

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

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

1.1. Product identifier

Product name : M4 COMMANDANT CLEANER 100 ML
Product code : 1830598-006.

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

Use descriptor system (REACH) :

PC 35 : Washing and cleaning (including the solvent-based products)

1.3. Details of the supplier of the safety data sheet

Registered company name : SERVICE BEST INTERNATIONAL.
Address : De Run 4271 - P.O. Box 76.5500.LM Veldhoven.The Netherlands.
Telephone : +31 (0)4 02 30 23 00. Fax : +31 (0)4 02 30 23 02.
www.servicebest.com

1.4. Emergency telephone number : +33 (0)1 45 42 59 59.

Association/Organisation : INRS / ORFILA <http://www.centres-antipoison.net>.

Other emergency numbers

United Kingdom emergency telephone number : 999
European emergency call : 112

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Eye irritation, Category 2 (Eye Irrit. 2, H319).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS07

Signal Word :

WARNING

Hazard statements :

H319 Causes serious eye irritation.

Precautionary statements - Prevention :

P264 Wash hands thoroughly after handling.

Precautionary statements - Response :

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

Precautionary statements - Disposal :

P501 Dispose of empty or unused container to waste disposal or household waste in accordance with national regulations.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures****Composition :**

Identification	(EC) 1272/2008	Note	%
CAS: 1344-28-1 EC: 215-691-6 REACH: 01-2119529248-35 ALUMINIUM OXIDE		[1]	25 \leq x % < 50
EC: 926-141-6 REACH: 01-2119456620-43 HYDROCARBONS, C11-C14, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS	GHS08 Dgr Asp. Tox. 1, H304 EUH:066		10 \leq x % < 25
CAS: 57-55-6 EC: 200-338-0 REACH: 01-2119456809-23 PROPYLENE GLYCOL		[1]	2.5 \leq x % < 10
CAS: 157627-86-6 EC: 500-337-8 REACH: ALCOHOLS, C13-15, BRANCHED AND LINEAR, ETHOXYLATED	GHS07, GHS05 Dgr Acute Tox. 4, H302 Eye Dam. 1, H318 Aquatic Chronic 3, H412		2.5 \leq x % < 10
CAS: 64-17-5 EC: 200-578-6 REACH: 01-2119457610-43 ETHANOL	GHS07, GHS02 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319	[1]	0 \leq x % < 2.5

Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures**In the event of splashes or contact with eyes :**

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin :

Rinse with soapy water.

In the event of swallowing :

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

Eye contact :

Irritating to eyes.

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

Information for the doctor :

Treat symptomatically. Treatment of overexposure should be based on control of symptoms and the clinical condition of the patient.

The severity of injury, the prognosis of intoxication depend directly on the concentration and duration of exposure.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO₂)

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

5.3. Advice for firefighters

Cool containers / tanks with water spray.

Fold gas / fumes / mists with water spray.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Spills or accidental release, notify relevant authorities in accordance with current regulations.

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.

Avoid spills or further leakage if possible without risk.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

See control measures against fire in Section 5.

See protective measures listed in sections 7 and 8.

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SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

- Always wash hands after handling.
- Remove and wash contaminated clothing before re-using.
- Ensure that there is adequate ventilation, especially in confined areas.

Fire prevention :

- Handle in well-ventilated areas.
- Prevent access by unauthorised personnel.

Recommended equipment and procedures :

- For personal protection, see section 8.
- Observe precautions stated on label and also industrial safety regulations.
- Avoid eye contact with this mixture.
- Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures :

- No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

- No data available.

Storage

- Keep the container tightly closed in a dry, well-ventilated place.
- The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Packaging

- Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

- No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
1344-28-1	10 mg/m3	-	-	-	-
64-17-5		1000 ppm		A3	

- Germany - AGW (BAuA - TRGS 900, 21/06/2010) :

CAS	VME :	VME :	Excess	Notes
64-17-5		500 ppm 960 mg/m3		2(II)

- Belgium (Order of 19/05/2009, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
1344-28-1	10 mg/m3				
64-17-5	1000 ppm 1907 mg/m3				

- France (INRS - ED984 :2012) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
1344-28-1	-	10	-	-	-	-
64-17-5	1000	1900	5000	9500	-	84

- Spain (Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT), Mayo 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
1344-28-1	10 mg/m3				

64-17-5	1000 ppm 1910 mg/m3				
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- Netherlands / MAC-waarde (SER, 4 May 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
1344-28-1	10 mg/m3	-	-	-	-
64-17-5	260 mg/m3	1900 mg/m3		Huid	

- UK / WEL (Workplace exposure limits, EH40/2005, 2007) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
1344-28-1	4 mg/m3				
57-55-6	150 ppm 474 mg/m3				
64-17-5	1000 ppm 1920 mg/m3				

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

ETHANOL (CAS: 64-17-5)

Final use:

Exposure method:
Potential health effects:
DNEL :

Workers.

