SAFETY DATA SHEET

First issue : November 8, 2012
Revised : 01 June 2024
Ver. : 7.00

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

1.1 Product identifier

Product name : **YOKEN permanent ink**
Black contained in PM440-XX Range

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

Relevant identified uses of the product : Ink for use marking pen

1.3. Details of the supplier of the safety data sheet

Company name : Zart Art
Company address : 14-17 Dansu Court, Hallam, VIC 3803
Tel : +61 3 9890 1867
Emergency Phone number : Australia - 13 11 26 (Poisons Information Centre)

SECTION 2 Hazards identification

2.1. Classification of the substance or mixture

GHS classification

PHYSICAL HAZARDS	:	Flammable liquids	Category 2
HEALTH HAZARDS	:	Acute toxicity (inhalation vapoursgases)	Category 4
		Skin corrosion/irritation	Category 2
		Serious eye damage/Eye irritation	Category 1
		Skin sensitization	Category 1
		Carcinogenicity	Category 1A
		Reproductive Toxicity	Category 1A
		Specific target organ toxicity (Single exposure)	Category 2 (Systemic toxicity, Central nervous system) Category 3 (Respiratory tract irritation, Narcotic effect)
		Specific target organ toxicity (Repeated exposure)	Category 1 (Liver) Category 2 (Central nervous system, Blood system, Thyroid)
Enviromental Hazards	:	Acute hazards to the aquatic environment	Category 2
		Chronic hazards to the aquatic environment	Category 2

Pictogram : 

Signal Word : **Danger**

Hazard Statement :

H225	Highly flammable liquid and vapour
H315	Causes skin irritation.
H317	May cause an allergic skin reaction
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation
H336	May cause drowsiness or dizzinessauses
H350	May cause cancer
H360	May damage fertility or the unborn child.
H371	May cause damage to the Central nervous system, Systemic toxicity
H372	Causes damage to organs (Liver)
H373	May cause damage to the Central nervous system and Blood system, Thyroid through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention :

P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	After handling Wash hands thoroughly
P270	Do no eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response	:	P302 + P352	IF ON SKIN: Wash with plenty of water and soap.
		P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin
		P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
		P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		P308 + P311	IF exposed or concerned: Call a POISON CENTER or doctor/physician.
		P308 + P313	IF exposed or concerned: Get medical advice/attention.
		P312	Call a POISON CENTER or doctor/physician if you feel unwell.
		P313	Get medical advice/attention.
		P314	Get medical advice/attention if you feel unwell.
		P332	If skin irritation occurs: Get medical advice/attention.
		P337 + P313	If eye irritation persists: Get medical advice/attention.
		P361 + P364	Take off immediately all contaminated clothing and wash if before reuse.
		P370 + P378	In case of fire: Use a fire extinguisher appropriate for extinction.
		P391	Collect spillage.
		P363 + P313	If skin irritation or rash occurs, get medical advice/attention.
Storage	:	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
		P403 + P235	Store in a well-ventilated place. Keep cool.
		P405	Store locked up.
Disposal	:	Dispose of contents/container to in accordance with local/regional/national/ local/regional/national/international regulations.	

2.2. Other hazards : Black powder that presents little or no immediate hazard.
Avoid formation of dust.

SECTION 3 Composition/information on ingredients

3.1. Substances

Substances or Mixture : Mixture

Chemical name	Content	CAS Registry number
C.I.Solvent Black 7	8%	8005-02-5
Resin	CBI	CBI (Confidential Business Information)
2-Propanol, 1-methoxy-	47%	107-98-2
Ethanol	19%	64-17-5
1-Propanol	12%	71-23-8
Isopropyl alcohol	1%	67-63-0
Diphenylamine	0.2%	122-39-4
p-tert-Octylphenol	0.3%	140-66-9
p-tert-butylphenol	0.1%	98-54-4

SECTION 4 First aid measures

4.1. Description of first aid measures

General information	:	Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.
Inhalation	:	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.
Ingestion	:	Rinse mouth thoroughly with water. Give a few small glasses of water to drink. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.
Skin contact	:	Remove contaminated clothing. Wash skin thoroughly with soap and water or use an approved skin cleanser. It is important to remove the substance from the skin immediately. In the event of any sensitisation symptoms developing, ensure further exposure is avoided. Get medical attention if symptoms are severe or persist after washing.
Eye contact	:	Rinse with water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.
Protection of first aiders	:	First aid personnel should wear appropriate protective equipment during any rescue.

