

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1. Product identifier**

Product name : AVERY DENNISON SURFACE CLEANER
Product code : CA3750001

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

Application : Professional use. (SU22). Cleaning agent (PC35).

1.3. Details of the supplier of the safety data sheet

Supplier : Avery Dennison Graphics Solutions
Willem Einthovenstraat 11
2342 BH Oegstgeest, The Netherlands
Telephone : +31-71-342 16 61
Fax : +31-71-342 15 94
E-mail : peter.kuivenhoven@eu.averydennison.com

1.4. Emergency telephone number

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

NL - Telephone : +31-71-342 16 61

(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 : Flammable liquid, category 2. Eye irritation, category 2. Skin sensitization, category 1. Specific target organ toxicity after single exposure, category 3. Hazardous to the aquatic environment — Chronic category 2.

Human health hazards : Causes serious eye irritation. May cause sensitisation by skin contact. Vapours may cause drowsiness and dizziness.

Physical/chemical hazards : Flammable.

Environmental hazards : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Other information : Keep out of the reach of children. Avoid contact with skin. Wear suitable gloves. Do not breathe spray. Use only in well-ventilated areas.

2.2. Label elements

Label elements (1272/2008/EC):

Hazard pictograms :



Signal word : Danger

H- and P-phrases : H225 Highly flammable liquid and vapour.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P370+P378	In case of fire: Use carbondioxide (CO ₂), alcohol resistant foam, dry chemical or water fog to extinguish.
alc	
P261 spray	Avoid breathing spray.
P280 hands	Wear protective gloves and eye protection.
eyes	
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P273	Avoid release to the environment.
P391	Collect spillage.
P501	Dispose of contents/container to an approved waste disposal plant.

Additional labelling

- : Contains: d-Limonene
- : Where the mixture is labelled in accordance with Regulation (EC) No 1272/2008 (CLP) the packaging shall (also) carry the text: Contains: Propan-2-ol
- : 5 % of the mixture consists of ingredient(s) of unknown toxicity.

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
Propan-2-ol Flam. Liq. 2; Eye Irrit. 2; STOT SE 3 H225; H319; H336	50 - 75	67-63-0	200-661-7	01-2119457558-25	#
d-Limonene Flam. Liq. 3; Skin Irrit. 2; Skin Sens. 1; Aquatic Acute 1; Aquatic Chronic 1 H226; H315; H317; H410	1 - 5	5989-27-5	227-813-5	01-2119529223-47	#
2-Butoxyethanol Acute Tox. 4; Eye Irrit. 2; Skin Irrit. 2 H332; H312; H302; H319; H315	1 - 5	111-76-2	203-905-0	01-2119475108-36	#

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. Consult a doctor if irritation occurs.
- Eye contact : Wash out with (lukewarm) water for at least 15 minutes. Remove contact lenses. Consult a doctor.

Ingestion : Do not induce vomiting. Do rinse the mouth. Give one glass of water. Never give anything by mouth to an unconscious person. Consult a doctor immediately.

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

Effects and symptoms

Inhalation : May cause headache, drowsiness, dizziness and a feeling of sickness. May cause irritation to respiratory airways and coughing.

Skin contact : May cause redness and irritation, sensitisation. May produce an allergic reaction. May cause dry skin and redness.

Eye contact : Irritant. May cause redness and pain.

Ingestion : May cause a feeling of sickness, vomiting and diarrhoea.

SECTION 5 FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Suitable : Carbon dioxide (CO₂). Alcohol resistant 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. Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see section 8. For guidance on disposal of spilled material see section 13. Keep away from sources of ignition — No smoking. 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. Waste product should not be allowed to contaminate soil or water.

Other information : Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

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. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Do not breathe spray. 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. Protect from sunlight.

Recommended packaging : Keep only in the original container.

Non recommended packaging : Steel (except stainless steel).

7.3. Specific end use(s)

Use : Use only as directed. Do not mix with other products.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1. Control parameters

Occupational exposure limits : Occupational exposure limits have not been established for this product. Derived no-effect levels (DNEL) have not been established for this product. Predicted no-effect concentrations (PNEC) have not been established for this product.

