

## SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Product name : COMMANDANT M4  
Product code : CM45

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

Application : Consumer product (SU21). Car maintenance.

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

Supplier : Turtle Wax Benelux B.V.  
Wageningselaan 6  
3903 LA Veenendaal, The Netherlands  
Telephone : +31 318 54 65 65  
Fax : +31 318 54 65 75  
E-mail : msds@turtlewax.ltd.uk  
Website : www.valma.eu

### 1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:

NL - Telephone : +31 318 54 65 65

(During office hours only)

EMERGENCY TELEPHONE NUMBER (for DOCTORS only):

(24/7)

## SECTION 2 HAZARDS IDENTIFICATION

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### 2.1. Classification of the substance or mixture

CLP classification : Eye irritation, category 2.  
(1272/2008/EC)

Human health hazards : Irritating to eyes. Contains petroleum distillates, may be harmful when ingested.  
Physical/chemical hazards : Not classified as dangerous according to statutory EC-Directives. Combustible.  
Environmental hazards : Not classified as dangerous according to statutory EC-Directives.  
Other information : Keep out of the reach of children.

### 2.2. Label elements

Label elements (1272/2008/EC):

Hazard pictograms :



Signal word : Warning

H- and P-phrases : H319 Causes serious eye irritation.  
P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P280 eyes Wear eye protection/face protection.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.



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P337+P313

If eye irritation persists: Get medical advice/attention.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

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### 3.2. Mixtures

Product description : Mixture.

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	REACH nr.	OEL
Aluminium oxide ----- -----	25 - 50	1344-28-1	215-691-6		#
Distillates (petroleum), hydrotreated light Asp. Tox. 1 H304; EUH066	5 - 10	64742-47-8	265-149-8		#
Propane-1,2-diol ----- -----	1 - 5	57-55-6	200-338-0	01-2119456809-23	#
Methanol Flam. Liq. 2; Acute Tox. 3; STOT SE 1 H225; H331; H311; H301; H370	1 - 3	67-56-1	200-659-6	01-2119433307-44	#
Isotridecanol, branched, ethoxylated Acute Tox. 4; Eye Dam. 1 H302; H318	1 - 5	69011-36-5	-----		

Reference is made to chapter 16 for full text of each relevant H phrase. Substance(s) with an Occupational Exposure Limit are marked with #. Occupational exposure limit(s) are listed in section 8.

## SECTION 4 FIRST AID MEASURES

### 4.1. Description of first aid measures

First aid measures

- Inhalation : Move victim into fresh air. Consult a doctor if victim feels unwell.
- Skin contact : Take off contaminated clothing. Wash off skin with plenty of water and soap before product dries up.
- Eye contact : Wash out with (lukewarm) water for at least 15 minutes. Remove contact lenses. Consult a doctor.
- Ingestion : Do not induce vomiting. Give nothing to drink. Do rinse the mouth. Never give anything by mouth to an unconscious person. Consult a doctor if victim feels unwell.

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

Effects and symptoms

- Inhalation : May cause headache, dizziness and a feeling of sickness.
- Skin contact : No specific effects and/or symptoms are known.
- Eye contact : Irritant. May cause redness and pain.
- Ingestion : May cause a feeling of sickness, vomiting and diarrhoea. May cause lung damage, sore throat and lack of breath.

## SECTION 5 FIREFIGHTING MEASURES

### 5.1. Extinguishing media

Extinguishing media

Product name : Commandant M4

Date of issue : 01-12-2015

Replaces issue dated

: 26-09-2012

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Suitable : Carbondioxide (CO2). Foam. Dry chemical. Water fog.  
Not suitable : Water jet.

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

Special exposure hazards : None known.  
Hazardous thermal decomposition products : Carbon monoxide may be evolved if incomplete combustion occurs.

## 5.3. Advice for firefighters

Special protective equipment for fire-fighters : Use adequate respiratory equipment in case of insufficient ventilation.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

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

Personal precautions : Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. For guidance on selection of personal protective equipment see section 8. For guidance on disposal of spilled material see section 13. Vapours are heavier than air. Build up (of gasses) in low areas involves risk of suffocation.

