

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

Version number 16

· 1.1 Product identifier

• Trade name: Perfect Line Degreaser M600

· Article number: PL.M600.5 / PL.M600.1

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

· Sector of Use

Printing date 19.03.2019

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

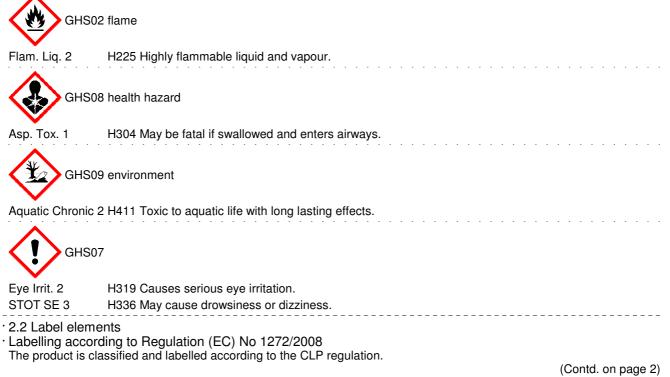
- SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen) • Application of the substance / the mixture Degreaser
- Uses advised against SU21 Consumer uses: Private households / general public / consumers
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Perfect Line					
Postbus 90117					
5000 LA Tilburg					
Holland					
T +31 (0)85 744 11 18					
E info@perfectline.nl					
W www.iperfectline.nl					

- · Further information obtainable from: Product safety department: info@perfectline.nl
- 1.4 Emergency telephone number: National Poisoning Information Centre - Bilthoven - The Netherlands
- T +31 (0)30 274 88 88 Restricted to physicians for information on ingredients.

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



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(Contd. of page 1) Hazard pictograms GHS07 GHS02 GHS08 GHS09 · Signal word Danger · Hazard-determining components of labelling: Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics xvlene ethylbenzene toluene Hazard statements H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H304 May be fatal if swallowed and enters airways. H411 Toxic to aquatic life with long lasting effects. Precautionary statements Do not breathe mist/vapours/spray. P260 P280 Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P301+P310 P331 Do NOT induce vomiting. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. · Additional information: EUH066 Repeated exposure may cause skin dryness or cracking. Restricted to professional users. · 2.3 Other hazards · Results of PBT and vPvB assessment · PBT: Not applicable. · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components %(m/m):

EC number: 920-750-0 Reg.nr.: 01-2119473851-33	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H336	75-100%
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-32	xylene	2.5-10%
CAS: 141-78-6 EINECS: 205-500-4 Reg.nr.: 01-2119475103-46	ethyl acetate � Flam. Liq. 2, H225; � Eye Irrit. 2, H319; STOT SE 3, H336	2.5-10%
5	ethylbenzene Flam. Liq. 2, H225; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H332; Aquatic Chronic 3, H412 ir the wording of the listed hazard phrases refer to section 16.	0.5-2.5%

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SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:
- Immediately wash with water and soap and rinse thoroughly.
- If skin irritation continues, consult a doctor.
- · After eye contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- Remove contactlenses.
- · After swallowing:
- Do not induce vomiting; call for medical help immediately.
- Rinse mouth.
- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: CO2 or powder. Fight larger fights with alcohol resistant foam.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- 5.2 Special hazards arising from the substance or mixture During heating or in case of fire poisonous gases are produced. Carbon monoxide (CO)
- · 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
- Wear protective equipment. Keep unprotected persons away.
- 6.2 Environmental precautions: Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water.
 6.3 Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.
- 6.4 Reference to other sections
 See Section 7 for information on safe handling.
 See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.
 Information about fire - and explosion protection: Keep ignition sources away - Do not smoke. Protect against electrostatic charges.
- Keep respiratory protective device available.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.

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Store only in the original receptacle.

· Information about storage in one common storage facility: Store away from oxidising agents.

· Further information about storage conditions: Keep container tightly sealed.

· Storage class: 3

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

1330-20-7 xylene

IOELV Short-term value: 442 mg/m³, 100 ppm Long-term value: 221 mg/m³, 50 ppm Skin

141-78-6 ethyl acetate

IOELV Short-term value: 1468 mg/m³, 400 ppm Long-term value: 734 mg/m³, 200 ppm

100-41-4 ethylbenzene

IOELV Short-term value: 884 mg/m³, 200 ppm Long-term value: 442 mg/m³, 100 ppm Skin