Occupational exposure limits (mg/m³):

Chemical name	Country	TWA 8 hour (mg/m ³)	STEL 15 min (mg/m ³)	Comments
Propan-2-ol	GB	999	1250	-
d-Limonene		110	-	MAC: DE, CH, NL
2-Butoxyethanol	GB	123	246	Skin; BMGV
2-Butoxyethanol	EC	100	246	Skin

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 : Wear appropriate protective clothing, overalls or suit, and similar boots in accordance with EN 365/367 resp. 345. Suitable material: nitril. Indication of permeation breakthrough time: 1 hour.

Respiratory protection : Take care of sufficient ventilation. Wear suitable respiratory protection in case of large scale exposure. Suitable: gas filter type AK (brown/green), class I or higher on e.g. a facemask in accordance with EN 140.

- Hand protection : Wear appropriate safety gloves in accordance with EN 374. Suitable material: nitril. \pm 0,5 mm
Indication of permeation breakthrough time: 1 hour.
- 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 : Green.
- Odour : Characteristic.
- Odour threshold : Not known.
- pH : 11
- Solubility in water : Soluble.
- Partition coefficient (n-octanol/water) : Not known.
- Flash point : 22 °C (PMcc)
- Auto ignition temperature : > 230 °C
- Boiling point/boiling range : 82 °C
- Melting point/melting range : < -20 °C
- Explosion limits (in air) : Not known. Lower explosion limit in air (%): 0,7 (d-Limonene)
: Upper explosion limit in air (%): 12 Propan-2-ol
- Oxidising properties : Not applicable.
- Decomposition temperature : Not applicable.
- Viscosity (20°C) : Not known. (1 mm²/sec = 1cSt)
- Viscosity (40°C) : < 7 mm²/sec
- Vapour pressure (20°C) : Not known.
- Vapour density (20°C) : Not known. (air = 1)
- Relative density (20°C) : 0,88 g/ml
- Evaporation rate : Not known. (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.

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: 5 %. ATE: > 5 mg/l. Low toxicity. Not classified - based on available data, the classification criteria are not met. Target organ(s): Central nervous system. May cause headache, drowsiness, dizziness and a feeling of sickness.
- Corrosion/irritation : May cause irritation to respiratory airways and coughing.
- Sensitisation : Does not contain respiratory sensitisers. Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : 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: 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : Irritant. May cause redness.
- Sensitisation : May cause sensitisation by skin contact. May produce an allergic reaction.
- 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: > 5000 mg/kg.bw. Ingredients of unknown toxicity: 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met. May cause hampered eyesight.
- Corrosion/irritation : May cause a feeling of sickness, vomiting and diarrhoea.
- Carcinogenicity : 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
Propan-2-ol	NOAEL (oral)	870 mg/kg bw/d	-----	Rat
	LD50 (oral)	4396 mg/kg bw	-----	Rat
	LD50 (dermal)	12800 mg/kg bw	-----	Rat
	LC50 (inhalation)	46600 mg/m3	-----	Rat
	Skin irritation	Slightly irritant	OECD 404	Rabbit
	Eye irritation	Irritant	OECD 405	Rabbit
	NOAEL (fertility, oral)	407 mg/kg bw/d		Rat
	NOAEL (development, oral)	400 mg/kg bw/d		Rat
	NOEL (carcinogenicity, oral)	Not carcinogenic	OECD 416	Rat
	Skin sensitisation	Not sensitizing	OECD 406	Guinea pig
	Mutagenicity	Negative	OECD 471	
	NOAEL (inhalation)	12500 mg/m3	OECD 451	Rat
	Genotoxicity - in vivo	Not genotoxic	OECD 474	Mouse
	NOEL (carcinogenicity, inh.)	12500 mg/m3		Mouse
	Genotoxicity - in vitro	Not genotoxic	OECD 476	