### 6.2. Environmental precautions

Environmental precautions : Avoid release of product into sewers, surface water and/or ground water. Large spills: contain with dike.

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

Methods for cleaning up : Collect spilled material in containers. Absorb residues in sand or other inert material. Dispose at an authorised waste collection point. Wash away remainder with plenty of water and soap.

## SECTION 7 HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Handling : Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. Keep away from sources of ignition — No smoking. Do not breathe vapour. Avoid contact with skin and eyes.

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

Storage : Keep frost-free, in a cool, dry and well-ventilated place (< 35 °C). Keep away from oxidizing agents.  
Recommended packaging : Keep only in the original container.

### 7.3. Specific end use(s)

Use : Use only as directed.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Occupational exposure limits : Occupational exposure limits have not been established for this product.

Occupational exposure limits (mg/m<sup>3</sup>):

Chemical name	Country	TWA 8 hour (mg/m <sup>3</sup> )	STEL 15 min (mg/m <sup>3</sup> )	Comments
Aluminium oxide	GB	10	-	-
Distillates (petroleum), hydrotreated light		1200	-	CEFIC-HSPA
Propane-1,2-diol	GB	474	-	Total Vapour and Particulates



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Propane-1,2-diol		474		MAC UK: Total Vapour and Particulates
Methanol	GB	266	333	Skin
Methanol	EC	260	-	Skin
Methanol		260		EU

## 8.2. Exposure controls

Engineering measures : Use only in well-ventilated areas. Comply with standard precautionary measures for working with chemicals.  
Hygienic measures : When using do not eat, drink or smoke.

Personal protective equipment:

The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.

Body protection : Use of specific protective industrial clothing is not required under normal conditions of use.  
Respiratory protection : Take care of sufficient ventilation. Wear suitable respiratory protection in case of large scale exposure.  
Suitable: gas filter type A (brown), class I or higher on e.g. a facemask in accordance with EN 140.  
Hand protection : Under normal conditions of use specific gloves are not required.  
Eye protection : Wear appropriate safety glasses with side shields, in accordance with EN 166, when there is danger of possible eye contact.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Appearance : Liquid.  
Colour : Pink.  
Odour : Characteristic.  
Odour threshold : Not known.  
pH : 7  
Solubility in water : Not soluble.  
Partition coefficient (n-octanol/water) : Not known.  
Flash point : 62 °C (PMcc)  
Auto ignition temperature : > 371 °C  
Boiling point/boiling range : 100 °C  
Melting point/melting range : 0 °C  
Explosion limits (in air) : Not known. Lower explosion limit in air (%): 0,6 ( Distillates (petroleum), hydrotreated light )  
Upper explosion limit in air (%): 44 Methanol  
Oxidising properties : Not applicable. Does not contain oxidizing substances.  
Decomposition temperature : Not applicable.  
Viscosity (20°C) : Not known. (1 mm<sup>2</sup>/sec = 1cSt)  
Viscosity (40°C) : 20000 mm<sup>2</sup>/sec  
Vapour pressure (20°C) : Not known.  
Vapour density (20°C) : Not known. (air = 1)  
Relative density (20°C) : 1,3 g/ml  
Evaporation rate : < 1 (n-butyl acetate = 1)

## SECTION 10 STABILITY AND REACTIVITY

### 10.2. Chemical stability

Stability : Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Reactivity : No other hazardous reactions known.



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## 10.4. Conditions to avoid

Conditions to avoid : See section 7.

## 10.5. Incompatible materials

Materials to avoid : Keep away from oxidizing agents.

## 10.6. Hazardous decomposition products

Hazardous decomposition products : Not known.

## SECTION 11 TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

No toxicological research has been carried out on this product.

#### Inhalation

- Acute toxicity : Calculated LC50: > 10 mg/l. Ingredients of unknown toxicity: 56 %. ATE: > 5 mg/l. May cause headache, dizziness and a feeling of sickness.
- Sensitisation : Does not contain respiratory sensitisers. Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Does not contain carcinogenic substances. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

#### Skin contact

- Acute toxicity : Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: 56 %. ATE: > 2000 mg/kg.bw.
- Corrosion/irritation : Unlikely to cause irritation.
- Sensitisation : Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

#### Eye contact

- Corrosion/irritation : Irritant.

