

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

### 1.1 Product identifier

**W & H Service Oil F1 MD-400 REF 10940021**  
**Article number: 1101670**

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

#### 1.2.1 Relevant uses

Lubricant

#### 1.2.2 Uses advised against

None known.

### 1.3 Details of the supplier of the safety data sheet

**Company** Ivoclar Vivadent Ltd.  
12 Omega Street  
0751 Auckland, Rosedale / NEW ZEALAND  
Phone +64 (0)508 486 252  
E-mail orders.nz@ivoclar.com

#### Address enquiries to

**Technical information** orders.nz@ivoclar.com  
**Safety Data Sheet** sdb@chemiebuero.de (No dispatch of safety data sheets)  
Safety data sheets are available from the supplier.


### 1.4 Emergency telephone number

**Advisory body** National Poison Centre (New Zealand): 0800 764 766 (24 hours)

## SECTION 2: Hazards identification

**Approval** This product has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR002515, Aerosols (Flammable), Group Standard 2020)

**Hazard classifications** aerosol Category 2  
Hazardous to the aquatic environment acute Category 3  
aspiration hazard Category 1

**Hazard pictograms** 

**Signal word** DANGER

**Hazard statements** H223 Flammable aerosol.  
H229 Pressurised container: May burst if heated.  
H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements** 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.  
P260 Do not breathe spray.  
P273 Avoid release to the environment.  
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C / 122°F.

**Other Classifications** There are no other Classifications that are known to apply.

## SECTION 3: Composition / Information on ingredients

**3.1 Substances**  
not applicable

### 3.2 Mixtures

The product is a mixture.

Range [%]	Substance
50 - < 100	iso-Butane CAS: 75-28-5
10 - < 20	White mineral oil (petroleum) CAS: 8042-47-5
5 - < 10	Propane CAS: 74-98-6
1 - < 3	Butane CAS: 106-97-8
0,1 - < 1	O,O,O-Triphenyl phosphorothioate CAS: 597-82-0

Comment on component parts For full text of H-statements: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

<b>General information</b>	Remove contaminated soaked clothing immediately and dispose of safely.
<b>Inhalation</b>	Ensure supply of fresh air. In the event of symptoms seek medical treatment.
<b>Skin contact</b>	When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.
<b>Eye contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Ingestion</b>	Rinse out mouth and give plenty of water to drink. Get medical advice. Do not induce vomiting.

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

Vertigo  
Nausea, vomiting.

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

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	foam, dry powder, water spray jet, carbon dioxide
<b>Extinguishing media that must not be used</b>	Full water jet

### 5.2 Special hazards arising from the substance or mixture

risk of formation of toxic pyrolysis products, carbon monoxide (CO), not combusted hydrocarbons  
Bursting aerosols can be forcibly projected from a fire.

### 5.3 Advice for firefighters

Use self-contained breathing apparatus.  
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.  
Cool containers at risk with water spray jet.

## SECTION 6: Accidental release measures

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

Use personal protective equipment.  
Ensure adequate ventilation.  
Keep away from all sources of ignition.

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.  
In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.

### 6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, universal absorbent, diatomaceous earth).  
Dispose of absorbed material in accordance within the regulations.

### 6.4 Reference to other sections

See SECTION 8+13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid formation of aerosols.  
Use solvent-resistant equipment.  
Keep away from sources of ignition - refrain from smoking.  
Vapours can form an explosive mixture with air.  
Take precautionary measures against static discharges.  
Do not eat, drink or smoke when using this product.  
Wash hands before breaks and after work.  
Use barrier skin cream.

### 7.2 Conditions for safe storage, including any incompatibilities

Provide solvent-resistant and impermeable floor.  
Do not store together with food and animal food/diet.  
Keep in a cool place. Store in a dry place.  
Protect from heat/overheating and from sun.  
Recommended storage temperature: 5-25 °C (41-77 °F).

