

Safety Data Sheet According to Regulation (EC) No 1907/2006

Printing ink

Version 1.0

Revision date: 29/09/2015

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

| Identification on the label/Trade name: | Avery Dennison TrafficJet Ink: Flush, Yellow, Black, Worboy Green, Blue, Green, Red, and Brown |
|---|--|
| Additional identification: | Printing ink; mixture |
| Identification of the product: | See section 3 |
| Index Number: | Not available |
| REACH registration No.: | Not available |
| 1.2 Relevant identified uses of the substance a | nd uses advised against: |
| 1.2.1 .1 Identified uses: | |
| For industrial use only by qualified personne | 91 |
| 1.2.2 .2 Uses advised against: | |
| Not available. | |
| 1.3 Details of the supplier of the safety data sh | eet: |
| Supplier(Only representative): | - |
| Supplier(Manufacturer): | Avery Dennison Corporation |
| Address: | 7542 N. Natchez Avenue, Niles, IL 60714 |
| | USA |
| Contact person(E-mail): | reflective.orders@averydennison.com |
| Telephone: | +1 (800) 282-8379 |
| Fax: | N/A |
| 1.4 Emergency telephone Number: | |
| CHEMTREC International: +1 (703) 527-3887 – (| See Appendix for Regional Country Codes) |
| Available outside office hours? | YES X NO |
| Section 2 Hazards Identification | |

2.1 Classification of the substance/mixture:

2.1.1 Classification:

The mixture is classified as following according to 1999/45/EC and REGULATION (EC) No 1272/2008:

| REGULATION (EC) No 1272/2008 | |
|------------------------------|--|
| Hazard statement | |
| H315 | |
| H318 | |
| H360 | |
| H336 | |
| - | |

For full text of H- phrases: see section 2.2.

| 1999/45/EC | |
|-------------------------|-----------|
| Hazards characteristics | R-Phrases |
| Xi | R38 |
| Хі | R41 |

Product name: Printing ink

| - | R60 |
|---|-----|
| - | R67 |

For full text of R- phrases: see section 16.

2.2 label elements:



| Hazard Pictograms: | |
|--------------------------|--|
| Signal Word(S): | Danger |
| Hazard Statement: | H315: Causes skin irritation |
| | H318: Causes serious eye damage |
| | H360: May damage fertility or the unborn child |
| | H336: May cause drowsiness or dizziness. |
| Precautionary statement: | P201: Obtain special instructions before use. |
| | P202: Do not handle until all safety precautions have been read and understood. |
| | P261: Avoid breathing dust/fume/gas/mist/vapors/spray. |
| | P271: Use only outdoors or in a well-ventilated area. |
| | P264: Wash hands thoroughly after handling. |
| | P280: Wear protective gloves/protective clothing/eye protection/face protection. |
| | P281: Use personal protective equipment as required. |
| | P302 + P352: IF ON SKIN: Wash with plenty of soap and water. |
| | P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position |
| | comfortable for breathing. |
| | P312: Call a POISON CENTER or doctor/physician if you feel unwell. |
| | P332 + P313: If skin irritation occurs: Get medical advice/attention. |
| | P362: Take off contaminated clothing and wash before reuse. |
| | P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. |
| | Remove contact lenses, if present and easy to do. Continue rinsing. |
| | P310: Immediately call a POISON CENTER or doctor/physician. |
| | P308 + P313: IF exposed or concerned: Get medical advice/attention. |
| | P403 + P233: Store in a well-ventilated place. Keep container tightly closed. |
| | P405: Store locked up. |
| | P501: Dispose of contents/container to |
| | |

2.3 Other hazards:

Not available.

