

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

Product name : AVERY DENNISON FLAT SURFACE CLEANER  
Product code : 09101030, CB1380001

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

Application : SU22 Professional use. For industrial or institutional use. PC35 Cleaning agent.

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

Supplier : Avery Dennison Graphics Solutions  
Willen Einthovenstraat 11  
2342 BH OESTGEEEST, The Netherlands  
Telephone : +31-85000 2000  
E-mail : gs.msds@eu.averydennison.com  
Website : www.graphics.averydennison.eu

**1.4. Emergency telephone number**

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

NL - Telephone : +31-85000 2000 (24/7)

EMERGENCY TELEPHONE NUMBER (for DOCTORS only):

National Poisons Information Service +44-844 892 0111 (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.

**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.  
P280 hands Wear protective gloves and eye protection.  
eyes  
P370+P378 In case of fire: Use carbondioxide (CO2), alcohol resistant foam, dry chemical or  
alc water fog to extinguish.

**2.3. Other hazards**

Other information : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

**SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS** \*

**3.2. Mixtures**

Product description : Mixture.

Information on hazardous substances:

| Substance name  | Concentration (w/w) (%) | CAS nr.  | EC number | Remark | REACH nr.        |
|-----------------|-------------------------|----------|-----------|--------|------------------|
| 2-Butoxyethanol | 10 - < 20               | 111-76-2 | 203-905-0 |        | 01-2119475108-36 |
| 2-Aminoethanol  | 0,1 - < 1               | 141-43-5 | 205-483-3 |        | 01-2119486455-28 |

| Substance name  | Hazard Class                              | H-phrases                    | Pictograms   |                |
|-----------------|---|------------------------------|--------------|----------------|
| 2-Butoxyethanol | Acute Tox. 4; Eye Irrit. 2; Skin Irrit. 2 | H332; H312; H302; H319; H315 | GHS07        |                |
| 2-Aminoethanol  | Acute Tox. 4; Skin Corr. 1B; STOT SE 3    | H332; H312; H302; H314; H335 | GHS05; GHS07 | H335 : C ≥ 5 % |

Occupational exposure limit(s), if relevant, are listed in section 8.

Reference is made to chapter 16 for full text of each relevant H phrase.

**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.
- 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 FIRE-FIGHTING MEASURES**
**5.1. Extinguishing media**

Extinguishing media

- Suitable : Carbondioxide (CO2). 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**

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**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. 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. In case of 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 : See also section 8.

**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**

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## 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.

Workplace 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       |
| 2-Aminoethanol  | GB      | 7,6                             | 2,5                              | Skin       |
| 2-Aminoethanol  | 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<br>Inhalation | 246 mg/m <sup>3</sup> | 89 mg/kg bw<br>663 mg/m <sup>3</sup> |                       | 75 mg/kg bw/day<br>98 mg/m <sup>3</sup> |
| 2-Aminoethanol  | Dermal<br>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<br>Inhalation                 | 123 mg/m <sup>3</sup> | 44,5 mg/kg bw<br>426 mg/m <sup>3</sup> |                     | 38 mg/kg bw/day<br>49 mg/m <sup>3</sup>                    |
| 2-Aminoethanol  | Oral<br>Dermal<br>Inhalation<br>Oral |                       | 13,4 mg/kg bw                          | 2 mg/m <sup>3</sup> | 3,2 mg/kg bw/day<br>0,24 mg/kg bw/day<br>3,75 mg/kg bw/day |

Predicted no-effect concentration (PNEC):

| Chemical name   | Route of exposure  | Fresh water | Marine water |                 |
|-----------------|--------------------|-------------|--------------|-----------------|
| 2-Butoxyethanol | Water              | 8,8 mg/l    | 0,88 mg/l    |                 |
|                 | Sediment           | 34,6 mg/kg  | 3,46 mg/kg   |                 |
|                 | Intermittent water |             |              | 9,1 mg/l        |
|                 | STP                |             |              | 463 mg/l        |
|                 | Soil               |             |              | 3,13 mg/kg      |
|                 | Oral               |             |              | 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 for momentary use. Wear suitable protective clothing, overalls or suit, and similar boots in accordance with EN 365/367 resp. 345 in case of frequent or prolonged use and in case of large scale exposure. Suitable material: butyl. Indication of permeation breakthrough time: 6 hours.
- 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: 6 hours.
- 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**

