Safety Data Sheet (SDS)

Issued on 2015-04-24
Revised or —

1. Identification

Product

Description	Lubrication oil
Order code	Z016112

Company Information

Company Name	NAKANISHI INC.	
Address	700 Shimohinata Kamuna-shi Tochigi 322-8666, Japan (HQ)	
Dept.	Quality Assurance Dept.	
TEL	+81(0)289-64-3380 (HQ)	+81(0)289-64-7277 (QA)
FAX	+81(0)289-62-5636 (HQ)	+81(0)289-64-3890 (QA)
Emergency contact No.	—	

Recommended use and usage restrictions Lubricant

2. Hazard identification

Significant hazards and effects

Specific hazards

GHS classification	Aspiration hazard : Category 1

Physical and Chemical hazards

Explosives	N/A
Flammable/Ignitable gas	N/A
Flammable/Ignitable aerosol	N/A
Burnable/oxidized gas	N/A
High-pressure gas	N/A
Ignitable liquid	N/A
Flammable solid	N/A
Autoreactive chemical	N/A
Pyrophoric liquid	N/A
Pyrophoric solid	N/A
Self-heating chemical	N/A
Water-reactive flammable chemical	N/A
Oxidizing liquid	N/A
Oxidizing solid	N/A
Organic peroxide	N/A
Metal-corrosive chemical	N/A

Hazards to health

Acute toxicity (oral)	N/A
Acute toxicity (percutaneous)	N/A
Acute toxicity (inhalation : gas)	N/A
Acute toxicity (inhalation : vapor)	N/A
Acute toxicity (inhalation : dust, mist)	N/A
Skin corrosivity/Irritation	N/A
Serious damage to eyes/Eye irritation	N/A
Respiratory sensitization	N/A
Skin sensitization	N/A
Germline mutagenicity	N/A
Carcinogenicity	N/A

Reproductivity	N/A
Effects on breast-feeding	N/A
Target organ/Systemic toxicity (single exposure)	N/A
Target organ/Systemic toxicity (repeated exposure)	N/A
Hazards to suction aspiration	Classification 1

Hazards to environment

Hazards to water environment (acute)	N/A
Hazards to water environment (chronic)	N/A
Hazards to the Ozone layer	N/A

Labeling elements

Pictogram

Signal word	Danger
Hazard statements	H304：May be fatal if swallowed and enters airways
Precautionary statement	
Prevention	No precautionary phrases
Response	P301+P310: IF SWALLOWED: Immediately call a POISON P301+P331: IF SWALLOWED: Do NOT induce vomiting
Storage	P405: Store locked up
Disposal	P501: Dispose of contents/ container to an approved waste disposal plant.

3. Composition/information on ingredients

Substance / Mixture	Substance
General product description	Lubrication oil

Ingredients and composition

Chemical name (another name)	CAS No.	Concentratio (mass %)	Chemical/Structural formula	GHS Classification
White mineral oil (Liquid paraffin)	8042-47-5	100	N/A	Asp. Tox. 1 H304

4. First-aid measures

Inhalation	・No treatment necessary under normal conditions of use. ・If symptoms persist, obtain medical advice.
Skin contact	・Remove contaminated clothing. ・Flush exposed area with water and follow by washing with soap if availa ・If persistent irritation occurs, obtain medical attention.
Eye contact	・Flush eye with copious quantities of water. ・If persistent irritation occurs, obtain medical attention.
Ingestion	・If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. ・If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
Most important symptoms and effects, both acute and delayed	・If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing. ・If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever.

	・The onset of respiratory symptoms may be delayed for several hours after exposure. ・Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance. ・Ingestion may result in nausea, vomiting and/or diarrhoea.
Protection of first-aiders	・When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.
Notes to physician	・Treat symptomatically. Call a doctor or poison control center for guidance.

