



SAFETY DATA SHEET TIJ-BK140-5 PRINTING INK

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name TIJ-BK140-5 PRINTING INK

Product number TIJ-BK140-5

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

Identified uses Printing ink.

1.3. Details of the supplier of the safety data sheet

Supplier Domino UK Ltd
Bar Hill
Cambridge
CB23 8TU
Tel: +44 (0) 1954 782551
Fax: +44 (0) 1954 782874
Email: msds@domino-uk.com

1.4. Emergency telephone number

Emergency telephone For emergencies call +44 (0)207 858 0111 (24 Hours)

National emergency telephone number 999 / 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 2 - H225

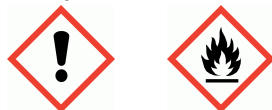
Health hazards STOT SE 3 - H336

Environmental hazards Not Classified

Classification (67/548/EEC or 1999/45/EC) F;R11. R67.

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements H225 Highly flammable liquid and vapour.
H336 May cause drowsiness or dizziness.

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Precautionary statements	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P403+P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
Contains	1-METHOXY-2-PROPANOL
Supplementary precautionary statements	<p>P240 Ground/ bond container and receiving equipment.</p> <p>P241 Use explosion-proof electrical equipment.</p> <p>P242 Use only non-sparking tools.</p> <p>P243 Take precautionary measures against static discharge.</p> <p>P261 Avoid breathing vapour/ spray.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.</p> <p>P312 Call a POISON CENTER/ doctor if you feel unwell.</p> <p>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p> <p>P405 Store locked up.</p>

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

1-METHOXY-2-PROPANOL		30-50%
CAS number: 107-98-2	EC number: 203-539-1	
Classification	Classification (67/548/EEC or 1999/45/EC)	
Flam. Liq. 3 - H226	R10 R67	
STOT SE 3 - H336		
ETHANOL		30-50%
CAS number: 64-17-5	EC number: 200-578-6	REACH registration number: 01-2119457610-43-xxxx
Classification	Classification (67/548/EEC or 1999/45/EC)	
Flam. Liq. 2 - H225	F;R11	
1,1,2,2-TETRAMETHOXYETHANE		10-30%
CAS number: 2517-44-4		
Classification	Classification (67/548/EEC or 1999/45/EC)	
Flam. Liq. 3 - H226	R10.	

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SOLVENT BLACK 27	5-9.9%
CAS number: 12237-22-8	
Classification Aquatic Chronic 3 - H412	Classification (67/548/EEC or 1999/45/EC) R52/53.
2-METHYLPROPAN-2-OL	<0.1%
CAS number: 75-65-0 EC number: 200-889-7	
Classification Flam. Liq. 2 - H225 Acute Tox. 4 - H332 Eye Irrit. 2 - H319 STOT SE 3 - H335	Classification (67/548/EEC or 1999/45/EC) F;R11 Xn;R20 Xi;R36/37

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments The product contains organic solvents.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Keep affected person away from heat, sparks and flames. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention.
Inhalation	Move affected person to fresh air at once. If breathing stops, provide artificial respiration. Keep affected person warm and at rest. Get medical attention immediately.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention.
Skin contact	Remove affected person from source of contamination. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Vapours may cause headache, fatigue, dizziness and nausea.
Ingestion	May cause nausea, headache, dizziness and intoxication. Ingestion of large amounts may cause unconsciousness.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	May cause severe eye irritation.

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

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

5.2. Special hazards arising from the substance or mixture

Specific hazards Toxic gases or vapours. Carbon monoxide (CO). Carbon dioxide (CO₂). Take precautionary measures against static discharges.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours. Oxides of carbon.

5.3. Advice for firefighters

Protective actions during firefighting Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities. Use water to keep fire exposed containers cool and disperse vapours. Move containers from fire area if it can be done without risk.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Avoid the spillage or runoff entering drains, sewers or watercourses. Small Spillages: Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Large Spillages: Absorb in vermiculite, dry sand or earth and place into containers. Inform authorities if large amounts are involved.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep away from heat, sparks and open flame. Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Vapours may accumulate on the floor and in low-lying areas. Static electricity and formation of sparks must be prevented.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from oxidising materials, heat and flames. Store in tightly-closed, original container in a well-ventilated place. Keep only in the original container.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

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1-METHOXY-2-PROPANOL

Long-term exposure limit (8-hour TWA): WEL 100 ppm 375 mg/m³

Short-term exposure limit (15-minute): WEL 150 ppm 560 mg/m³

Sk

ETHANOL

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m³

2-METHYLPROPAN-2-OL

Long-term exposure limit (8-hour TWA): WEL 100 ppm 308 mg/m³

Short-term exposure limit (15-minute): WEL 150 ppm 462 mg/m³

WEL = Workplace Exposure Limit

Sk = Can be absorbed through skin.

