! SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Name of product MK-dent PREMIUM SERVICE OIL (LU1011)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Sector of uses [SU]
SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Recommended intended purpose(s)
Lubricant

1.3. Details of the supplier of the safety data sheet

Manufacturer/distributor
MK-dent GmbH
Marie-Curie-Straße 2, D-22941 Bargteheide
Phone +49(0)4532-400490, Fax +49(0)4532-4004910
E-Mail info@mk-dent.com
Internet www.mk-dent.com

Advice
Produktinformation / Product Information Phone
+49(0)4532-400490
Fax +49(0)4532-4004910

Importer/Distributor
Company name: Ivoclar Vivadent Pty Ltd
Place: 1-5 Overseas Drive Noble Park North VIC 3174
Telephone: +61 3 9795 9599 Telefax:Fax: +61 3 9795 9645
e-mail: info@ivoclarvivadent.com

1.4. Emergency telephone number

131 126 (Poisons Information Centre - 24 hours / 7 days)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
Aerosol 1	**H222, H229**	
Aquatic Chronic 2	**H411**	

Hazard statements for physical hazards

H222	**Extremely flammable aerosol.**
H229	**Pressurised container: May burst if heated.**

Hazard statements for environmental hazards

H411	**Toxic to aquatic life with long lasting effects.**

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]

GHS02

GHS09

Signal word
Danger

Hazard statements for physical hazards

H222	**Extremely flammable aerosol.**
H229	**Pressurised container: May burst if heated.**

Hazard statements for environmental hazards

H411	**Toxic to aquatic life with long lasting effects.**

Precautionary Statements

General

P102	Keep out of reach of children.

Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.

Response

P391	Collect spillage.

Storage

P410 + P412	Protect from sunlight. Do no expose to temperatures exceeding 50°C/122°F.

Disposal

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

Special rules for supplemental label elements for certain mixtures
Contains peppermint oil. May produce an allergic reaction.

Additional information

Special rules on packaging
Touchable warning sign (EN/ISO 11683).

2.3. Other hazards
Results of PBT and vPvB assessment
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/ information on ingredients

3.1. Substances
not applicable

3.2. Mixtures
Description
ester oil

Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
74-98-6	**200-827-9**	**propane**	**16,9**	**Flam. Gas 1, H220 / Press. Gas**
75-28-5	**200-857-2**	**isobutane**	**16,9**	**Flam. Gas 1, H220 / Press. Gas**
106-97-8	**203-448-7**	**butane**	**16,9**	**Flam. Gas 1, H220 / Press. Gas**
540-84-1	**208-759-1**	**2,2,4-trimethylpentane**	**3,8**	**Flam. Liq. 2, H225 / Asp. Tox. 1, H304 / Skin Irrit. 2, H315 / STOT SE 3, H336 / Aquatic Acute 1, H400 / Aquatic Chronic 1, H410**
68037-01-4	**500-183-1**	**Dec-1-ene, homopolymer, hydrogenated**	**45**	**Asp. Tox. 1, H304**
8006-90-4	**308-770-2**	**peppermint oil**	**0,45**	**Asp.Tox. 1, H304 / Skin Irrit. 2, H315 / Eye Irrit. 2, H319 / Skin Sens. 1, H317 / Aquatic Chronic 2, H411**

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
Remove contaminated soaked clothing immediately.
In the event of persistent symptoms receive medical treatment.
Take affected person into fresh air.

In case of inhalation
Remove the casualty into fresh air and keep him immobile.
In the event of symptoms refer for medical treatment.

In case of skin contact
In case of irritation consult a doctor.
In case of contact with skin wash off with water.

In case of eye contact
In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.
Remove contact lens.

In case of ingestion
Do not induce vomiting.
Medical treatment.
Rinse out mouth thoroughly with water.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment (Advice to doctor)
Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
Dry fire-extinguishing substance
Carbon dioxide
Water spray jet

Unsuitable extinguishing media
Full water jet

5.2. Special hazards arising from the substance or mixture

Fire gas of organic material has to be classed invariably as respiratory poison.
Nitrogen oxides (NOx)
Carbon monoxide (CO)
Carbon dioxide (CO_2)

5.3. Advice for firefighters

Special protective equipment for fire-fighters
Use breathing apparatus with independent air supply.
Breathing protection and eye protection is required for fire-fighting under presence of fume and vapour

Additional information
Cool endangered containers with water spray and possibly remove them from fire site.
Collect contaminated firefighting water separately, must not be discharged into the drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
For non-emergency personnel
Avoid skin and eye contact

For emergency responders
Remove persons to safety.
Keep people away and stay on the upwind side.
Use personal protective clothing.
Keep away sources of ignition.

