# Material Safety Data Sheet (MSDS) Issued on February 26, 2004

			Issued on	February 26, 2004
			Revised on	December 16, 2009
1. Product and Company Infor	mation			
Product				
Description	Care3 Handpiece Mainte	enance Oil		
Order code	Z016117			
Company Information	2010111			
Company Name	NAKANISHI INC.			
Address	700 Shimohinata Kamun	a chi Tachigi 222 9666	lanan (HO)	
		•	Japan (ng)	
Dept.	Quality Assurance Dept.			
TEL	+81(0)289-64-3380 (HQ	, , ,	. ,	
FAX	+81(0)289-62-5636 (HQ	e) +81(0)289-64-3	890 (QA)	
Emergency contact No.				
Recommended use and usage	ge restrictions : Lubricant			
3. Hazards information				
Significant hazards and effects				
Specific hazards	,			
GHS classification				
Physical and Chemical haza	rds			
Explosives	100	N/A		
Flammable/Ignitable gas		N/A		
Flammable/Ignitable aeros	ol	N/A		
Burnable/oxidized gas		N/A		
•		N/A N/A		
High-pressure gas				
Ignitable liquid		Out of category		
Flammable solid		N/A N/A		
Autoreactive chemical				
Pyrophoric liquid		Out of category		
Pyrophoric solid		N/A		
Self-heating chemical	- h <sup>1</sup> 1	unclassifiable		
Water-reactive flammable	cnemical	N/A		
Oxidizing liquid		N/A		
Oxidizing solid		N/A		
Organic peroxide		N/A		
Metal-corrosive chemical		unclassifiable		
Hazards to health		<b>•</b> • • •		
Acute toxicity (oral)		Out of category		
Acute toxicity (percutaneous)		unclassifiable		
Acute toxicity (inhalation : g		N/A		
Acute toxicity (inhalation : v		unclassifiable		
Acute toxicity (inhalation : c	dust, mist)	unclassifiable		
Skin corrosivity/Irritation		Out of category		
Serious damage to eyes/E	ye irritation	Out of category		
Respiratory sensitization		unclassifiable		
Skin sensitization		Out of category		
Germline mutagenicity		unclassifiable		

Carcinogenicity	Out of category
Reproductivity	Out of category
Effects on breast-feeding	unclassifiable
Target organ/Systemic toxicity (single exposure)	unclassifiable
Target organ/Systemic toxicity (repeated exposure)	unclassifiable
Hazards to suction aspiration	unclassifiable
Hazards to environment	
Hazards to water environment (acute)	Out of category
Hazards to water environment (chronic)	unclassifiable
* B	lanks = N/A or unclassifiable
Labeling elements	
Pictogram	N/A
Cautions	N/A

Pictogram	N/A
Cautions	N/A
Hazard and toxicity information	N/A
Handle with care	N/A

### 3.. Composition and component (of single product - hazards)

Component	CAS No.	Content concentration (mass %)	Chemical/Structural formula	Notice No. from government gazette (CSCL)	PRTR
(another name)		(111855 70)		g===== (====,	
Liquid paraffin	8042-47-5	100	unidentifiable	9-1692	N/A