### 7.3 Specific end use(s)

See product use, SECTION 1.2

**SECTION 8: Exposure controls / personal protection**

**8.1 Control parameters**

**Ingredients with occupational exposure limits to be monitored (NZ)**

Substance
Butane
CAS: 106-97-8
Time Weighted Average (TWA): 800 ppm, 1900 mg/m <sup>3</sup>

**DNEL**

Substance
O,O,O-Triphenyl phosphorothioate, CAS: 597-82-0
Industrial, inhalative, Long-term - systemic effects, 1.39 mg/m <sup>3</sup>
Industrial, dermal, Long-term - systemic effects, 400 µg/kg bw/day
general population, inhalative, Long-term - systemic effects, 340 µg/m <sup>3</sup>
general population, dermal, Long-term - systemic effects, 200 µg/kg bw/day
general population, oral, Long-term - systemic effects, 200 µg/kg bw/day
iso-Butane, CAS: 75-28-5
There are no DNEL values established for the substance.
Propane, CAS: 74-98-6
There are no DNEL values established for the substance.
White mineral oil (petroleum), CAS: 8042-47-5
Industrial, dermal, Long-term - systemic effects, 217,05 mg/kg bw/day
Industrial, inhalative, Long-term - systemic effects, 164,56 mg/m <sup>3</sup>
general population, inhalative, Long-term - systemic effects, 34,78 mg/m <sup>3</sup>
general population, dermal, Long-term - systemic effects, 93,02 mg/kg bw/day
general population, oral, Long-term - systemic effects, 25 mg/kg bw/day

**PNEC**

Substance
O,O,O-Triphenyl phosphorothioate, CAS: 597-82-0
freshwater, 0.17µg/L
seawater, 0.017µg/L
sewage treatment plants (STP), 10mg/L
sediment (freshwater), 33.9mg/kg sediment dw
sediment (seawater), 3.39mg/kg sediment dw
soil, 2.46mg/kg soil dw
iso-Butane, CAS: 75-28-5
There are no PNEC values established for the substance.
Propane, CAS: 74-98-6
There are no PNEC values established for the substance.
White mineral oil (petroleum), CAS: 8042-47-5
There are no PNEC values established for the substance.

## 8.2 Exposure controls

<b>Additional advice on system design</b>	Ensure adequate ventilation on workstation.
<b>Eye protection</b>	Safety glasses. (EN 166:2001)
<b>Hand protection</b>	The details concerned are recommendations. Please contact the glove supplier for further information. 0,7 mm; Butyl rubber, >480 min (EN 374-1/-2/-3).
<b>Skin protection</b>	Solvent-resistant protective clothing (EN 340)
<b>Other</b>	Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
<b>Respiratory protection</b>	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, filter A. (DIN EN 14387)
<b>Thermal hazards</b>	No information available.
<b>Delimitation and monitoring of the environmental exposition</b>	Protect the environment by applying appropriate control measures to prevent or limit emissions.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Physical state</b>	gas
<b>Form</b>	aerosol
<b>Color</b>	yellowish
<b>Odor</b>	characteristic
<b>Odour threshold</b>	not determined
<b>pH-value</b>	not determined
<b>pH-value [1%]</b>	not determined
<b>Boiling point or initial boiling point and boiling range [°C]</b>	- 40
<b>Flash point [°C]</b>	-80
<b>Flammability</b>	not applicable
<b>Lower explosion limit</b>	1,5 Vol %
<b>Upper explosion limit</b>	10,8 Vol %
<b>Oxidising properties</b>	no
<b>Vapour pressure/gas pressure [kPa]</b>	not determined
<b>Density [g/cm<sup>3</sup>]</b>	0,8575
<b>Relative density</b>	not determined
<b>Bulk density [kg/m<sup>3</sup>]</b>	not applicable
<b>Solubility in water</b>	insoluble
<b>Solubility other solvents</b>	No information available.
<b>Partition coefficient n-octanol/water (log value)</b>	not determined
<b>Kinematic viscosity</b>	not determined
<b>Relative vapour density</b>	not determined
<b>Melting point [°C]</b>	not determined
<b>Auto-ignition temperature [°C]</b>	not self-igniting
<b>Decomposition temperature [°C]</b>	not determined
<b>Particle characteristics</b>	not applicable

### 9.2 Other information

none

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

See SECTION 10.3.

## 10.2 Chemical stability

Stable under recommended storage conditions.

## 10.3 Possibility of hazardous reactions

Evolution of flammable mixtures possible during spraying or misting in air.

## 10.4 Conditions to avoid

Strong heating.

## 10.5 Incompatible materials

Not required under normal conditions.

## 10.6 Hazardous decomposition products

No hazardous decomposition products known.

