

SAFETY DATA SHEET



1. Identification

Product identifier SYNTHETIC OIL A465
Other means of identification None.
Recommended use Lubricating Oil
Recommended restrictions None known.
Manufacturer/Importer/Supplier/Distributor information
Company name Nye Lubricants, Inc.
A Member of the FUCHS Group
Address 12 Howland Road
Fairhaven, MA 02719
USA
Telephone +1 508 996 6721
E-mail sds@fuchs.com

Emergency telephone number +1 866 519 4752
Access code 334212
Website www.nyelubricants.com

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Carcinogenicity Category 2
OSHA defined hazards Not classified.
Label elements



Signal word Warning
Hazard statement Suspected of causing cancer.
Precautionary statement
Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.
Response If exposed or concerned: Get medical advice/attention.
Storage Store locked up.
Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC) None known.
Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT PARAFFINIC		64742-56-9	5 - < 10
PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFINIC		64742-54-7	5 - < 10

Chemical name	Common name and synonyms	CAS number	%
PETROLEUM DISTILLATES, SOLVENT DEWAXED HEAVY PARAFFINIC		64742-65-0	5 - < 10
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC		64742-55-8	3 - < 5
DIPHENYLAMINE		122-39-4	< 1
Other components below reportable levels			60 - < 70

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
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/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	<p>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.</p>
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid prolonged exposure. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC (CAS 64742-55-8)	PEL	5 mg/m3	Mist.
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT PARAFFINIC (CAS 64742-56-9)	PEL	5 mg/m3	Mist.
PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFINIC (CAS 64742-54-7)	PEL	5 mg/m3	Mist.
PETROLEUM DISTILLATES, SOLVENT DEWAXED HEAVY PARAFFINIC (CAS 64742-65-0)	PEL	5 mg/m3	Mist.
		2000 mg/m3 500 ppm	

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value	Form
DIPHENYLAMINE (CAS 122-39-4)	TWA	10 mg/m3	
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC (CAS 64742-55-8)	TWA	5 mg/m3	Inhalable fraction.
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT PARAFFINIC (CAS 64742-56-9)	TWA	5 mg/m3	Inhalable fraction.
PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFINIC (CAS 64742-54-7)	TWA	5 mg/m3	Inhalable fraction.
PETROLEUM DISTILLATES, SOLVENT DEWAXED HEAVY PARAFFINIC (CAS 64742-65-0)	TWA	5 mg/m3	Inhalable fraction.

NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Components	Type	Value
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC (CAS 64742-55-8)	IDLH	2500 mg/m3

NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Components	Type	Value
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT PARAFFINIC (CAS 64742-56-9)	IDLH	2500 mg/m3
PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFINIC (CAS 64742-54-7)	IDLH	2500 mg/m3
PETROLEUM DISTILLATES, SOLVENT DEWAXED HEAVY PARAFFINIC (CAS 64742-65-0)	IDLH	2500 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits (REL)

Components	Type	Value	Form
DIPHENYLAMINE (CAS 122-39-4)	TWA	10 mg/m3	
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC (CAS 64742-55-8)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT PARAFFINIC (CAS 64742-56-9)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFINIC (CAS 64742-54-7)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
PETROLEUM DISTILLATES, SOLVENT DEWAXED HEAVY PARAFFINIC (CAS 64742-65-0)	Ceiling	1800 mg/m3	
	STEL	10 mg/m3	Mist.

Biological limit values
ACGIH Biological Exposure Indices (BEI)

Components	Value	Determinant	Specimen	Sampling Time
DIPHENYLAMINE (CAS 122-39-4)	5 %	Methemoglobin	Hemoglobin in blood	*

* - For sampling details, please see the source document.

Appropriate engineering controls

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.

Individual protection measures, such as personal protective equipment

Eye/face protection	Chemical respirator with organic vapor cartridge and full facepiece.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Use of an impervious apron is recommended.

Respiratory protection

Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

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.