### 4. First-aid measures

Eye contact	<ul> <li>Immediately and thoroughly wash eyes with clean water for 15 mins. If you wear contact lenses, remove them, and continue to wash the eyes. If the pain persists, seek the help of a doctor.</li> </ul>
Skin contact	<ul> <li>Immediately wash the site with soap and water.</li> </ul>
Inhalation	<ul> <li>Immediately move the affected person to a place with fresh air and keep him/her warm with a blanket and quiet and seek medical attention.</li> </ul>
Ingestion	<ul> <li>Seek medical attention without t forcing the person to vomit. Rinse his/her mouth if it's contaminated.</li> </ul>
Possible acute/delayed symptoms and major symptoms/signs	<ul> <li>Vomit/diarrhea-producing, if swallowed. Inflammation-producing, if got into eyes. Inflammation-producing, if come in contact with skin. Sickness-producing, if inhaled.</li> </ul>
Protection to those who provide first aid	No information
5. Fire-fighting measures	
Fire-fighting agent	<ul> <li>Spray enforcement agent, foam/powder/carbon dioxide fire-fighting agent are effective.</li> </ul>
Unsuitable fire-fighting agent	<ul> <li>Do not use jet spray water.</li> </ul>
Specific fire-fighting methods	<ul> <li>Remove inflammable items from the source of the fire.</li> </ul>
	Use powder/carbon dioxide fire-extinguisher at the early stages of fire. In case of a larger fire, it is effective to use a foam fire extinguisher and block out the air. The flames could spread by using water. Sprinkle water on equipments around the area. Forbid unauthorized persons to access to the fire site.
Protection to those who extinguish a fire	<ul> <li>Wear a proper protective cloth (rescue suit) and extinguish the fire from the windward side.</li> </ul>

6. Measures for preventing exposure

Exposure to human body Protectors/Emergency measure Exposure to environment Collection/Neutralization	<ul> <li>Collect as much of the liquid as possible to prevent soil/water pollution.</li> <li>In case of large amount, rope off the area where a leak has occurred to keep people away. Be sure to wear protectors. Use soil and sand to stop the flow of leaking lubricant and lead the lubricant to a safe area. Collect as much of the liquid as possible in an empty container. Do not discharge it into rivers and/or sewers etc. In case of small amount, supply earth sand/waste cloth to absorb the lubricant, and wipe it off.</li> </ul>
	At sea, use an oil-spill containment boom to prevent it from spreading, and it up with an absorption mat. Do not discharge leakage into sewers, drains, etc.
	Dispose of waste etc. in accordance with applicable regulations.
Method/Equipment for	<ul> <li>In case of spilling, immediately prevent it from spreading and collect it by</li> </ul>
containment/purifying	skimming or using appropriate absorbent. If necessary, use chemicals that
	meets technical standards specified in the Transport Ministerial Ordinance.
Prevention of second disaster	Immediately report to the appropriate authorities for help.

## 7. Handling and Storage (Conform to applicable regulations)

Handling	
Technical aspects	<ul> <li>Take a countermeasure against static electricity and wear a dielectric cloth/ shoes. Steam generated by oil products is accumulative since it is heavier than air. Provide adequate ventilation and keep it away from fire. The lubricant must be handled at room temperature while paying attention to prevent moisture and dirt from entering the lubricant. When handling a larger-than-specified quantity of the products, perform the activity at the manufacturing/storage/ handling site satisfying the applicable standards. When repairing a machine with hazardous residue, remove the hazardous material in a safe place beforehand. When repairing a machine with hazardous residue, remove the hazardous material in a safe place beforehand. Use protective equipment if there is a possibility of contacting with skin/eyes. Use breathing apparatus not inhale the mist, if necessary. When taking the lubricant out of the container, use a pump. Do not suck it through a tube. Do not weld/overheat/punctuate/cut the container, which could cause an explosion.</li> </ul>
Local/General ventilation	<ul> <li>See "8. Measures for preventing exposure"</li> </ul>
Contact avoidance	<ul> <li>Keep it away from heat (flames/sparks). Do nc explosion.</li> </ul>
Cautions for handling	<ul> <li>Do not apply pressure on the empty container, which could cause an explosion.</li> <li>Do not swallow it. Keep out of reach of children.</li> </ul>
Storage	
Technical aspects	<ul> <li>Avoid heat, spark, flame and static electricity.</li> </ul>
	Electric(al) apparatus used in the storage area must be explosionproof structured. Earth the apparatus on the ground when used. Airtight the container. Avoid direct sunlight.
Incompatible hazardous substances	<ul> <li>Keep halogen/strong acid/alkali/oxidizing substances in a separate place in order not to come in contact with each other</li> </ul>
Conditions	<ul> <li>Store it with "Hazard" labeling in a well-ventilated place.</li> </ul>
Packaging technique	<ul> <li>When moving the lubricant to separate container, use a metal or glass container Plastics containers could be soluble.</li> </ul>

8. Measures for preventing exposure

Equipment measures

• For mist/vapor generation, keep the source of mist/vapor airtight or provide a local exhaust system. Provide cleaning facilities for eyes/body near the handling place.