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

**Acute oral toxicity**

Product
oral, Based on the available information, the classification criteria are not fulfilled.
Substance
O,O,O-Triphenyl phosphorothioate, CAS: 597-82-0
LC50, oral, Rat, >10,000 mg/kg bw, OECD 401
NOAEL, oral, Rat, 1000 mg/kg bw/day, OECD 408
White mineral oil (petroleum), CAS: 8042-47-5
LD50, oral, Rat, >5000 mg/kg (OECD 401)

**Acute dermal toxicity**

Product
dermal, Based on the available information, the classification criteria are not fulfilled.
Substance
O,O,O-Triphenyl phosphorothioate, CAS: 597-82-0
LD50, dermal, Rat, >2,000 mg/kg bw, OECD 402
White mineral oil (petroleum), CAS: 8042-47-5
LD50, dermal, Rabbit, >2000 mg/kg (OECD 402)

**Acute inhalational toxicity**

Product
inhalative, Based on the available information, the classification criteria are not fulfilled.
Substance
iso-Butane, CAS: 75-28-5
LC50, inhalative, mouse, 1237 mg/l (2h) (Lit.)
Propane, CAS: 74-98-6
LC50, inhalative, Rat, > 1443 mg/l (15 min) (Lit.)
White mineral oil (petroleum), CAS: 8042-47-5
LC50, inhalative, Rat, >5000 mg/m <sup>3</sup> (4h) (OECD 403)
Butane, CAS: 106-97-8
LC50, inhalativ (gas), Rat, 1443 mg/L (15 min)

**Serious eye damage/irritation** Based on the available information, the classification criteria are not fulfilled.

Substance
iso-Butane, CAS: 75-28-5
Eye, non-irritating
Propane, CAS: 74-98-6
Eye, non-irritating
White mineral oil (petroleum), CAS: 8042-47-5
Eye, Rabbit, OECD 405, non-irritating

**Skin corrosion/irritation** Based on the available information, the classification criteria are not fulfilled.

Substance
iso-Butane, CAS: 75-28-5
dermal, non-irritating
Propane, CAS: 74-98-6
dermal, non-irritating
White mineral oil (petroleum), CAS: 8042-47-5

dermal, Rabbit, OECD 404, non-irritating

**Respiratory or skin sensitisation** Based on the available information, the classification criteria are not fulfilled.

Substance
iso-Butane, CAS: 75-28-5
dermal, non-sensitizing
inhalative, non-sensitizing
Propane, CAS: 74-98-6
dermal, non-sensitizing
inhalative, non-sensitizing
White mineral oil (petroleum), CAS: 8042-47-5
dermal, Guinea pig, OECD 406, non-sensitizing

**Specific target organ toxicity — single exposure** Based on the available information, the classification criteria are not fulfilled.

Substance
iso-Butane, CAS: 75-28-5
inhalative, non-irritating
Propane, CAS: 74-98-6
inhalative, non-irritating

**Specific target organ toxicity — repeated exposure** Based on the available information, the classification criteria are not fulfilled.

Substance
iso-Butane, CAS: 75-28-5
NOAEC, inhalative, Rat, 4437 mg/m <sup>3</sup> , The effects observed are not sufficient for classification.
White mineral oil (petroleum), CAS: 8042-47-5
NOAEL, dermal, Rat, 2000 mg/kg bw/day, OECD 411
NOAEL, oral, Rat, 1200 mg/kg bw/day, OECD 451
NOEL, inhalative, Rat, 50 mg/m <sup>3</sup> , OECD 412

**Mutagenicity** Based on the available information, the classification criteria are not fulfilled.

**Reproduction toxicity** Based on the available information, the classification criteria are not fulfilled.

**- Fertility**

Substance
White mineral oil (petroleum), CAS: 8042-47-5
NOAEL, oral, Rat, 1000 mg/kg bw/day (subchronic), no adverse effect observed

**- Development** No information available.

**Carcinogenicity** Based on the available information, the classification criteria are not fulfilled.

Substance
White mineral oil (petroleum), CAS: 8042-47-5
NOAEL, oral, Rat, 1200 mg/kg bw/day, OECD 453, no adverse effect observed

**Aspiration hazard** May be fatal if swallowed and enters airways.  
Based on the available information, the classification criteria are fulfilled.  
Calculation method

**General remarks**

Toxicological data of complete product are not available.  
The determination of properties hazardous to health does not take the propellant or carrier material into account.