· DNELs

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Hydrocar	bons, C7-C9, n-alkanes, isoalkanes, cyclics				
Dermal	Long-term exposure - systemic effects	773 mg/kg bw/day (worker) ECHA database			
Inhalative	Long-term exposure - systemic effects	2,035 mg/m3 (worker) ECHA database			
1330-20-7	7 xylene				
Dermal Inhalative	Long-term exposure - systemic effects Acute - short-term exposure - systemic effects Acute - short-term exposure - local effects Long-term exposure - systemic effects	180 mg/kg bw/day (worker) 289 mg/m3 (worker) 289 mg/m3 (worker) 77 mg/m3 (worker)			
141-78-6	ethyl acetate				
Dermal	Long-term exposure - systemic effects Acute - short-term exposure - systemic effects Acute - short-term exposure - local effects Long-term exposure - systemic effects Long-term exposure - local effects	63 mg/kg bw/day (worker) 1,468 mg/m3 (worker) 1,468 mg/m3 (worker) 734 mg/m3 (worker) 734 mg/m3 (worker)			
100-41-4	ethylbenzene				
Dermal	Acute - short-term exposure - local effects Long-term exposure - systemic effects	293 mg/kg bw/day (worker) 180 mg/kg bw/day (worker)			
Inhalative Long-term exposure - systemic effects 77 mg/m3 (worker) PNECs					
	7 xylene .46 mg/kg (sediment marine water) 58 mg/l (STP)				

0.327 mg/l (aqua, freshwater)

0.327 mg/l (aqua, marine water)

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141-78-6 ethyl acetate

PNEC 0.115 mg/kg (sediment marine water)

- 1.15 mg/kg (sediment freshwater)
- 0.148 mg/kg (soil)
- PNEC 650 mg/l (STP)

0.24 mg/l (aqua, freshwater)

1.65 mg/l (aqua, intermittent releases)

0.024 mg/l (aqua, marine water)

100-41-4 ethylbenzene

PNEC 13.7 mg/kg (sediment freshwater)

2.68 mg/kg (soil)

PNEC 9.6 mg/l (STP)

- 0.1 mg/l (aqua, freshwater)
- 0.1 mg/l (aqua, intermittent releases)
- 0.01 mg/l (aqua, marine water)
- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Do not inhale gases / fumes / aerosols.
- Avoid contact with the eyes and skin.
- · Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use selfcontained respiratory protective device.

Short term filter device: Filter A.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product.

- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- Material of gloves
- Suitable materials for safety gloves (EN 374): Nitrile rubber, NBR
- Penetration time of glove material
- Value for the permeation: Level \geq 480 min (hydrocarbons)
- The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. Eye protection:



Tightly sealed goggles

· Body protection: Solvent resistant protective clothing

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SECTION 9: Physical and chemical properties · 9.1 Information on basic physical and chemical properties · General Information · Appearance: Form: Fluid Colour: Colourless · Odour: Characteristic · Odour threshold: Not determined. · pH-value: Not determined. · Change in condition Melting point/freezing point: Undetermined. Initial boiling point and boiling range: ≥77-≤78 °C · Flash point: -4 °C · Flammability (solid, gas): Not applicable. · Ignition temperature: 460 °C · Decomposition temperature: Not determined. · Auto-ignition temperature: Product is not selfigniting. · Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible. · Explosion limits: Lower: 1.1 Vol % Upper: 7 Vol % · Vapour pressure at 20 °C: 6.7 hPa · Density at 20 °C: 0.76 g/cm³ · Relative density Not determined. Vapour density Not determined. · Evaporation rate Not determined. · Solubility in / Miscibility with Slightly soluble. water: · Partition coefficient: n-octanol/water: Not determined. · Viscosity: Dynamic at 20 °C: 1 mPas Kinematic: Not determined. · Solvent content: Organic solvents: 100.0 % VOC (EC) 100.00 % Solids content: 0.0 % 9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

10.2 Chemical stability

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

- 10.3 Possibility of hazardous reactions Reacts with strong oxidizing agents.
- · 10.4 Conditions to avoid High temperatures.

· 10.5 Incompatible materials: Oxidizing agents

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· 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

· Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

 Oral
 LD50
 >5,000 mg/kg (rat)

 Dermal
 LD50
 >2,800 mg/kg (rabbit)

 Inhalative
 LC50/4h
 >23.3 mg/l (rat) (vapour, OECD 403)

1330-20-7 xylene

Oral LD50 3,523 mg/kg (rat) Dermal LD50 12,126 mg/kg bw (rabbit) Inhalative LC50/4h 6,700 ppm (rat)

141-78-6 ethyl acetate

 Oral
 LD50
 4,100 mg/kg (mouse)

 Dermal
 LD50
 5,620 mg/kg (rat)

 >20,000 mg/kg (rabbit)

Inhalative LC50/4h 30 mg/l (rat)

100-41-4 ethylbenzene

Oral LD50 3,500 mg/kg (rat) Dermal LD50 17,800 mg/kg (rabbit)

Inhalative LC50/4h 17.8 mg/l (rat)

· Primary irritant effect:

- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation
- Causes serious eye irritation.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure
- May cause drowsiness or dizziness.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard

May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

EC50/48h 4.6 mg/l (daphnia) EC50/72h 10 mg/l (pseudokirchneriella subcapitata)

LC50/96h 3-10 mg/l (oncorhynchus mykiss)

1330-20-7 xylene

IC50/72h 2.2 mg/l (algae) NOEC/72h 0.44 mg/l (algae) EC50/48h 1 mg/l (daphnia magna)

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LC50/96h 2.6 mg/l (oncorhynchus mykiss)

141-78-6 ethyl acetate

NOEC/32d >9.65 mg/l (fish) NOEC/21d 2.4 mg/l (daphnia magna) EC50/48h 5,600 mg/l (algae) 610 mg/l (daphnia magna) LC50/96h 230 mg/l (fish)

100-41-4 ethylbenzene

EC50/24h >100 mg/l (daphnia magna)

· 12.2 Persistence and degradability No further relevant information available.

· Degree of elimination:

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics OECD 301F 98 % (/) (OECD 301 F, 28 days, readily biodegradable)

141-78-6 ethyl acetate

OESO 303A >99.9 % (/) (OESO 303A) (readily biodegradable) • 12.3 Bioaccumulative potential

1330-20-7 xylene

BCF 25.9 (/) LogPow 3.15 (/)

141-78-6 ethyl acetate

BCF 30 (leuciscus idus) • 12.4 Mobility in soil

141-78-6 ethyl acetate

Koc 1.43 (/)

· Other information:

141-78-6 ethyl acetate

BOD5/20d 79 (/)

- · Ecotoxical effects:
- · Remark: Toxic for fish
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground. Also poisonous for fish and plankton in water bodies. Toxic for aquatic organisms

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- Recommendation
- Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- · European waste catalogue

07 01 04* other organic solvents, washing liquids and mother liquors

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 Uncleaned packaging: Recommendation: Disposal must be made according to 	o official regulations.
SECTION 14: Transport information	
 14.1 UN-Number ADR/ADN, IMDG, IATA 14.2 UN proper shipping name ADR/ADN IMDG IATA 14.3 Transport hazard class(es) ADR/ADN, IMDG 	UN1263 1263 PAINT RELATED MATERIAL, ENVIRONMENTALLY HAZARDOUS PAINT RELATED MATERIAL (HYDROCARBONS, C7-C9 N- ALKANES, ISO-ALKANES, CYCLICS), MARINE POLLUTANT PAINT RELATED MATERIAL
· Class · Label	3 Flammable liquids. 3
· Class · Label	3 Flammable liquids. 3
 14.4 Packing group ADR/ADN, IMDG, IATA 14.5 Environmental hazards: 	II Product contains environmentally hazardous substances: HYDROCARBONS, C7-C9 N-ALKANES, ISO-ALKANES, CYCLICS
 Marine pollutant: Special marking (ADR/ADN): 14.6 Special precautions for user Danger code (Kemler): EMS Number: Stowage Category 	Yes Symbol (fish and tree) Symbol (fish and tree) Warning: Flammable liquids. 33 F-E, <u>S-E</u> B
 14.7 Transport in bulk according to Annex II of Marp and the IBC Code Transport/Additional information: 	Not applicable.
 Transport/Additional information: ADR/ADN Limited quantities (LQ) Excepted quantities (EQ) 	5L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
Transport category Tunnel restriction code	2 D/E (Contd. on page 10)

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· IMDG

· Limited quantities (LQ)

Excepted quantities (EQ)

· UN "Model Regulation":

(Contd. of page 9) 5L Code: E2

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml UN 1263 PAINT RELATED MATERIAL, 3. II. ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

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

Directive 2012/18/EU

- · Named dangerous substances ANNEX I None of the ingredients is listed.
- Seveso category

E2 Hazardous to the Aquatic Environment

P5c FLAMMABLE LIQUIDS

- · Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

· National regulations:

· Other regulations, limitations and prohibitive regulations The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H373 May cause damage to the central nervous system, the kidneys and the liver through prolonged or repeated exposure. Route of exposure: Inhalation.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.
- · Department issuing SDS: Product safety department.
- · Contact: Ing. R. Derks
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- DNEL: Derived No-Effect Level (REACH) PNEC: Predicted No-Effect Concentration (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative

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EU —

Flam. Liq. 2: Flammable liquids – Category 2	
Flam. Liq. 3: Flammable liquids – Category 3	
Acute Tox. 4: Acute toxicity – Category 4	

Acute Tox. 4: Acute toxicity – Category 4 Skin Irrit. 2: Skin corrosion/irritation – Category 2 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2 Asp. Tox. 1: Aspiration hazard – Category 1 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2 Acustic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3