Exposure limit value

	Controlled	Allowable concentration		
Component	concentration (SHA)	Japan society for occupational health	ACGIH(TLV-TWA)	ACGIH(TLV-STEL)
Liquid paraffin	N/A	3mg/m <sup>3</sup> (Mineral oil mist)	5mg/m <sup>3</sup> (Mineral oil mist)	N/A
Protectors (if necessar	y)			
For respiration	Not necessary	under normal conditions	s. Wear a (organic) gas	mask if necessary.
For hands	Wear oil-resist hands.	tant protective globes i	f come in long-term/rep	eated contact with
For eyes	Wear general	Wear general glasses if droplets are spread.		
For skin/body	In case of long sleeves.	g-term use or getting w	et, wear oil-resistant w	ork cloth with long
Proper hygiene measu	Take off the w re No eating and	ret cloth and wash it the smoking while working vith soap prior to eating	-	ig it again.

#### 9. Physical and chemical properties, hazard information

	Component
Status	Liquid
Appearance	Clear and colorless
Odor	Odiferous
рН	
Melting point	
Boiling point	
Firing point	160°C(COC)
Ignition point	
Explosive range	1~7vol% (estimate)
Vapor pressure	3.0 x 10 <sup>-3</sup> Pa (50°C)
Vapor density	
Specific gravity	0.835g/cm <sup>3</sup> (15°C)
Solubility	Not soluble (water : 20°C)
Octanol/water partition coefficient	
Decomposition temperature	
Odor threshold	
Evaporation rate (Butyl acetate=1)	
Flammability (solid, gas)	
Fluid point	-10.0°C
Viscosity	7.8mm <sup>2</sup> /s (37.8°C)
Others	No data

10. Stability and reactivity

Stability	Stable
Hazard reactivity	Stable
Conditions to avoid	Heating, Contacting with Incompatible hazardous substances, Fire source
	Strong oxidant
Hazardous decomposition product	N/A

 11. Toxicological information (on component, including human cases and immunological information)

 Acute toxicity (oral)

 • LD<sub>50</sub>>5g/kg

Acute toxicity (oral)	• LD <sub>50</sub> >5g/kg
	therefore, classified as out of acute toxicity (oral).
Acute toxicity (percutaneous)	<ul> <li>Unclassifiable for the reason of no data</li> </ul>
Acute toxicity (inhalation : gas	<ul> <li>Unclassifiable for the reason of no data</li> </ul>
Acute toxicity (inhalation : vap	or) • Unclassifiable for the reason of no data
Acute toxicity (inhalation : mist	<ul> <li>Unclassifiable for the reason of no data</li> </ul>
Skin corrosivity/Irritation	<ul> <li>No irritation detected after applying it to skin of a rabbit, therefore, classified as out of skin corrosivity/irritation.</li> </ul>
Serious damage to eyes/	<ul> <li>No irritation detected after applying it to skin of a rabbit, therefore, classified</li> </ul>
Eye irritation	as out of serious damage to eyes/Eye irritation.
Respiratory sensitization or	<ul> <li>For respiratory sensitization, unclassifiable for the reason of no data. No</li> </ul>
Skin sensitization	skin sensitization detected after applying it to skin of a pig.
Germline mutagenicity	Unclassifiable for the reason of no data
Carcinogenicity	<ul> <li>Liquid paraffin has higher degree of refining than highly-refined oil which is</li> </ul>
0	classified as 3 of IARC group (no carcinogenicity to human). Therefore,
	classified as no carcinogenicity.
Reproductivity	No reproductivity decline detected after applying 4350mg/kg bw/day to male
	and female rats for 13wks (5days/week), therefore, classified as out of
	reproductivity.
Specific target organ/	Unclassifiable for the reason of no data
Systemic toxicity (repeated ex	
Specific target organ/	Unclassifiable for the reason of no data
Systemic toxicity (single expos	
Hazards to suction aspiration	Unclassifiable for the reason of no data
12. Ecological information	
Eco toxicity	Fish (Bluegill) LC <sub>50</sub> >10g/L
	Classified as out of "Hazards to water environment (acute)", but unclassifiable
	for Bioaccumulation potential and Rapid Decomposability. Therefore,
	unclassifiable for "Hazards to water environment (chronic)
Persistence/Decomposability	
I	No information
,	No information
,	No information
Environmental standards	No information
13. Disposal considerations	
•	Dispose of the container and the lubricant contained by yourself or request an
	industrial waste disposal professional licensed by the local government for the
	disposal. No dumping. In case of disposal by landfill, burn it in an incineration
	system beforehand. The following substances in the burned ash must meet the
	to devide act by the Concert Administrative Agency of the Cohinet - Concert