5. Fire-fighting measures

Suitable extinguishing medi	・Foam, water spray or fog. ・Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable extinguishing media	・Do not use water in a jet.
Specific hazards during firefighting	・Hazardous combustion products may include: ・A complex mixture of airborne solid and liquid particulates and gases (smoke). ・Carbon monoxide may be evolved if incomplete combustion occurs. ・Unidentified organic and inorganic compounds.
Specific extinguishing methods	・Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Special protective equipment for firefighters	・Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. ・Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. ・Select firefighters clothing approved to relevant Standards (e.g. Europe: EN 469).

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	・Avoid contact with skin and eyes. ・Use appropriate containment to avoid environmental contamination. ・Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. ・Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	・Slippery when spilt. Avoid accidents, clean up immediately. ・Prevent from spreading by making a barrier with sand, earth or other containment material. ・Reclaim liquid directly or in an absorbent. ・Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.
Additional advice	・For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet. ・For guidance on disposal of spilled material see Chapter 13 of this Safety Data Sheet.

7. Handling and storage

Handling

General Precautions	・Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols.

	・Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.
Advice on safe handling	・Avoid prolonged or repeated contact with skin. ・Avoid inhaling vapour and/or mists. ・When handling product in drums, safety footwear should be worn and proper handling equipment should be used. ・Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.
Avoidance of contact	・Strong oxidising agents.
Product Transfer	・This material has the potential to be a static accumulator. ・Proper grounding and bonding procedures should be used during all bulk transfer operations.

Storage

Conditions	・Keep container tightly closed and in a cool, well-ventilated place. ・Use properly labeled and closable containers. ・Store at ambient temperature.
Packaging material	・Suitable material: For containers or container linings, use mild steel or high density polyethylene. ・Unsuitable material: PVC.
Container Advice	・Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

8. Exposure controls/personal protection

Components with workplace control parameters

Component	CAS No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Oil mist, mineral	Not Assigned	TWA (inhalable fraction)	5 mg/m^3	US. ACGIH Threshold Limit Values

Biological occupational exposure limits

No biological limit allocated.

Monitoring Methods

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.
Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.
Examples of sources of recommended exposure measurement methods are given below or contact the supplier.
Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods
http://www.cdc.gov/niosh/

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods
http://www.osha.gov/

Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances
http://www.hse.gov.uk/

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA) , Germany
http://www.dguv.de/inhalt/index.jsp

L'Institut National de Recherche et de Securité, (INRS), France http://www.inrs.fr/accueil

Engineering measures

- The level of protection and types of controls necessary will vary depending upon potential exposure conditions.
- Select controls based on a risk assessment of local circumstances.
- Appropriate measures include:
  Adequate ventilation to control airborne concentrations.
- Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.
- General Information:
  Define procedures for safe handling and maintenance of controls.
  Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.
  Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.
  Drain down system prior to equipment break-in or maintenance.
  Retain drain downs in sealed storage pending disposal or subsequent recycle.
  Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or Routinely wash work clothing and protective equipment to remove contaminants.
  Discard contaminated clothing and footwear that cannot be cleaned.
  Practice good housekeeping.

Personal protective equipment

Protective measures

Personal protective equipment (PPE) should meet recommended national standards. Check with

Respiratory protection

- No respiratory protection is ordinarily required under normal conditions of use.
  In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material.
  If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation.
  Check with respiratory protective equipment suppliers.
  Where air-filtering respirators are suitable, select an appropriate combination of mask and filter.
  Select a filter suitable for the combination of organic gases and vapours [Type A/Type P boiling point >65°C (149°F)].

Hand protection Remarks

- Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection.
  PVC, neoprene or nitrile rubber gloves Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity.
  Always seek advice from glove suppliers.
  Contaminated gloves should be replaced.
  Personal hygiene is a key element of effective hand care.
  Gloves must only be worn on clean hands.
  After using gloves, hands should be washed and dried thoroughly.
  Application of a non-perfumed moisturizer is recommended.