Dermal contact.
Long term systemic effects.
343 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Short term local effects.
1900 mg of substance/m3

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
950 mg of substance/m3

Final use:

Exposure method:
Potential health effects:
DNEL :

Consumers.

Ingestion.
Long term systemic effects.
87 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Dermal contact.
Long term systemic effects.
206 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Short term local effects.
950 mg of substance/m3

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
114 mg of substance/m3

PROPYLENE GLYCOL (CAS: 57-55-6)

Final use:

Exposure method:
Potential health effects:
DNEL :

Workers.

Inhalation.
Long term systemic effects.
168 mg of substance/m3

Exposure method:
Potential health effects:

Inhalation.
Long term local effects.

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DNEL : 10 mg of substance/m3

Final use:

Exposure method:
Potential health effects:
DNEL :

Consumers.

Inhalation.
Long term systemic effects.
50 mg of substance/m3

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term local effects.
10 mg of substance/m3

Predicted no effect concentration (PNEC):

ETHANOL (CAS: 64-17-5)

Environmental compartment: Soil.
PNEC : 0.63 mg/kg

Environmental compartment: Fresh water.
PNEC : 0.96 mg/l

Environmental compartment: Sea water.
PNEC : 0.79 mg/l

Environmental compartment: Intermittent waste water.
PNEC : 2.75 mg/l

Environmental compartment: Fresh water sediment.
PNEC : 3.6 mg/kg

Environmental compartment: Marine sediment.
PNEC : 2.9 mg/kg

Environmental compartment: Waste water treatment plant.
PNEC : 580 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

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- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

- PVA (Polyvinyl alcohol)

Recommended properties :

- Impervious gloves in accordance with standard EN374

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

Exposure controls linked to environmental protection

See Section 6, 7, 12 and 13.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :

Physical state :	Paste.
Opacity :	Opaque
Color :	Rose

Important health, safety and environmental information

pH :	Not stated. Neutral.
Boiling point/boiling range :	Not relevant.
Flash point interval :	Not relevant.
Vapour pressure (50°C) :	Not relevant.
Density :	> 1
Water solubility :	Dilutable.
Melting point/melting range :	Not relevant.
Self-ignition temperature :	Not relevant.
Decomposition point/decomposition range :	Not relevant.

9.2. Other information

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

10.5. Incompatible materials

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)

- carbon dioxide (CO₂)

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

Splashes in the eyes may cause irritation and reversible damage

11.1.1. Substances

Acute toxicity :

ETHANOL (CAS: 64-17-5)

Oral route :

LD50 = 10470 mg/kg

Species : Rat

OECD Guideline 401 (Acute Oral Toxicity)

Dermal route :

LD50 > 2000 mg/kg

Species : Rabbit

OECD Guideline 402 (Acute Dermal Toxicity)

Inhalation route (n/a) :

LC50 = 51 mg/l

OECD Guideline 403 (Acute Inhalation Toxicity)

ALCOHOLS, C13-15, BRANCHED AND LINEAR, ETHOXYLATED (CAS: 157627-86-6)

Oral route :

300 < LD50 <= 2000 mg/kg

Species : Rat

Other guideline

HYDROCARBONS, C11-C14, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS

Oral route :

LD50 > 5000 mg/kg

Species : Rat

OECD Guideline 401 (Acute Oral Toxicity)

Dermal route :

LD50 > 5000 mg/kg

Species : Rabbit

OECD Guideline 402 (Acute Dermal Toxicity)

Inhalation route (n/a) :

LC50 > 5000 mg/m³

Skin corrosion/skin irritation :

ALCOHOLS, C13-15, BRANCHED AND LINEAR, ETHOXYLATED (CAS: 157627-86-6)

Corrosivity :

No observed effect.

