

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

Product name : AVERY FLAT SURFACE CLEANER  
Product code : 09101030  
MSDS nr. : 1352

**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 (in the UK and Ireland for healthcare professionals only):  
(24/7)

**SECTION 2 HAZARDS IDENTIFICATION**

\*

**2.1. Classification of the substance or mixture**

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

Human health hazards : Causes skin irritation. Causes serious eye irritation.  
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 : H315 Causes skin irritation.  
H319 Causes serious eye irritation.

Additional labelling: none.

Ingredient declaration according to Regulation 648/2004:

Contains:	Concentration (%)
Perfumes	

### 2.3. Other hazards

Other information : Does not contain PBT or vPvB substances.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS \*

### 3.2. Mixtures

Product description : Mixture.

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	REACH nr.	OEL
2-Butoxyethanol Acute Tox. 4; Eye Irrit. 2; Skin Irrit. 2 H332; H312; H302; H319; H315	10 - < 20	111-76-2	203-905-0	01-2119475108-36	#
Monoethanolamine Acute Tox. 4; Skin Corr. 1B H332; H312; H302; H314; H335	0,1 - < 1	141-43-5	205-483-3	01-2119486455-28	#

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 persists.
- 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 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. May cause irritation to respiratory airways and coughing.
- Skin contact : Irritant. May cause dry skin and redness.
- Eye contact : Irritant. May cause redness and pain.
- Ingestion : May cause a feeling of sickness, vomiting and diarrhoea.

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

Note to physicians : None known.

## SECTION 5 FIREFIGHTING MEASURES

### 5.1. Extinguishing media

Extinguishing media

Suitable : Carbondioxide (CO<sub>2</sub>). Foam. Dry chemical. Water fog.  
Not suitable : None known.

**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. 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.  
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.

**6.4. Reference to other sections**

Reference to other sections : For guidance on selection of personal protective equipment see section 8. For guidance on disposal of spilled material see section 13.

**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.  
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/m<sup>3</sup>):

Chemical name	Country	TWA 8 hour (mg/m <sup>3</sup> )	STEL 15 min (mg/m <sup>3</sup> )	Comments
2-Butoxyethanol	GB	123	246	Skin; BMGV
2-Butoxyethanol	EC	100	246	Skin
Monoethanolamine	GB	7,6	2,5	Skin
Monoethanolamine	EC	2,5	7,6	Skin

Derived no-effect level (DNEL) for workers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
2-Butoxyethanol	Dermal Inhalation	246 mg/m <sup>3</sup>	89 mg/kg bw 663 mg/m <sup>3</sup>		75 mg/kg bw/day 98 mg/m <sup>3</sup>
Monoethanolamine	Dermal Inhalation			3,3 mg/m <sup>3</sup>	1 mg/kg bw/day

Derived no-effect level (DNEL) for consumers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
2-Butoxyethanol	Dermal Inhalation	123 mg/m <sup>3</sup>	44,5 mg/kg bw 426 mg/m <sup>3</sup>		38 mg/kg bw/day 49 mg/m <sup>3</sup>
Monoethanolamine	Oral Dermal Inhalation Oral		13,4 mg/kg bw	2 mg/m <sup>3</sup>	3,2 mg/kg bw/day 0,24 mg/kg bw/day 3,75 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
2-Butoxyethanol	Water Sediment Intermittent water STP Soil Oral	8,8 mg/l 34,6 mg/kg	0,88 mg/l 3,46 mg/kg	9,1 mg/l 463 mg/l 3,13 mg/kg 0,02 mg/kg food

**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 : Wear appropriate safety gloves in accordance with EN 374. Suitable material: butyl.  $\pm$  0,5 mm.  
Indication of permeation breakthrough time: not permeable.
- 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	: Blue.	
Odour	: Perfumed.	
Odour threshold	: Not known.	
pH	: 10,5	
Solubility in water	: Soluble.	
Partition coefficient (n-octanol/water)	: Not applicable.	
Flash point	: 72 °C	
Flammability (solid, gas)	: Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	: > 230 °C	
Boiling point/boiling range	: 100 °C	
Melting point/melting range	: < 0 °C	
Explosive properties	: None known.	Does not contain explosives.
Explosion limits (in air)	: Not known.	Lower explosion limit in air (%): 1,3 ( 2-Butoxyethanol )
	:	Upper explosion limit in air (%): 10,6
Oxidising properties	: Not applicable.	Does not contain oxidizing substances.
Decomposition temperature	: Not applicable.	
Viscosity (20°C)	: Not known.	
Viscosity (40°C)	: Not relevant.	The product contains < 10% substances having an aspiration hazard.
Vapour pressure (20°C)	: Not known.	
Vapour density (20°C)	: > 1	(air = 1)
Relative density (20°C)	: 0,99 g/ml	
Evaporation rate	: < 1	(n-butyl acetate = 1)

**SECTION 10 STABILITY AND REACTIVITY****10.1. Reactivity**

Reactivity : See sub-sections below.

**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 : Not known.  
 products

**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: > 7,066 mg/l. Ingredients of unknown toxicity: < 1 %. ATE: > 5 mg/l. Low toxicity. Not classified - based on available data, the classification criteria are not met. May cause headache, dizziness and a feeling of sickness.
- Corrosion/irritation : Not classified - based on available data, the classification criteria are not met.
- Sensitisation : Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

**Skin contact**

- Acute toxicity : Calculated LD50: > 3607 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. Prolonged contact may dry out and defat the skin.
- Sensitisation : Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Not expected to be mutagenic. 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.
- Corrosion/irritation : May cause a feeling of sickness, vomiting and diarrhoea. Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

## Toxicological information:

Chemical name	Property		Method	Test animal
2-Butoxyethanol	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 : Calculated LC50 (fish): 5079 mg/l. Calculated EC50 (waterflea): 3229 mg/l. Contains < 1 % of components with unknown hazards to the aquatic environment. Not classified - based on available data, the classification criteria are not met.

**12.2. Persistence and degradability**

Persistence – degradability : No specific information known.

**12.3. Bioaccumulative potential**

Bioaccumulative potential : Contains bioaccumulating substances.

**12.4. Mobility in soil**

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

**12.5. Results of PBT and vPvB assessment**

PBT/vPvB assessment : Does not contain PBT or vPvB substances.

**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 should be recycled or re-used. Treat product residues and non-empty pack as hazardous waste.

Additional warning : None.

Waste water discharge : Avoid discharge of waste water arising from tank cleaning to the environment.

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. : 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/ADN (road/railway/inland waterways)

Class : This product is not classified according to ADR/RID/ADN.

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.

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

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments.

**SECTION 15 REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Community regulations : Regulation (EC) No 830/2015 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations.

:

**15.2. Chemical safety assessment**

Chemical safety assessment : Not applicable.

**SECTION 16 OTHER INFORMATION**

\*

**16.1. Other information**

The information in this safety data sheet is compiled in compliance with Regulation (EC) No 830/2015 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:

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.



## Full text of hazard classes mentioned in section 3:

Acute Tox. 4 : Acute toxicity, category 4.  
Skin Corr. 1B : Skin corrosive, category 1B.  
Skin Irrit. 2 : Skin irritation, category 2.  
Eye Irrit. 2 : Eye irritation, category 2.

## 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  
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.