Section 3 Composition/information on ingredients

| Substance/Mixture: | Mixture |
|--------------------|---------|
| Ingredient(s): | |

| | Chemical Name | Registration No. | CAS No. | EC No. | Concentration |
|---|---------------------------------|------------------|----------|-----------|---------------|
| [| Diethylene Glycol Diethyl Ether | N/A | 112-36-7 | 203-963-7 | 40-60 |

| Gamma Butyrolactone | N/A | 96-48-0 | 202-509-5 | 10-30 |
|-------------------------------------|-----|-----------|-----------|-------|
| Tetraethylene Glycol Dimethyl Ether | N/A | 143-24-8 | 205-594-7 | 1-10 |
| Carbon Black | N/A | 1333-86-4 | 215-609-9 | 0-5 |

Section 4 First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

Move to fresh air. Seek medical attention if irritation persists.

4.1.2 In case of skin contact:

Wash with soap and water and rinse thoroughly for 15 minutes. Get medical attention if blisters or inflammation are present on the skin.

4.1.3 In case of eyes contact:

Flush eyes and under eyelids for 15 minutes with water. Seek medical attention if irritation or redness persists.

4.1.4 In case of ingestion:

Do not induce vomiting. Rinse mouth with water but do not swallow and get medical attention. Call Poison Control or Physician immediately.

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

Causes skin irritation. Causes serious eye damage. May damage fertility or the unborn child. May cause drowsiness or dizziness.

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

If skin irritation or rash occurs, get medical advice/attention.

| Section 5 Fire-Fighting measures | |
|---|---|
| 5.1 Extinguishing media: | |
| Suitable extinguishing media: | Water spray for cooling, foam, carbon dioxide, dry chemical, or Halon for fire suppression. |
| Unsuitable extinguishing media: | Not available. |
| 5.2 Special hazards arising from the substance or mixture | Material is a flammable liquid but must be preheated for combustion. May burn in fire conditions releasing products, which may be toxic (CO, CO2, and volatile organics). |
| 5.3 Special fire fighting methods and special protective actions for fire-fighters: | Wear approved MSHA/NIOSH breathing apparatus and full protective clothing. |

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

| 6.1.1 For non-emergency personnel: | Keep good personal precautions. Keep products and raw materials are managed |
|------------------------------------|--|
| | and stacked orderly. Work well in cleaning procedures for products and waste. |
| | Observe good industrial hygiene practices. Use personal protective equipment |
| | recommended in Section 8. |
| 6.1.2 For emergency responders: | Evacuate personnel from the area. Shut off all sources of ignition; No flares, |
| | smoking, or flames in the area. Wear protective equipment. |

Product name: Printing ink

| 6.2 Environmental Precautions: | Do not flush to sewer or waterways. |
|--|--|
| | Dike with soil. Cover with a sheet to prevent expanding odor. |
| 6.3 Methods for Containment and Cleaning | For small spills, use absorbent media. Dispose of the absorbent media according to |
| up: | local, regional, and national regulations. |
| | For large spills, enclose the spilled liquid with sand. Recover the liquid while |
| | covering it with an oil-resistant antistatic sheet. Dispose of material according to |
| | local, regional, and national regulations. |
| 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 information on disposal. |
| 6.5 Additional information: | Not applicable. |

| Section 7 Handling and storage | |
|--|--|
| 7.1 Precautions for safe handling: | |
| 7.1.1 Protective measures: | In accordance with good industrial practices, handle with care and avoid personal contact. |
| | Wear protective gloves, safety goggles, and other protective clothing. |
| | Avoid contact with skin, eyes, and clothing. |
| 7.1.2 Advice on general occupational | Do not eat, drink and smoke in work areas. Wash hands after use. Remove |
| hygiene: | contaminated clothing and protective equipment before entering eating areas. |
| 7.2 Conditions for safe storage, including | Keep out of direct sunlight and away from heat source. |
| any incompatibilities: | Keep tightly closed. |
| | Use adequate ventilation. |
| 7.3 Specific end use(s): | Not applicable. |