Contaminated containers

and packages

standards set by the General Administrative Agency of the Cabinet : Copper or the compound, Zin or the compound, Fluoride, Alkyl mercury compound, Mercury or the compound, Arsenic or the compound, Hexavalent chromium compound, Organophosphorous compound, Lead and the compound, Cadmium and the compound, Cyanogen compound, PCB. In case of incineration disposal, carry out the incineration in a safe place/way not to pose a hazard to others. Set a guard.

Dispose of the container and the lubricant contained by yourself or request an

industrial waste disposal professional licensed by the local government for the

disposal.

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14. Transport information	
International regulations	N/A
National regulations	
Surface transportation	Hazardous material of Fire defense law
Container	List of rules/regulations for hazardous materials 3.2
	Metallic drum (250L), Metallic container (60L) etc.
Labeling on container	I Description of the hazard, Category 4 No.3 Oil, Danger level III
	II Quantity
	III Keep fire away
	1) Deliver the containers without being frictioned/shaken during transportation.
	2) In case of delivering a larger-than-specified quantity of products, provide the
	vehicle with appropriate signs specified in the ministerial ordinance. Also prepare a suitable firefighting equipment in the vehicle. The height of cargo
	must be 3m or lower.
	3) Do not mix it with Category 1 & 6 hazardous materials or high-pressure gas,
	when loading.
Maritime transportation	Ship Safety Act, nonhazardous material, individual transport/cargo
Air transportation	Aviation law, nonhazardous material
Specific cautions	On delivery, avoid direct sunlight and prevent container from being damaged/
	corroding/falling/rolling/collapsing.
15. Applicable laws and regula	ations
Industrial Safety and Health Ac	
High Pressure Gas Safety Ac	
Fire defense law	Category 4, No.3 oil
Poisonous and Deleterious Substances	N/A
Control I aw	
Water Quality Pollution	Oil discharge regulations (5mg/L allowable concentration)
Control Act	Detected as normal-hexane extracts
	e Pollution and Maritime Disaste Oil discharge regulations (prohibited in principle)
Sewerage Service Act Wastes Disposal and	Mineral oil discharge regulations Industrial-waste regulations (Diffusion/outflow-prohibited)
Public Cleansing Act	Industrial-waste regulations (Dirusion/outriow-prombited)
Food Sanitation Act	Must be used exclusively for the purpose of dividing and demolding bread dough
	under restrictions of Japanese Standards of Food Additives
PRTR	N/A
16. Other information	
Informative literature	MSDS for each material
	Liquefied petroleum gas MSDS
	All data of object substances under PRTR
	All data of object substances under Industrial Safety and Health Act
	All data of object substances under Poisonous and Deleterious Substance
	Control Law
Remarks	There may be a lack of sufficient information for the reason that all documents
	and literatures are not searched. And release of new findings or revision of
	conventional theory could change this information. This MSDS is not intended to
	ensure completeness/accuracy of information of information. Therefore, the

product requires extreme caution in handling. The adequacy will be determined at your own risk.