6.2. Environmental precautions
Do not discharge into the drains or bodies of water..

6.3. Methods and material for containment and cleaning up
Take up with absorbent material (e.g. sand, kieselguhr, acid binder, general-purpose binder, sawdust).
Take up with absorbent material.

Additional Information
Inform competent authorities in case of leakage to sewage system/surface water/groundwater.

6.4. Reference to other sections
Safe handling: see section 7
Disposal: see section 13
Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
Avoid formation of aerosols.

General protective measures
Take the usual precautions when handling with chemicals.

Hygiene measures
Please observe work hygiene regulations.
At work do not eat, drink and smoke.
Remove soiled or soaked clothing immediately.

Advice on protection against fire and explosion
Pay attention to general rules of internal fire prevention.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Keep in closed original container.

Advice on storage compatibility
Keep away from foods and beverages.
Keep away from ignition sources.
Store at distance to oxidising agents.
Do not store together with alkalies.
Keep at distance to acids.

Further information on storage conditions
Keep container tightly closed and store at cool and aired place.
Protect from direct solar radiation.
Protect from heat and direct solar radiation.

7.3. Specific end use(s)
Recommendation(s) for intended use
See section 1.2

! SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Ingredients with occupational exposure limits to be monitored

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
106-97-8	Butane	8 hours	1450	600	EH40/2005
		Short-term	1810	750	

8.2. Exposure controls
Respiratory protection
In case of insufficient ventilation or long-term effect use breathing apparatus.
Breathing apparatus in the event of aerosol or mist formation.

! **Hand protection**
Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: Nitrilrubber (index 1)
The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374.
The exact breakthrough time of the glove material is to be inquired from the protection glove manufacturer and must be strictly adhered to.

Eye protection
safety goggles with side protection

Other protection measures
Protective clothing

Appropriate engineering controls
Sufficient ventilation and exhaustion

! SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Colour	Odour
aerosol	yellowish	characteristic

Odour threshold
No data available

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not determined				
Boiling temperature / boiling range	not determined				
Melting point / Freezing point	not determined				
Flash point	ca. -80 °C				
Vapourisation rate	not determined				

	Value	Temperature	at	Method	Remark
Flammable (solid)	not determined				
Flammability (gas)	not determined				
Ignition temperature	ca. 400 °C				
Self ignition temperature	not determined				
Lower explosion limit	not determined				
Upper explosion limit	not determined				
Vapour pressure	not determined				
Relative density	not determined				
Vapour density	not determined				
Solubility in water					insoluble
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity	not determined				

Oxidising properties
No information available.

Explosive properties
Does not apply; nevertheless can be produced explosive vapour/air mixtures

9.2. Other information
no

SECTION 10: Stability and reactivity

10.1. Reactivity
No hazardous reactions known.

10.2. Chemical stability
Stable under the stated storage temperature.

10.3. Possibility of hazardous reactions
Reactions with strong acids and alkalies.
Reactions with oxidising agents.

10.4. Conditions to avoid
strong heating
sunlight

10.5. Incompatible materials
Substances to avoid
strong acids
oxidizing agent
alkalis

10.6. Hazardous decomposition products
Carbon monoxide and carbon dioxide.

Thermal decomposition

Remark No decomposition if used as directed.

Additional information
No risk of production of decomposition products when appropriately handled and stored

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritation/Sensitization

	Value/Validation	Species	Method	Remark
LD50 acute oral	No data available			
LD50 acute dermal	No data available			
LC50 acute inhalation	No data available			
Skin irritation	low irritant effect - not necessary to label			
Eye irritation	low irritant - no labeling duty			
Skin sensitization	No data available			
Sensitization respiratory system	No data available			

Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
Subacute Toxicity	No data available			
Subchronic Toxicity	No data available			
Chronic Toxicity	No data available			
Mutagenicity	No data available			
Reproduction-Toxicity	No data available			
Carcinogenicity	No data available			

Specific target organ toxicity (single exposure)
no

Specific target organ toxicity (repeated exposure)
no

Aspiration hazard
May be fatal if swallowed and enters airways.