Exposure limits

8.2. Exposure controls

Appropriate engineering controls

All handling should only take place in well-ventilated areas. As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist.

Eye/face protection

Wear chemical splash goggles.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station. Do not smoke in work area. Promptly remove any clothing that becomes contaminated. Wash promptly if skin becomes contaminated. When using do not eat, drink or smoke. Wash after use and before eating, smoking and using the toilet.

Respiratory protection

No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Black.
Odour	Alcoholic.
Odour threshold	Not available.
pH	Not available.
Melting point	-114°C Information given is applicable to the major ingredient.
Initial boiling point and range	~78°C @ Information given is applicable to the major ingredient.
Flash point	22°C CC (Closed cup).
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.

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Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 3.3 % Upper flammable/explosive limit: 19 % Information given is applicable to the major ingredient.
Vapour pressure	5.81 kPa @ 20°C Information given is applicable to the major ingredient.
Vapour density	>1
Relative density	Not available.
Solubility(ies)	Miscible with water. Soluble in the following materials: Alcohols.
Partition coefficient	Not available.
Auto-ignition temperature	365°C Information given is applicable to the major ingredient.
Decomposition Temperature	Not available.
Viscosity	1.7-2.2 cP @ 25°C

9.2. Other information

Other information	Not determined.
Molecular weight	Not relevant.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Under normal conditions of storage and use, no hazardous reactions will occur.
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10.4. Conditions to avoid

Conditions to avoid	Avoid contact with strong oxidising agents. Avoid heat, flames and other sources of ignition.
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10.5. Incompatible materials

Materials to avoid	Strong oxidising agents.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Decomposition at ambient temperatures may generate the following substances: Toxic gases or vapours. Carbon monoxide (CO). Carbon dioxide (CO ₂).
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀)	Not available.
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Acute toxicity - dermal

Notes (dermal LD₅₀)	Not available.
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Acute toxicity - inhalation

Notes (inhalation LC₅₀)	Not available.
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Respiratory sensitisation

Respiratory sensitisation	Not available.
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Germ cell mutagenicity

Genotoxicity - in vitro Not available.

Carcinogenicity

Carcinogenicity Not available.

Reproductive toxicity

Reproductive toxicity - fertility Not available.

Reproductive toxicity - development Not available.

Specific target organ toxicity - single exposure

STOT - single exposure Not available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not available.

Inhalation Vapours may cause headache, fatigue, dizziness and nausea.

Ingestion May cause nausea, headache, dizziness and intoxication.

Skin contact Irritating to skin.

Eye contact Irritating to eyes.

Medical symptoms Central nervous system depression. Nausea, vomiting. Intoxication. Symptoms following overexposure to dust may include the following: Irritability. Headache. Nausea, vomiting.

SECTION 12: Ecological Information

12.1. Toxicity

Toxicity Avoid discharge to the aquatic environment.

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

12.4. Mobility in soil

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste.

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Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	1210
UN No. (IMDG)	1210
UN No. (ICAO)	1210

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	PRINTING INK
Proper shipping name (IMDG)	PRINTING INK
Proper shipping name (ICAO)	PRINTING INK
Proper shipping name (ADN)	PRINTING INK

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID label	3
IMDG class	3
ICAO class/division	3

Transport labels



14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ICAO packing group	II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

EmS	F-E, S-D
Emergency Action Code	•3YE
Hazard Identification Number (ADR/RID)	33
Tunnel restriction code	(D/E)

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

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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Guidance Workplace Exposure Limits EH40.
Safety Data Sheets for Substances and Preparations.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

US - TSCA

All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification

None of the ingredients are listed.

SECTION 16: Other information

Key literature references and sources for data TOXNET; REACH dossier; supplier SDS.

Revision date 06/10/2016

Revision 1

SDS number 21089

Risk phrases in full R10 Flammable.
R11 Highly flammable.
R20 Harmful by inhalation.
R36/37 Irritating to eyes and respiratory system.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67 Vapours may cause drowsiness and dizziness.

Hazard statements in full H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.