#### Ingestion

- Acute toxicity : Calculated LD50: > 3617 mg/kg.bw. Ingredients of unknown toxicity: 6 %. ATE: > 2000 mg/kg.bw. May cause marked impairment of vision or blindness. After ingestion, at vomiting, risk of aspiration in the lungs.
- Corrosion/irritation : May cause a feeling of sickness, stomachache, vomiting and diarrhoea.
- Carcinogenicity : Does not contain carcinogenic substances. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

#### Toxicological information:

Chemical name	Property		Method	Test animal
Isotridecanol, branched, ethoxylated	LD50 (dermal) - estimate	> 2000 mg/kg bw	-----	Rat
	Skin irritation - estimate	Non-irritant	-----	Rabbit
	Eye irritation - estimate	Severely irritant	-----	Rabbit
	Skin sensitisation - estimate	Not sensitizing	-----	Guinea pig
	Mutagenicity - estimate	Not mutagenic	OECD 471	-----
	NOAEL (development) - estimate	Not teratogenic	Read across	-----



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NOAEL (fertility) - estimate	Not reprotoxic	Read across	----
NOEL (carcinogenicity) - estimate	Not carcinogenic	Read across	----
Genotoxicity - estimate	Not genotoxic	Read across	----
NOAEL (oral) - estimate	100 mg/kg bw/d	Read across	----
LD50 (oral) - estimate	> 600 mg/kg bw	Read across	Rat

## SECTION 12 ECOLOGICAL INFORMATION

### 12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity : Not classified as dangerous for the aquatic environment. Calculated LC50 (fish): 63 mg/l. Calculated EC50 (waterflea): 4999 mg/l. Contains 37 % of components with unknown hazards to the aquatic environment. May form an oil film on the water surface causing a decline in oxygen content with possible adverse effects for aquatic organisms.

### 12.2. Persistence and degradability

Persistence – degradability : No specific information known. The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) 648/2004 on detergents.

### 12.3. Bioaccumulative potential

Bioaccumulative potential : No specific information known.

### 12.4. Mobility in soil

Mobility : Adsorbs to soil and has low mobility. Floats on water.

### 12.6. Other adverse effects

Other information : Not applicable.

## SECTION 13 DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

Product residues : Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat product residues and non-empty pack as chemical waste. Dispose waste to an official chemical waste depot.

Additional warning : None.

Local legislation : Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

## SECTION 14 TRANSPORT INFORMATION

### 14.1. UN number

UN nr. : None.

### 14.2. UN proper shipping name

Transport name : Not regulated.

### 14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID (road / railway)



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Class : This product is not classified according to ADR/RID.  
IMDG (sea)  
Class : This product is not classified according to IMDG.  
Marine pollutant : No  
IATA (air)  
Class : This product is not classified according to IATA.

## 14.6. Special precautions for user

Other information : Country specific variations may apply.

## SECTION 15 REGULATORY INFORMATION

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

Community regulations : Regulation (EC) No 1907/2006 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations.

Additional labelling: none.

Other information : Not applicable.

## SECTION 16 OTHER INFORMATION

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### 16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EC) 1907/2006 dated 18 December 2006 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (\*).

Full text of H-phrases mentioned in section 3:

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H370	Causes damage to organs.
EUH066	Repeated exposure may cause skin dryness or cracking.

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:

ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
DNEL	Derived no-effect level
ECETOC TRA	European centre for ecotoxicology and toxicology of chemicals. Targeted risk assessment
EU	European Union
EUSES	European Union System for the Evaluation of Substances
IBC code	Intermediate Bulk Container
LD50 LC50	Lethal Dose/Concentration for 50% of a population
NOAEL	No Observed (Adverse) Effect Level
NOEC	No observed effect concentration
OEL	Occupational exposure limit
PBT	Persistent, Bioaccumulative and Toxic



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PC	Chemical product category
PNEC	Predicted no-effect concentration
STP	Sewage Treatment Plant
SU	Sector of Use
SVHC	Substance of very high concern
TWA/STEL	Time-Weighted Average/Short Term Exposure Limit
vPvB	Very Persistent and Very Bioaccumulative

Number format : "," used as decimal separator.

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Date of fourth issue