	For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.
Eye protection	If material is handled such that it could be splashed into eyes, protective eyewear is recommended.
Skin and body protection	Skin protection is not ordinarily required beyond standard work clothes. It is good practice to wear chemical resistant gloves.
Thermal hazards	Not applicable
Environmental exposure controls	
General advice	Take appropriate measures to fulfill the requirements of relevant environmental protection legislation. Avoid contamination of the environment by following advice given in Chapter 6. If necessary, prevent undissolved material from being discharged to waste water. Waste water should be treated in a municipal or industrial waste water treatment plant before discharge to surface water. Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

9. Physical and chemical properties

Appearance	・Liquid at room temperature.
Colour	・colourless.
Odour	・Slight hydrocarbon
Odour Threshold	・Data not available
pH	・Not applicable
pour point	・-12 °C / 10 °FMethod: ISO 3016
Initial boiling point and boiling	・> 280 °C / 536 °Festimated value(s)
Flash point	・180 °C / 356 °F Method: ISO 2592
Evaporation rate	・Data not available
Flammability (solid, gas)	・Data not available
Upper explosion limit	・Typical 10 %(V)
Lower explosion limit	・Typical 1 %(V)
Vapour pressure	・< 0.5 Pa (20 °C / 68 °F) estimated value(s)
Relative vapour density	・> 1estimated value(s)
Relative density	・0.850 (15 °C / 59 °F)
Density	・850 g/cm3 (15.0 °C / 59.0 °F) Method: ISO 12185
Solubility(ies)	
Water solubility	・negligible
Solubility in other solvents	・Data not available

Partition coefficient: noctanol/	・Pow: > 6(based on information on similar products)
Auto-ignition temperature	・> 320 °C / 608 °F
Viscosity	
Viscosity, dynamic	・Data not available
Viscosity, kinematic	・3.3 mm^2/s (100 °C / 212 °F) Method: ISO 3014 15 mm^2/s (40.0 °C / 104.0 °F) Method: ISO 3014
Conductivity	・This material is not expected to be a static accumulator.
Decomposition temperature	・Data not available

10. Stability and reactivity

Chemical stability	・Stable.
Possibility of hazardous reactions	・Reacts with strong oxidising agents.
Conditions to avoid	・Extremes of temperature and direct sunlight.
Incompatible materials	・Strong oxidising agents.
Hazardous decomposition products	・Hazardous decomposition products are not expected to form during normal storage.

11. Toxicological information

Basis for assessment
・Information given is based on data on the components and the toxicology of similar products.

Symptoms of Overexposure
・If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever.
The onset of respiratory symptoms may be delayed for several hours after exposure.
Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance.
Ingestion may result in nausea, vomiting and/or diarrhoea.

Acute toxicity

Product:

Acute oral toxicity
・LD50 rat: > 5,000 mg/kg
Remarks: Expected to be of low toxicity:
Remarks: Aspiration into the lungs may cause chemical pneumonitis which can be fatal.

Acute inhalation toxicity
・LC 50 Rat: > 5 mg/l
Exposure time: 4 h
Remarks: Low toxicity by inhalation.

Acute dermal toxicity
・LD50 Rabbit: > 5,000 mg/kg
Remarks: Low toxicity:

Skin corrosion/irritation

Product:
・Remarks: Not irritating to skin. Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.

Serious eye damage/eye

Product:
・Remarks: Expected to be slightly irritating.

Respiratory or skin sensitisation

Product:
・Remarks: Not expected to be a skin sensitiser.

Germ cell mutagenicity

Product:
- Remarks: Not expected to be mutagenic.

Carcinogenicity

Product:
- Remarks: Not expected to be carcinogenic.
- Remarks: Product contains mineral oils of types shown to be non-carcinogenic in animal skinpainting studies.
  Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC).

Material	GHS/CLP Carcinogenicity Classification
Highly refined mineral oil	No carcinogenicity classification.

Reproductive toxicity

Product:
- Remarks: Not expected to impair fertility., Not expected to be a developmental toxicant.

STOT - single exposure

Product:
- Remarks: Not expected to be a hazard.

STOT - repeated

Product:
- Remarks: Not expected to be a hazard.