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

|   |                             |   |
|---|-----------------------------|---|
| Appearance                              | : Liquid.                   |   |
| Colour                                  | : Blue.                     |   |
| Odour                                   | : Perfumed.                 |   |
| Odour threshold                         | : Not known.                |   |
| pH                                      | : 11                        |   |
| Solubility in water                     | : Soluble.                  |   |
| Partition coefficient (n-octanol/water) | : Not known.                |   |
| Flash point                             | : 72 °C                     | Closed cup.   |
| Flammability (solid, gas)               | : Not applicable.           | Liquid. See flashpoint.                                   |
| Auto ignition temperature               | : > 200 °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)                        | : 1 mm <sup>2</sup> /sec    | (1 mm <sup>2</sup> /sec = 1cSt)                           |
| Viscosity (40°C)                        | : < 20 mm <sup>2</sup> /sec |   |
| Vapour pressure (20°C)                  | : 2300 Pa                   |   |
| Vapour density (20°C)                   | : > 1                       | (air = 1)   |
| Relative density (20°C)                 | : 1 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 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: < 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 : Does not contain substances classified as respiratory sensitiser. 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 : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

##### Skin contact

- Acute toxicity : Calculated LD50: > 3697 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 : 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.
- Aspiration : Not expected to be an aspiration hazard. Contains a substance/substances with an aspiration hazard. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : May cause a feeling of sickness, vomiting and diarrhoea.
- Carcinogenicity : Not expected to be carcinogenic. 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.
- Reprotoxicity : Development: Not expected to be reprotoxic. Development: Not classified - Based on available data, the classification criteria are not met. Fertility: not expected to be reprotoxic. Fertility: 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/m <sup>3</sup> | OECD 403 | Rat                    |
| LD50 (dermal)                | 435 mg/kg bw           | OECD 402 | Rabbit                 |
| NOAEL (inhalation)           | 152 mg/m <sup>3</sup>  | 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

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### 12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity : Calculated LC50 (fish): 3030 mg/l. Calculated EC50 (waterflea): 904 mg/l. Contains 0 % 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 ass

PBT/vPvB assessment : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

### 12.6. Other adverse effects

Other information : Not applicable.

## SECTION 13 DISPOSAL CONSIDERATIONS

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### 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 : Do not dispose into the environment, in drains or in water courses. 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 73/78 and the IBC Code**

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments. Packaged liquids are not considered bulk.

**SECTION 15 REGULATORY INFORMATION**

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

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

Ingredient declaration according to Regulation 648/2004:

| Contains: | Concentration (%) |
|-----------|-------------------|
| Perfumes  |                   |

**15.2. Chemical safety assessment**

Chemical safety assessment : 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 (EU) No 2015/830 dated 28 May 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 (\*).

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

|           |   |
|-----------|---|
| ADR       | : European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE       | : Acute Toxicity Estimate   |
| CLP       | : Classification, Labeling & Packaging  |
| CMR       | : Carcinogenic, Mutagenic or toxic for Reproduction                                   |
| EEC       | : European Economic Community   |
| GHS       | : Globally Harmonized System of Classification and Labelling of Chemicals             |
| IATA      | : International Air Transport Association   |
| IBC code  | : International Bulk Chemical Code  |
| IMDG      | : International Maritime Dangerous Goods Code   |
| LD50/LC50 | : Lethal Dose/Concentration for 50% of a population                                   |
| MAC       | : Maximum Allowable Concentration   |
| MARPOL    | : International Convention for the Prevention of Pollution From Ships                 |
| NO(A)EL   | : No Observed (Adverse) Effect Level  |
| OECD      | : Organisation for Economic Co-operation and Development                              |
| PBT       | : Persistent, Bioaccumulative and Toxic   |
| PC        | : Chemical product category   |
| PT        | : Product type  |
| REACH     | : Registration, Evaluation, Authorisation and Restriction of Chemicals                |
| RID       | : Regulations concerning the International Carriage of Dangerous Goods by Rail        |
| STP       | : Sewage Treatment Plant  |
| SU        | : Sector of Use   |
| TWA/STEL  | : Time-Weighted Average/Short Term Exposure Limit                                     |
| UN        | : United Nations  |
| VOC       | : Volatile Organic Compounds  |
| vPvB      | : Very Persistent and Very Bioaccumulative  |

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008:

|               |                       |
|---------------|-----------------------|
| Skin Irrit. 2 | : Calculation method. |
| Eye Irrit. 2  | : Calculation method. |

Full text of hazard classes mentioned in section 3:

|                   |                                    |
|-------------------|------------------------------------|
| Acute Tox. 4      | : Acute toxicity, category 4.      |
| Skin Corr. 1A/B/C | : Skin corrosive, category 1A/B/C. |
| Skin Irrit. 2     | : Skin irritation, category 2.     |
| Eye Irrit. 2      | : Eye irritation, category 2.      |

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.                      |

Number format : ", " used as decimal separator.

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End of safety data sheet.