Toxicity test (Additional information)
No data available

Experiences made from practice
No data available

Additional information
No toxical dates available.
Other hazardous properties may not be excluded.
The product is to be handled with the caution usual with chemicals.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological effects

	Value	Species	Method	Validation
Fish	LC50 0,11 mg/l (96 h)	Oncorhynchus mykiss		2,2,4-Trimethylpentan
Daphnia	EC50 0,4 mg/l (48 h)	Daphnia magna		2,2,4-Trimethylpentan
Algae	NOEL 0,658 mg/l (72 h)	Pseudokirchnerella subcapitata		2,2,4-Trimethylpentan
Bacteria	No data available.			

12.2. Persistence and degradability

	Elimination rate	Method of analysis	Method	Validation
Physico-chemical degradability	No data available.			
Biological degradability	22,4 % (28 d) 2,2,4-Trimethylpentan			Moderately/partially biodegradable
Degradability	No data available.			

12.3. Bioaccumulative potential
No data available

12.4. Mobility in soil
No data available

12.5. Results of PBT and vPvB assessment
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects
General regulation
If handled in the appropriate manner, no adverse effects on the environment are known and to be expected.
Ecological data are not available.
Do not allow uncontrolled leakage of product into the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste code No.	Name of waste
15 01 04	metallic packaging

Recommendations for the product
Consult the appropriate local waste disposal expert about waste disposal.
Remove in accordance with local official regulations.

Recommendations for packaging
Dispose of in accordance with legal regulations.
Packaging that cannot be cleaned should be disposed of like the product.

General information
The waste code must be allocated in compliance with the EAK-regulation referring to the specific process and the sector.
The classification of waste is always the responsibility of the end user.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	1950	1950	1950
14.2. UN proper shipping name	AEROSOLS	AEROSOLS (2,2,4-trimethylpentane)	Aerosols, flammable
14.3. Transport hazard class(es)	2.1	2.1	2.1
14.4. Packing group	-	-	-
14.5. Environmental hazards	Yes	Yes	Yes

14.6. Special precautions for user
No information available.

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

Land and inland navigation transport ADR/RID
Hazard label(s) 2.1
tunnel restriction code D
Classification code 5F

Marine transport IMDG
MARINE POLLUTANT

SECTION 15: Regulatory information

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

Classified as Hazardous according to the criteria of the National Occupational Health and Safety Commission (NOHSC) approved criteria for the classifying hazardous substances [NOHSC: 1008] 3rd edition.
Standard for the Uniform Scheduling of Medicines and Poisons.
Carcinogen classification under WHS Regulation 2011, Schedule 10.
Notification status in accordance with section 3 and current national legislation.

HSNO Approval: HSR001010, HSR000989, HSR001176, HSR003779
EPA NZ Classes of hazardous properties:
Classification 2.1 1A Flammable Gases: high hazard
Classification 3.1B Flammable Liquids: high hazard
Classification 6.1E (All) Acutely toxic
Classification 6.3B Mildly irritating to the skin
Classification 6.4A Irritating to the eye
Classification 9.1A (All) Very ecotoxic in the aquatic environment
Classification 3.1D Flammable Liquids: low hazard
Classification 6.1E (All) Acutely toxic
Classification 6.3A Irritating to the skin
Classification 6.4A irritating to the eye
Classification 9.1D (All) Slightly harmful in the aquatic environment or are otherwise designed for biocidal action
Classification 9.2D Slightly harmful in the soil environment

Other regulations (EU)
Aerosol directive (75/324/EEC).

15.2. Chemical Safety Assessment
For this mixture a chemical safety assessment has not been carried out.

SECTION 16: Other information

Recommended uses and restrictions
National and local regulations concerning chemicals shall be observed.

Further information
Abbreviations and acronyms see overview table at www.euphrac.eu
The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Indication of changes: "!" = Data changed compared with the previous version. Previous version: 1.9
Sources of key data used
Data sheets of the sub-supplier.

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.