Species : Rabbit

Other guideline

Other guideline

Serious damage to eyes/eye irritation :

ETHANOL (CAS: 64-17-5)

Causes serious eye irritation.

Corneal haze :

1 <= Average score < 2 and effects totally reversible within 21 days of observation

OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Conjunctival redness :

2 <= Average score < 2.5 and effects totally reversible within 21 days of observation
OECD Guideline 405 (Acute Eye Irritation / Corrosion)

ALCOHOLS, C13-15, BRANCHED AND LINEAR, ETHOXYLATED (CAS: 157627-86-6)

The substance produces at least in one animal effects on the cornea that are not expected to reverse or have not fully reversed within an observation period of normally 21 days.

Species : Rabbit

Other guideline

Germ cell mutagenicity :

ETHANOL (CAS: 64-17-5)

No mutagenic effect.

HYDROCARBONS, C11-C14, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS

No mutagenic effect.

Carcinogenicity :

HYDROCARBONS, C11-C14, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS

Carcinogenicity Test :

Negative.

No carcinogenic effect.

Reproductive toxicant :

HYDROCARBONS, C11-C14, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS

No toxic effect for reproduction

11.1.2. Mixture

No toxicological data available for the mixture.

SECTION 12 : ECOLOGICAL INFORMATION**12.1. Toxicity****12.1.1. Substances**

ETHANOL (CAS: 64-17-5)

Fish toxicity :

LC50 = 13000 mg/l

Species : Oncorhynchus mykiss

Duration of exposure : 96 h

OECD Guideline 203 (Fish, Acute Toxicity Test)

Crustacean toxicity :

EC50 = 12340 mg/l

Species : Daphnia magna

Duration of exposure : 48 h

Other guideline

Algae toxicity :

ECr50 = 275 mg/l

Species : Chlorella vulgaris

Duration of exposure : 72 h

OECD Guideline 201 (Alga, Growth Inhibition Test)

EC10 mg/l

Species : Chlorella vulgaris

Duration of exposure : 72 h

ALCOHOLS, C13-15, BRANCHED AND LINEAR, ETHOXYLATED (CAS: 157627-86-6)

Fish toxicity : 1 < LC50 <= 10 mg/l
Species : Brachydanio rerio
Duration of exposure : 96 h

Crustacean toxicity : 1 < EC50 <= 10 mg/l
Species : Daphnia magna
Duration of exposure : 48 h

0,1 < NOEC <= 1 mg/l
Species : Daphnia magna

Algae toxicity : 1 < ECr50 <= 10 mg/l
Species : Scenedesmus subspicatus
Duration of exposure : 72 h

HYDROCARBONS, C11-C14, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS

Fish toxicity : LC50 > 1000 mg/l
Species : Oncorhynchus mykiss
Duration of exposure : 96 h
OECD Guideline 203 (Fish, Acute Toxicity Test)

Crustacean toxicity : EC50 > 1000 mg/l
Species : Daphnia magna
Duration of exposure : 48 h
OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

NOEC = 1.22 mg/l
Species : Daphnia magna
Duration of exposure : 21 days
Other guideline

Algae toxicity : ECr50 > 1000 mg/l
Species : Pseudokirchnerella subcapitata
Duration of exposure : 72 h
OECD Guideline 201 (Alga, Growth Inhibition Test)

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

ETHANOL (CAS: 64-17-5)
Biodegradability : Rapidly degradable.

ALCOHOLS, C13-15, BRANCHED AND LINEAR, ETHOXYLATED (CAS: 157627-86-6)
Biodegradability : Rapidly degradable.

HYDROCARBONS, C11-C14, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS
Biodegradability : Rapidly degradable.

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12.3. Bioaccumulative potential

12.3.1. Substances

ETHANOL (CAS: 64-17-5)

Octanol/water partition coefficient : log K_{ow} = -0.3

Bioaccumulation : BCF = 0.66

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

Local arrangements :

Disposal with household waste if the article has a point if not put eco-packaging waste at an approved waste facility.

SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1. UN number

-

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

-

14.4. Packing group

-

14.5. Environmental hazards

-

14.6. Special precautions for user

-

SECTION 15 : REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2016/1179. (ATP 9)

- Container information:

No data available.

- Particular provisions :

No data available.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Abbreviations :

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

GHS07 : Exclamation mark

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.