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

No data available

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

No data available

SECTION 5 Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Extinguish with foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	:	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	:	Containers can burst violently or explode when heated, due to excessive pressure build-up.
Hazardous combustion products	:	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. Oxides of carbon.

5.3. Advice for firefighters

Protective actions during firefighting

Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters

Wear positive pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6 Accidental release measure

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Avoid contact with skin and eyes. Avoid inhalation of vapours. Use suitable respiratory protection if ventilation is inadequate.

6.2. Environmental precautions

Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment. Use appropriate containment to avoid environmental contamination.

6.3. Methods and material for containment and cleaning up

Remove it by sucking it in a vacuum so that it does not scatter, and collect it in a container for disposal.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Measures to prevent fire and explosion.	:	Avoid formation of dust. Keep away from sources of ignition. Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

	:	Keep container tightly closed. Keep container in a well ventilated place.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Japan Society for Occupational Health

Isopropyl alcohol 400ppm, 980mg/m^3 (maximum permissible concentration)

8.2. Exposure controls

Equipment measures : Use an exhaust device such as a local exhaust facility or a dust collector.

Appropriate engineering controls

Provide adequate general and local exhaust ventilation.
Ensure the ventilation system is regularly maintained and tested. Observe any occupational exposure limits for the product or ingredients. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure.

Eye/face protection

protection should be worn: Tight-fitting safety glasses.

Hand protection

Wear protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection

Wear appropriate clothing to prevent repeated or prolonged skin contact. Provide eyewash station and safety shower.

Hygiene measures

Wash hands thoroughly after handling. Wash at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Eye wash facilities and emergency shower must be available when handling this product.

Respiratory protection

Dust respirator

Environmental exposure controls

Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9 Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	:	Black liquid
Odour	:	Alcohol smell
Odour threshold	:	No data
pH	:	No data
Melting point	:	No data
Initial boiling point and range	:	No information available.
Flash point	:	No data
Evaporation rate	:	No specific test data are available.
Evaporation factor	:	No information available.
Flammability (solid, gas)	:	No specific test data are available.
Upper/lower flammability or explosive limits	:	No information available.
Vapour pressure	:	No information available.
Vapour density	:	No information available.
Relative density	:	No information available.
Bulk density	:	No information available.
Solubility(ies)	:	No information available.
Partition coefficient	:	No information available.
Autoignition temperature	:	No information available.
Decomposition Temperature	:	No information available.
Viscosity	:	No information available.
Explosive properties	:	Not considered to be explosive
Explosive under the influence of a flame	:	Not considered to be explosive.
Oxidising properties	:	No substances meet the criteria for classification as oxidising.

9.2. Other information : No information available.

SECTION 10 Stability and reactivity

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

No potentially hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid Keep away from heat, sparks and open flame.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	2-Propanol, 1-methoxy- : LD50=5900mg/kg Ethanol : LD50=6200,mg/kg 1-Propanole : LD50=2200mg/kg Isopropyl alcohol : LD50=4384mg/kg Diphenylamine : LD50=2480mg/kg p-tert-Octylphenol : LD50=2500mg/kg p-tert-butylphenol : LD50=3500mg/kg It was assumed Not classified. Changed from Category 5 to Not applicable due to the target processing country hazard classification correction.
Acute toxicity (dermal)	:	2-Propanol, 1-methoxy- : LD50=13000mg/kg Ethanol : LD50=20000mg/kg 1-Propanole : LD50=4000mg/kg Isopropyl alcohol : LD50=12870mg/kg Diphenylamine : LD50=5000mg/kg p-tert-Octylphenol : LD50=1880mg/kg p-tert-butylphenol : LD50=2318mg/kg It was assumed Not classified.
Acute toxicity (inhalation gases)	:	Liquid by GHS definition.
Acute toxicity (inhalation vapoursgases)	:	2-Propanol, 1-methoxy- : LD50=27,3mg/l Ethanol : LD50=27.3mg/l Isopropyl alcohol : LD50=25mg/l It was assumed Category 4
Acute toxicity (inhalation dusts and mists)	:	Classification not possible due to lack of data.
Skin corrosion/irritation	:	The total concentration of ingredients in Category 2 meets 10% or more. Based on the above, it was classified as Category 2.