## SECTION 12: Ecological information

### 12.1 Toxicity

Substance
O,O,O-Triphenyl phosphorothioate, CAS: 597-82-0
EC50, (48h), Daphnia magna, >100 mg/L, OECD 202
IC50, (3h), Activated sewage sludge, >100 mg/L, OECD 209
EL50, (72h), Desmodemus subspicatus, >100 mg/L, OECD 201
NOEC, (21d), Daphnia magna, >= 7.24 µg/L
NOEC, (90d), Oncorhynchus mykiss, 1.7 µg/L
LL50, (96h), Brachidanio rerio, >100 mg/L, OECD 203
iso-Butane, CAS: 75-28-5
LC50, (96h), Fish, 7,71 - 19,37 mg/L
White mineral oil (petroleum), CAS: 8042-47-5
LC50, (96h), Leuciscus idus, >1000 mg/l (OECD 203)
NOEC, (28d), Fish, >= 1000 mg/l
NOEC, (21d), Daphnia sp., >= 1000 mg/l
LL50, (48h), Daphnia magna, >100 mg/l (OECD 202)
NOEL, (72h), Algae, >=100 mg/l (OECD 201)

### 12.2 Persistence and degradability

<b>Behaviour in environment compartments</b>	No information available.
<b>Behaviour in sewage plant</b>	No information available.
<b>Biological degradability</b>	No information available.

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

### 12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

### 12.7 Other adverse effects

Do not discharge product unmonitored into the environment.

## SECTION 13: Disposal considerations

<b>Restrictions</b>	Substances covered by this Group Standard must comply with the relevant provisions of the Hazardous Substances (Hazardous Property Controls) Notice 2017
<b>Disposal method</b>	The substance must be handled as hazardous waste and disposed of in an approved facility.
<b>Contaminated packaging</b>	

## SECTION 14: Transport information

### 14.1 UN number

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG 1950

Air transport in accordance with IATA 1950

### 14.2 UN proper shipping name

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG Aerosols

- EMS F-D, S-U

- Label



- IMDG LQ 1 I

Air transport in accordance with IATA Aerosols, flammable

- Label



### 14.3 Transport hazard class(es)

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG 2.1

Air transport in accordance with IATA 2.1

### 14.4 Packing group

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

#### 14.5 Environmental hazards

Transport by land according to ADR/RID no

Inland navigation (ADN) no

Marine transport in accordance with IMDG no

Air transport in accordance with IATA no

#### 14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

#### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable

### SECTION 15: Regulatory information

This product has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR002515, Aerosols (Flammable), Group Standard 2020)

#### Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

Key workplace requirements are:

**MSDS** The content and format of this Safety-Data-Sheet is in accordance with HSNO Approved Code of Practice.

**Labelling** Consolidated Hazardous Substances (Labelling) Notice 2017

**Emergency plan** Required if > 1000L is stored

**Approved handler**

**Tracking** -

**Bunding & secondary containment** -

**Signage** -

**Location test certificate** -

**Flammable zone** -

**Fire extinguisher** -

**Note:** -

**Other Legislation** In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health, Safety in Employment Act and Regulations, local Council Rules and Regional Council Plans.

## SECTION 16: Other information

### 16.1 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route  
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses  
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
ATE = acute toxicity estimate  
CAS = Chemical Abstracts Service  
CLP = Classification, Labelling and Packaging  
DMEL = Derived Minimum Effect Level  
DNEL = Derived No Effect Level  
EC50 = Median effective concentration  
ECB = European Chemicals Bureau  
EEC = European Economic Community  
EINECS = European Inventory of Existing Commercial Chemical Substances  
EL50 = Median effective loading  
ELINCS = European List of Notified Chemical Substances  
EmS = Emergency Schedules  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
IC50 = Inhibition concentration, 50%  
IMDG = International Maritime Code for Dangerous Goods  
IUCLID = International Uniform Chemical Information Database  
LC50 = Lethal concentration, 50%  
LD50 = Median lethal dose  
LC0 = lethal concentration, 0%  
LOAEL = lowest-observed-adverse-effect level  
LL50 = Median lethal loading  
LQ = Limited Quantities  
MARPOL = International Convention for the Prevention of Marine Pollution from Ships  
NOAEL = No Observed Adverse Effect Level  
NOEC = No Observed Effect Concentration  
PBT = Persistent, Bioaccumulative and Toxic substance  
PNEC = Predicted No-Effect Concentration  
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals  
STP = Sewage Treatment Plant  
TLV@/TWA = Threshold limit value – time-weighted average  
TLV@STEL = Threshold limit value – short-time exposure limit  
VOC = Volatile Organic Compounds  
vPvB = very Persistent and very Bioaccumulative

### 16.2 Other information

#### Classification procedure

aerosol Category 2: H223 Flammable aerosol. (Calculation method) H229 Pressurised container: May burst if heated. (Calculation method)  
Hazardous to the aquatic environment acute Category 3: H412 Harmful to aquatic life with long lasting effects. (Calculation method)  
aspiration hazard Category 1: H304 May be fatal if swallowed and enters airways. (Calculation method)

#### Modified position

none

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