Section 8 Exposure Controls/Personal Protection

| 8.1 Control parameters: | | |
|--|---|--|
| 8.1.1 Occupational exposure limits: | Carbon Black: TWA 3.5 mg/m3; STEL 7 mg/m3 | |
| 8.1.2 Additional exposure limits under the | Not available. | |
| conditions of use: | | |
| 8.1.3 DNEL/DMEL and PNEC-Values: | Not available. | |
| 8.2 Exposure controls: | | |
| 8.2.1 Appropriate engineering controls: | Facilities storing or utilizing this substance should be equipped with an eyewash | |
| | facility and a safety shower. | |
| | Use Process enclosures, local exhaust ventilation, or other engineering controls. | |
| 8.2.2 Individual protection measures, such a | as personal protective equipment: | |
| Eye/face protection: | Safety Glasses with side shields, goggles, or face shield | |
| Hand protection: | Chemical resistant gloves | |
| Body protection: | Suitable safety clothes, aprons, shoes and protective boots | |
| Respiratory protection: | Chemical cartridge respirator for an organic vapor, or pressure self-contained | |
| | breathing apparatus. | |
| Thermal hazards: | Wear suitable protective clothing to prevent heat. | |
| 8.2.3 Environmental exposure controls: | Avoid discharge into the environment. | |
| | According to local regulations, Federal and official regulations. | |

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties:

| | information on basic physical and chemic | • • |
|------|---|--------------------------|
| A | Appearance: | liquid |
| C | Color: | Colored |
| C |)dor: | mild odor |
| C | odor threshold: | Not available |
| р | H: | Not applicable |
| N | lelting point/range (°C): | -25° C |
| В | Boiling point/range (°C): | 154° C |
| F | lash point (°C): | 65° C (closed cup) |
| E | vaporation rate: | Not available |
| F | lammability limit – lower (%): | Not available |
| F | lammability (solid, gas): | Not available |
| lç | gnition temperature (°C): | Not available |
| U | Ipper/lower flammability/explosive limits: | Not available |
| v | /apor pressure: | Not available |
| v | apor density: | > 3 (air = 1) |
| D | Density: | 0.97-1.06 g/ml (20° C) |
| В | Bulk density (kg/m ³): | Not available |
| v | Vater solubility (g/l): | Fully |
| n | -Octanol/Water (log Po/w): | Not available |
| Α | uto-ignition temperature: | Not available |
| D | Decomposition temperature: | Not available |
| v | /iscosity, dynamic (mPa.s): | 2 – 10 Cups |
| E | xplosive properties: | Not available |
| C | Dxidising properties: | Not available |
| N | lolecular Formula: | Mixture (Not Applicable) |
| N | Iolecular Weight: | Mixture (Not Applicable) |
| v | VOC: | 7.8 lbs./gal |
| 9.2. | Other information: | |
| F | at solubility(solvent– oil to be specified) | Not available |
| е | tc: | |
| S | Surface tension: | Not available |
| D | Dissociation constant in water(pKa): | Not available |
| C | Oxidation-reduction Potential: | Not available |
| S | oftening point/range: | Not available |
| | | |

| Section 10 Stability and reactivity | | | | |
|---|--|--|--|--|
| 10.1 Reactivity: | Stable under normal conditions | | | |
| 10.2 Chemical stability: | Stable under normal conditions | | | |
| 10.3 Possibility of hazardous reactions: | May burn in fire conditions releasing products, which may be toxic (CO, CO2, and | | | |
| | volatile organics). | | | |
| 10.4 Conditions to avoid: | Avoid heat and freezing temperatures | | | |
| Product name: Printing ink | SDS EU | | | |
| Version #: 1.0 Printing date: 29-09-2015. Revis | ion date: 29-09-2015. 5 / 8 | | | |

10.6 Hazardous decomposition products:

Strong Oxidizing materials, peroxides, acids or iron Will decompose to form carbon oxides when burned