9. Physical and chemical properties

Appearance**Physical state** Liquid.**Form** Liquid.**Color** Not available.**Odor** Not available.**Odor threshold** Not available.**pH** Not available.**Melting point/freezing point** Not available.**Initial boiling point and boiling range** Not available.**Flash point** 474.8 °F (246.0 °C) ASTM D-92**Evaporation rate** Not available.**Flammability (solid, gas)** Not applicable.**Upper/lower flammability or explosive limits****Explosive limit - lower (%)** Not available.**Explosive limit - upper (%)** Not available.**Vapor pressure** Not available.**Vapor density** Not available.**Relative 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.**Viscosity** Not available.**Other information****Density** 0.92 g/cm³**Explosive properties** Not explosive.**Flammability class** Combustible IIIB estimated**Kinematic viscosity** 62.1 cSt**Kinematic viscosity temperature** 104 °F (40 °C)**Oxidizing properties** Not oxidizing.**Pour point** -65.2 °F (-54 °C)**Shelf life** 4 years

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.**Chemical 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.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity	Not known.
Skin corrosion/irritation	Due to partial or complete lack of data the classification is not possible.
Serious eye damage/eye irritation	Due to partial or complete lack of data the classification is not possible.

Respiratory or skin sensitization

Respiratory sensitization	Due to partial or complete lack of data the classification is not possible.
Skin sensitization	Due to partial or complete lack of data the classification is not possible.

Germ cell mutagenicity Due to partial or complete lack of data the classification is not possible.

Carcinogenicity Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

DIPHENYLAMINE (CAS 122-39-4)	2B Possibly carcinogenic to humans.
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC (CAS 64742-55-8)	3 Not classifiable as to carcinogenicity to humans.
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT PARAFFINIC (CAS 64742-56-9)	3 Not classifiable as to carcinogenicity to humans.
PETROLEUM DISTILLATES, HYDROTREATED HEAVY PARAFFINIC (CAS 64742-54-7)	3 Not classifiable as to carcinogenicity to humans.
PETROLEUM DISTILLATES, SOLVENT DEWAXED HEAVY PARAFFINIC (CAS 64742-65-0)	3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
DIPHENYLAMINE (CAS 122-39-4)		
Aquatic		
Acute		
Fish	LC50	Medaka, high-eyes (Oryzias latipes)
		4 mg/l, 24 hours
		2.2 mg/l, 48 hours
Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.	
Bioaccumulative potential		
Mobility in soil	No data available.	
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	
13. Disposal considerations		
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.	
Local disposal regulations	Dispose in accordance with all applicable regulations.	
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.	
Waste from residues / unused products	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.	
14. Transport information		
DOT		
Not regulated as dangerous goods.		
IATA		
Not regulated as dangerous goods.		
IMDG		
Not regulated as dangerous goods.		
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.	
15. Regulatory information		
US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.	
Toxic Substances Control Act (TSCA)		
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)		
Not regulated.		
CERCLA Hazardous Substance List (40 CFR 302.4)		
Not listed.		
SARA 304 Emergency release notification		
Not regulated.		
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)		
Not listed.		
Superfund Amendments and Reauthorization Act of 1986 (SARA)		
SARA 302 Extremely hazardous substance		
Not listed.		
SARA 311/312 Hazardous chemical	Yes	
Classified hazard categories	Carcinogenicity	

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Diphenylamine	122-39-4	< 1

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations**California Proposition 65**

WARNING: This product can expose you to chemicals including ANILINE, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

1-NAPHTHYLAMINE (CAS 134-32-7)	Listed: October 1, 1989
2-NAPHTHYLAMINE (CAS 91-59-8)	Listed: February 27, 1987
ANILINE (CAS 62-53-3)	Listed: January 1, 1990

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	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).

16. Other information, including date of preparation or last revision

Issue date	May-07-2025
Version #	01
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	This document has undergone significant changes and should be reviewed in its entirety.