Aspiration toxicity

Product:
- Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

Further information

Product:
- Remarks: Used oils may contain harmful impurities that have accumulated during use.
  The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal.
  ALL used oil should be handled with caution and skin contact avoided
- Remarks: Slightly irritating to respiratory system.

12. Ecological information

Basis for assessment
- Ecotoxicological data have not been determined specifically for this product.
  Information given is based on a knowledge of the components and the ecotoxicology of similar products.(LL/EL/IL50 expressed as the nominal amount of product required to prepare aqueous test extract.)

Ecotoxicity

Product:

Toxicity to fish (Acute toxicity)
- Remarks: Expected to be practically non toxic:LL/EL/IL50 > 100 mg/l

Toxicity to crustacean (Acute toxicity)
- Remarks: Expected to be practically non toxic:LL/EL/IL50 > 100 mg/l

Toxicity to algae/aquatic plants (Acute toxicity)
- Remarks: Expected to be practically non toxic:LL/EL/IL50 > 100 mg/l

Toxicity to fish (Chronic toxicity)
- Remarks: NOEC/NOEL expected to be > 10 - <= 100 mg/l

Toxicity to crustacean (Chronic toxicity)
- Remarks: NOEC/NOEL expected to be > 10 - <= 100 mg/l

Toxicity to microorganisms (Acute toxicity)
- Remarks: Expected to be practically non toxic:LL/EL/IL50 > 100 mg/l

Persistence and degradability

Product:

Biodegradability
- Remarks: Expected to be inherently biodegradable.

Bioaccumulative potential

Product:

Bioaccumulation	・Remarks: Has the potential to bioaccumulate.
Partition coefficient: noctanol/water	・Pow: > 6Remarks: (based on information on similar products)

Mobility in soil

Product:

Mobility	・Remarks: Liquid under most environmental conditions. If it enters soil, it will adsorb to soil particles and will not be mobile. Remarks: Floats on water.

Other adverse effects

no data available

Product:

Additional ecological information	・Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential,photochemical ozone creation potential or global warming potential. Films formed on water may affect oxygen transfer and damage organisms. May cause physical fouling of aquatic organisms. Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.

13. Disposal considerations

Disposal methods

Waste from residues	・Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.
Contaminated packaging	・Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand. Disposal should be in accordance with applicable regional,national, and local laws and regulations.
Local legislation	・Disposal should be in accordance with applicable regional,national, and local laws and regulations.

14. Transport information

National Regulations

Hazchem Code	・NONE/TIADA

International Regulation

ADR	・Not regulated as a dangerous good
IATA-DGR	・Not regulated as a dangerous good
IMDG-Code	・Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Pollution category	・Not applicable
Ship type	・Not applicable
Product name	・Not applicable
Special precautions	・Not applicable

Special precautions for

・Remarks: Special Precautions: Refer to Chapter 7, Handling & Storage,for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

Additional Information	・MARPOL Annex 1 rules apply for bulk shipments by sea.

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013.

Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000.

OSHA 1994 and relevant regulations.

Factories and Machinery Act 1967 and relevant regulations.

Petroleum (Safety Measures) Act 1984.

Environmental Quality Act 1974 and regulation.

Motor Vehicles (Construction and Use) (Vehicles Carrying Petroleum Products) Rules, 1965- L.N.405/65 under Road Transport Act 1987.

Motor Vehicles (Construction, Equipment and Use) (Use Of Liquefied Petroleum Gas Fuel System in Motor Vehicles) Rules 1982 – P.U. (A) 392/82 under Road Transport Act, 1987.

Other international regulations

The components of this product are reported in the following inventories:

EINECS	・All components listed or polymer exempt.
TSCA	・All components listed.

16. Other information

Full text of H-Statements

H304	・May be fatal if swallowed and enters airways.

Full text of other abbreviations

Asp. Tox.	・Aspiration hazard
Abbreviations and Acronyms	・The standard abbreviations and acronyms used in this document can be looked up in reference literature (e.g.scientific dictionaries) and/or websites.

Further information

Other information	・A vertical bar (|) in the left margin indicates an amendment from the previous version.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.