Section 11 Toxicological information

| 11.1 Toxicokinetics, metabolism and distribution: | | | |
|---|--|--|--|
| Non-human toxikological data: | Not available | | |
| 11.2 Information on toxicological effects: | | | |
| Acute toxicity: | | | |
| LD50(Oral, Rat): | >2500 mg/kg | | |
| LD50(Dermal, Rabbit): | > 2000 mg/kg | | |
| LC50(Inhalation, Rat): | - | | |
| Skin corrosion/Irritation: | Causes skin irritation | | |
| Serious eye damage/irritation: | Causes serious eye damage | | |
| Respiratory or skin sensitization: | Not classified | | |
| Germ cell mutagenicity: | Not classified | | |
| Carcinogenicity: | Not classified | | |
| Reproductive toxicity: | May damage fertility or the unborn child | | |
| STOT- single exposure: | May cause drowsiness or dizziness | | |
| STOT-repeated exposure: | Not classified | | |
| Aspiration hazard: | Not classified | | |

Section 12 Ecological information

Toxicity:

| TOXICILY. | | | | | | | |
|-----------------------------------|----------|----------------|----------|----------|-------------------------------|------------|---------|
| | Acute t | oxicity | Time | Species | Method | Evaluation | Remarks |
| | LC50 | >220 mg/L | 96h | Fish | DIN 38412 | N/A | N/A |
| | EC50 | >500 mg/L | 48h | Daphnia | 92/69/EEC C.2, OECD-Guideline | N/A | N/A |
| | | | | | No. 202 | | |
| | EC50 | > 10 mg/L | 17h | Algae | 92/69/EEC C.3, OECD-Guideline | N/A | N/A |
| | | | | | No. 201 | | |
| Persistence and degradability: | | | Not ava | ailable. | | | |
| Bioaccumulative potential: | | | Not ava | ailable. | | | |
| Mobility in soil: | | Not ava | ailable. | | | | |
| Results of PBT & vPvB assessment: | | Not available. | | | | | |
| Other adverse | effects: | | | Not ava | ailable. | | |

| Section 13 Disposal considerations | |
|------------------------------------|---|
| 13.1 Waste treatment methods: | The material should be disposed of by incineration in a chemical incinerator in |
| 13.2 Product / Packaging disposal: | compliance with national and regional requirements. If empty container retains product residues, all label precautions must be observed. |
| | Return for reuse or dispose according to national or local regulations. |

| Section 14 Transport information | | | | |
|--|--------------------------|----------------------|---------------------------|--|
| | Land transport (ADR/RID) | Sea transport (IMDG) | Air transport (ICAO/IATA) | |
| UN-Number | Not regulated | Not regulated | Not regulated | |
| UN Proper shipping name | Not regulated | Not regulated | Not regulated | |
| Transport hazard Class | Not regulated | Not regulated | Not regulated | |
| Packaging group | Not regulated | Not regulated | Not regulated | |
| Environmental hazards | No | No | No | |
| Special precautions for user | See section 2.2 | See section 2.2 | See section 2.2 | |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not regulated | Not regulated | Not regulated | |

Section 15 Regulation information

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

| Relevant information regarding authorization: | Not applicable. |
|---|--|
| Relevant information regarding restriction: | Not applicable. |
| Other EU regulations: | Employment restrictions concerning young person must be observed. For use only by technically qualified individuals. |
| Other National regulations: Chemical Safety Assessment has been carried out? | Not applicable YES NO X |
| | |

Section 16 Other information

16.1 Indication of changes:

Version 1.0 Amended by EU No 453/2010

16.2 Relevant R- phrases (number and full text):

R38: Irritating to skin.

R41: Risk of serious damage to eyes

R60: May impair fertility

R67: Vapors may cause drowsiness and dizziness.

16.3 Training instructions:

Not applicable.

16.4 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this Product.

16.5 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

APPENDIX

Regional CHEMTREC Emergency Phone Numbers:

- Sydney, Australia (02) 9037 2994
- Auckland, New Zealand (09) 801 0034