d-Limonene	Genotoxicity - in vitro	Not genotoxic			
	LD50 (oral)	4400 mg/kg bw	-----	Rat	
	LD50 (dermal)	> 2000 mg/kg bw	-----	Rabbit	
	NOEL (oral)	5 mg/kg bw/d	-----	Rat	
	NOAEL (oral)	30 mg/kg bw/d		Rat	
	Skin irritation	Irritant	-----	-----	
	NOAEL (development, oral)	600 mg/kg bw/d		Rat	
	Skin sensitisation	10075 ug/cm2	OECD 429	Mouse	
	Mutagenicity	Negative	OECD 471		
	Eye irritation	Non-irritant	OECD 405	Rabbit	
	NOEL (carcinogenicity, oral)	> 300 mg/kg bw/d	OECD 451	Rat	
	2-Butoxyethanol	Genotoxicity - in vivo	> 2000 mg/kg bw/d		Rat
		Eye irritation	Irritant	OECD 405	Rabbit
LC50 (inhalation)		2200 mg/m3	OECD 403	Rat	
LD50 (dermal)		435 mg/kg bw	OECD 402	Rabbit	
NOAEL (inhalation)		152 mg/m3	OECD 413	Rat	
NOAEL (fertility, oral)		720 mg/kg bw/d			
Genotoxicity - in vitro		Not genotoxic			
NOEL (carcinogenicity, oral)		Not carcinogenic			
LD50 (oral)		1746 mg/kg bw	OECD 401	Rat	
NOAEL (dermal)		> 150 mg/kg bw/d	OECD 411	Rabbit	
Genotoxicity - in vivo		Not genotoxic	OECD 474	Mouse	
Mutagenicity		Negative	OECD 471	Salmonella typhimurium	
NOAEL (development, oral)		> 100 mg/kg bw/d	OECD 414	Rat	
Skin irritation	Irritant	OECD 404	Rabbit		
NOAEL (oral)	< 69	OECD 408	Rat		
Skin sensitisation	Not sensitizing	OECD 406	Guinea pig		

SECTION 12 ECOLOGICAL INFORMATION
12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity : Toxic to aquatic organisms. Calculated LC50 (fish): 15 mg/l. Calculated EC50 (waterflea): 7 mg/l.
Contains < 1 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence – degradability : May cause long-term adverse effects in the aquatic environment.

12.3. Bioaccumulative potential

Bioaccumulative potential : No specific information known.

12.4. Mobility in soil

Mobility : If product enters soil, it will be highly mobile and may contaminate groundwater.

12.6. Other adverse effects

Other information : Not applicable.

Ecological information:

Chemical name	Property		Method	Test animal
d-Limonene	LC50 (fish)	0,720 mg/l	OECD 203	Pimephales promelas
	EC50 (waterflea)	0,36 mg/l	OECD 202	Daphnia magna
	Ultimate aerobic biodegradation (%)	> 92 %		
	NOEC (waterflea) - chronic	0,15 mg/l.d		Daphnia magna
	Log P(ow)	4,38		

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 hazardous waste.
- Additional warning : Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums.
- European waste catalogue : Dispose hazardous waste in accordance with Directive 91/689/EEC under acknowledgement of a waste code according to Commission Decision 2000/532/EC to an official chemical waste depot.
- 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. : UN 1993

14.2. UN proper shipping name

Transport name : FLAMMABLE LIQUID, N.O.S. (Propan-2-ol ; d-Limonene)

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

ADR/RID (road / railway)

Class : 3
 Classification code : F1
 Packaging group : II
 Danger label : 3 + N



IMDG (sea)

Class : 3
 Packaging group : II
 EmS (fire / spill) : F - E / S - E
 Marine pollutant : No

IATA (air)

Class : 3

14.6. Special precautions for user

Other information : Country specific variations may apply. It is possible that a "Limited Quantity" exemption applies to the transport of this product.

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.

Other information : The packaging shall carry the text:

Ingredient declaration according to Regulation 648/2004:

Contains:	Concentration (%)
Aliphatic hydrocarbons	< 5
d-Limonene	

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.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H410	Very toxic to aquatic life with long lasting effects.

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



MATERIAL SAFETY DATA SHEET

According to Regulation (EU) No 453/2010

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.

Date of third issue