
| 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                                      | This product is not expected to cause reproductive or developmental effects.                                     |
| Specific target organ toxicity following single exposure   | Not classified.                                                                                                  |
| Specific target organ toxicity following repeated exposure | Not classified.                                                                                                  |
| Aspiration hazard                                          | Not an aspiration hazard.                                                                                        |
| Chronic effects                                            | Prolonged inhalation may be harmful.                                                                             |

## 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. (ZINC OXIDE) |

**Transport hazard class(es)**

|                                     |                                                                         |
|-------------------------------------|-------------------------------------------------------------------------|
| <b>Class</b>                        | 9                                                                       |
| <b>Subsidiary hazard</b>            | -                                                                       |
| <b>Packing group</b>                | III                                                                     |
| <b>Environmental hazards</b>        | Yes                                                                     |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |

**IATA**

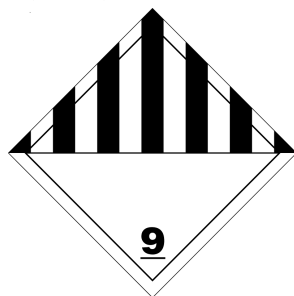
|                                     |                                                                         |
|-------------------------------------|-------------------------------------------------------------------------|
| <b>UN number</b>                    | UN3077                                                                  |
| <b>UN proper shipping name</b>      | Environmentally hazardous substance, solid, n.o.s. (ZINC OXIDE)         |
| <b>Transport hazard class(es)</b>   |                                                                         |
| <b>Class</b>                        | 9                                                                       |
| <b>Subsidiary hazard</b>            | -                                                                       |
| <b>Packing group</b>                | III                                                                     |
| <b>Environmental hazards</b>        | Yes                                                                     |
| <b>ERG Code</b>                     | 9L                                                                      |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Other information</b>            |                                                                         |
| <b>Passenger and cargo aircraft</b> | Allowed with restrictions.                                              |
| <b>Cargo aircraft only</b>          | Allowed with restrictions.                                              |

**IMDG**

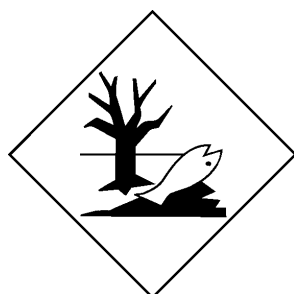
|                                     |                                                                                                                                                 |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>UN number</b>                    | UN3077                                                                                                                                          |
| <b>UN proper shipping name</b>      | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE), MARINE POLLUTANT (ZINC OXIDE, Glycine, N-methyl-N-[(9Z)-1-oxo-9-octadecenyl]-) |
| <b>Transport hazard class(es)</b>   |                                                                                                                                                 |
| <b>Class</b>                        | 9                                                                                                                                               |
| <b>Subsidiary hazard</b>            | -                                                                                                                                               |
| <b>Packing group</b>                | III                                                                                                                                             |
| <b>Environmental hazards</b>        |                                                                                                                                                 |
| <b>Marine pollutant</b>             | Yes                                                                                                                                             |
| <b>EmS</b>                          | F-A, S-F                                                                                                                                        |
| <b>Special precautions for user</b> | 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**

Zinc oxide (CAS 1314-13-2)

**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**

ZINC OXIDE (CAS 1314-13-2)

**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

Composition / Information on Ingredients: Ingredients