Serious eye damage/Eye irritation	:	It falls under Category 1 because the total content of eye Category 1 ingredients is above the concentration limit (3%).
Respiratory	:	Classification is impossible due to lack of data.
Skin sensitization	:	It falls under Category 1 because the surfactant content is 1% or more.
Germ cell mutagenicity	:	Classification is impossible due to lack of data.
Carcinogenicity	:	Since ethanol content is 0.1% or more, it was classified as Category 1A.
Reproductive Toxicity	:	Since ethanol content is 0.3% or more, it was classified as Category 1A.
Effects on or via lactation	:	Classification is impossible due to lack of data.
Specific target organ toxicity (Single exposure)	:	Since isopropyl alcohol is 1% or more, it falls under Category 2 (Central nervous system). It falls under Category 3 because the total content of Category 3 (Respiratory irritant) ingredients is above the concentration limit (20%). It falls under Category 3 because the total amount of ingredients in Category 3 (Narcotic effects) is greater than the concentration limit (20%).
Specific target organ toxicity (Repeated exposure)	:	It can be classified as Category 1 because it contains 10% or more of the following ingredients that fall under Category 1. Ethanol (Liver) It can be classified as Category 2 because it contains 1% or more of the following ingredients that fall under Category 2. Ethanol (Central nervous system) Isopropyl alcohol (Liver, Blood)
Aspiration Hazard	:	Classification is impossible due to lack of data.

SECTION 12 Ecological information

12.1. Toxicity

Hazardous to the aquatic environment (Acute)	:	Ethanol: Not classified, (Fish) = 11200mg/l (Crustacea) = 5463mg/l (Algae) = 1000mg/l Source: NITE) 1-Propyl alcohol: Not classified, (crustacean) = 3025mg/l Source: NITE) Isopropyl alcohol: Not classified, LC50=unknown, EC50=unknown 2-Propanol, 1-methoxy-: Not classified, LC50=unknown, EC50=unknown p-t octylphenol: Category 2 LD50 = (crustaceans) = 1,9mg/l p-t Butylphenol: LD50=2318mg/kg Diphenylamine: Category 1, LC50 = unknown, EC50 = 0.36mg/L It was assumed Category 2.

Hazardous to the aquatic environment (Long-term)	:	Ethanol: Not applicable, (Crustacea) = 9.6 mg/l Rapidly degradable = Yes Source: NITE) 1-Propyl alcohol: Not classified, LC50=unknown, EC50=unknown Isopropyl alcohol: Not classified, rapid degradability = Yes Source: NITE) 2-Propanol, 1-methoxy: Not classified, LC50=unknown, EC50=unknown p-t octylphenol: Category 2 (algae) = 0.32mg/l Rapid degradability = none Source: NITE) p-t butylphenol: Category 1 (fish) = 0,0061mg/l Diphenylamine: Category 1, (algae) = 0.0273mg/l rapid degradability = none Source: NITE) It was assumed Category 2.
Hazardous to the ozone layer	:	No data

12.2. Persistence and degradability

The degradability of the product is not known.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.
Partition coefficient No information available.

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

None known.

SECTION 13 Disposal considerations

13.1. Waste treatment methods

General information

The generation of waste should be minimised or avoided wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

Disposal methods

Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Do not pressurise, cut, weld, drill, grind or otherwise expose containers to heat or sources of ignition.

Waste class

The waste code classification is to be carried out according to the European Waste Catalogue (EWC).

SECTION 14 Transport information

14.1. UN number : 1210

14.2. UN proper shipping name : PRINTING INK FLAMMABLE

14.3. Transport hazard class(es) : 3

14.4. Packing group : II

14.5. Environmental hazards

Air: Transport in accordance with ICAO-TO/IATA-DGR.
Sea: Transport in accordance with IMDG Code

14.6. Special precautions for user

Follow all regulations in your country.

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

Follow all regulations in your country.

SECTION 15 Regulatory information

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

Follow all regulations in your country.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16 Other information

The product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with legal regulations. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should therefore not be construed as guaranteeing specific properties.

16.2. Date of the latest revision of the SDS

Revision date : June 1, 2024