

Safety data sheet

According to the UN Global Harmonized System (Rev. 4)

Printing date 15.06.2020

Version number 1.0

Revision: 15.06.2020

1 Identification of the substance/mixture and of the company/undertaking**Product identifier****Trade name:** TJ Pro Black**Article number:** 999502**Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

Details of the supplier of the safety data sheet

Avery Dennison Digital Ink Solutions

250 Chester Street, Building 7

Painesville, OH 44077 - USA

1-877-214-0909

Manufacturer/Supplier:

Avery Dennison

250 Chester Street

Painesville, OH 44077

USA

Further information obtainable from: reflective.product.compliance@averydennison.com**Emergency telephone number:** CHEMTREC International +1 (703) 527-3887 24 hr**2 Hazards identification****Classification of the substance or mixture**

Acute Tox. 4 H302 Harmful if swallowed.
Skin Corr. 3 H316 Causes mild skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
Repr. 2 H361 Suspected of damaging fertility or the unborn child (causing atrophy of the testes).
Aquatic Acute 2 H401 Toxic to aquatic life.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

Label elements**GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).**Hazard pictograms**

GHS07 GHS08

Signal word Warning**Hazard-determining components of labelling:**

2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester

Photoinitiator

Hazard statements

Harmful if swallowed.

Causes mild skin irritation.

May cause an allergic skin reaction.

Suspected of damaging fertility or the unborn child (causing atrophy of the testes).

Toxic to aquatic life.

Harmful to aquatic life with long lasting effects.

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Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Rinse mouth.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients**Chemical characterisation: Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.**Dangerous components:**

86273-46-3 2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester	≥ 50 - ≤ 100%
Acute Tox. 4, H302; Skin Sens. 1, H317; Aquatic Acute 2, H401; Aquatic Chronic 3, H412	
75980-60-8 Photoinitiator	10 - 25%
Repr. 2, H361	
2399-48-6 Tetrahydrofurfuryl Acrylate	2.5 - 10%
Skin Irrit. 2, H315; Eye Irrit. 2A, H319	
1333-86-4 Carbon black	≥ 2.5 - ≤ 10%
Self-heat. 2, H252	

Additional information: For the wording of the listed hazard phrases refer to section 16.**4 First aid measures****Description of first aid measures****After inhalation:** Supply fresh air; consult doctor in case of complaints.**After skin contact:** Generally the product does not irritate the skin.**After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.**After swallowing:** If symptoms persist consult doctor.**Most important symptoms and effects, both acute and delayed** No further relevant information available.**Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

5 Firefighting measures**Extinguishing media****Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.**Special hazards arising from the substance or mixture** No further relevant information available.**Advice for firefighters****Protective equipment:** No special measures required.**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures** Not required.**Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

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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.

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.

7 Handling and storage**Handling:****Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about fire - and explosion protection: No special measures required.**Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:** No special requirements.**Information about storage in one common storage facility:** Not required.**Further information about storage conditions:** None.**Specific end use(s)** No further relevant information available.**8 Exposure controls/personal protection****Additional information about design of technical facilities:** No further data; see item 7.**Control parameters****Ingredients with limit values that require monitoring at the workplace:****1333-86-4 Carbon black**PEL (USA) Long-term value: 3.5 mg/m³REL (USA) Long-term value: 3.5* mg/m³
0.1 in presence of PAHs; See Pocket Guide Apps.A+CTLV (USA) Long-term value: 3 mg/m³
*inhalable fractionWEL (Great Britain) Short-term value: 7 mg/m³
Long-term value: 3.5 mg/m³**Additional information:** The lists valid during the making were used as basis.**Exposure controls****Personal protective equipment:****General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Respiratory protection:

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

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Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Goggles recommended during refilling

9 Physical and chemical properties

Information on basic physical and chemical properties**General Information****Appearance:**

Form:	Liquid
Colour:	Black
Odour:	Characteristic
Odour threshold:	Not determined.

pH-value: Not determined.

Change in condition

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.

Flash point: Not applicable.

Flammability (solid, gas): Not applicable.

Decomposition temperature: Not determined.

Auto-ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

Vapour pressure: Not determined.

Density:	Not determined.
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.

Solubility in / Miscibility with water: Not miscible or difficult to mix.

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Partition coefficient: n-octanol/water: Not determined.**Viscosity:****Dynamic:** Not determined.**Kinematic:** Not determined.**VOC (EC)** < 0.00 %**Other information** No further relevant information available.

10 Stability and reactivity

Reactivity No further relevant information available.**Chemical stability****Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.**Possibility of hazardous reactions** No dangerous reactions known.**Conditions to avoid** No further relevant information available.**Incompatible materials:** No further relevant information available.**Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects**Acute toxicity****LD/LC50 values relevant for classification:****1333-86-4 Carbon black**

Oral LD50 10,000 mg/kg (rat)

Primary irritant effect:**Skin corrosion/irritation** No irritant effect.**Serious eye damage/irritation** No irritating effect.**Respiratory or skin sensitisation** No sensitising effects known.**Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Repr. 2

12 Ecological information

Toxicity**Aquatic toxicity:** No further relevant information available.**Persistence and degradability** No further relevant information available.**Behaviour in environmental systems:****Bioaccumulative potential** No further relevant information available.**Mobility in soil** No further relevant information available.**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.

Results of PBT and vPvB assessment**PBT:** Not applicable.**vPvB:** Not applicable.

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Other adverse effects No further relevant information available.**13 Disposal considerations****Waste treatment methods****Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:**Recommendation:** Disposal must be made according to official regulations.**14 Transport information****UN-Number**

ADR, IMDG, IATA

not regulated

UN proper shipping name

ADR, IMDG, IATA

not regulated

Transport hazard class(es)

ADR, ADN, IMDG, IATA

Class

not regulated

Packing group

ADR, IMDG, IATA

not regulated

Environmental hazards:

Not applicable.

Special precautions for user

Not applicable.

Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

UN "Model Regulation":

not regulated

15 Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture****GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).**Hazard pictograms**

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Hazard statements

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Causes mild skin irritation.

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Suspected of damaging fertility or the unborn child (causing atrophy of the testes).

Toxic to aquatic life.

Harmful to aquatic life with long lasting effects.

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 Rinse mouth.
 Store locked up.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

Directive 2012/18/EU

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

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

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

H252 Self-heating in large quantities; may catch fire.
 H302 Harmful if swallowed.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H361 Suspected of damaging fertility or the unborn child (causing atrophy of the testes).
 H401 Toxic to aquatic life.
 H412 Harmful to aquatic life with long lasting effects.

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
 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)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Self-heat. 2: Self-heating substances and mixtures – Category 2
 Acute Tox. 4: Acute toxicity - oral – Category 4
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Skin Corr. 3: Skin corrosion/irritation – Category 3
 Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
 Skin Sens. 1: Skin sensitisation – Category 1
 Repr. 2: Reproductive toxicity – Category 2
 Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2
 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3