SECTION 1. IDENTIFICATION

Product identifier used on the label : Surteco Pearl Bronze

Product Code(s) : SM-5017

Recommended use of the chemical and restrictions on use

: Printing Ink

Use pattern:Professional Use Only

Chemical family : Mixture

Name, address, and telephone number

of the supplier:

Name, address, and telephone number of $% \left\{ 1,2,\ldots ,n\right\}$

the manufacturer:

Refer to supplier

Quest Inks & Coatings
2401 Anson Drive

Mississauga, ON, Canada

L5S 1G1

Supplier's Telephone #

: 905-405-0041

Monday to Friday 8:00 am to 4:30 pm

24 Hr. Emergency Tel # : For 24-hour emergency assistance, call: 1-613-996-6666 (CANUTEC).

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

Golden Viscous liquid. Solvent odor.

This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Hazard classification:

Flammable Liquids - Category 2 Specific Target Organ Toxicity, Single Exposure - Category 3 narcotic effects Specific Target Organ Toxicity, Single Exposure -Category 3 (respiratory) Sensitization, skin - Category 1

Label elements

Hazard pictogram(s)





Signal Word

DANGER!

Hazard statement(s)

Highly flammable liquid and vapour

May cause an allergic skin reaction.

May cause drowsiness and dizziness.

May cause respiratory irritation.

Precautionary statement(s)

Keep away from heat, sparks and open flame. - No smoking.

Keep container tightly closed.

Ground and bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing mist or vapours.

Contaminated work clothing must not be allowed out of the workplace.

Use only outdoors or in a well-ventilated area. Wear

protective gloves and eye/face protection.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

In case of fire: Use water fog, dry chemical, CO2 or 'alcohol' foam for extinction.

Store locked up.

Store in a well-ventilated place. Keep cool. Keep

container tightly closed.

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

Other hazards

Other hazards which do not result in classification:

Ingestion may cause irritation of the mouth, throat and stomach. Contact with eyes may cause irritation. May cause mild skin irritation

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical name	Common name and synonyms	CAS#	Concentration
Ethyl acetate	Ethyl ethanoate	141-78-6	34.8
	Acetoxyethane		

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

Eve contact

Ingestion : IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do not

induce vomiting. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep victim's head

lowered (forward) to reduce the risk of aspiration.

Inhalation: Immediately remove person to fresh air. If breat

Immediately remove person to fresh air. If breathing has stopped, give artificial

respiration. If breathing is difficult, give oxygen by qualified medical personnel only.

Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact : Wash affected areas with soap and water. Take off contaminated clothing and wash

before re-use. Get medical attention if irritation develops and persists.

: Flush with large amounts of water for 15 minutes. Remove contact lenses if present

and easy to do. If irritation or symptoms develop, seek medical attention.

Most important symptoms and effects, both acute and delayed

: May cause central nervous system depression. May cause headache, nausea, dizziness and other symptoms of central nervous system depression. May cause respiratory irritation. Symptoms may include coughing, choking and wheezing. May cause an allergic skin reaction. Symptoms may include redness, itching and swelling. Direct skin contact may cause temporary redness. Direct eye contact may cause temporary redness. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Indication of any immediate medical attention and special treatment needed

: Treat symptomatically. This product is a CNS depressant.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

: Use media suitable to the surrounding fire such as water fog or fine spray, alcohol foams, carbon dioxide and dry chemical.

Unsuitable extinguishing media

: Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture / Conditions of flammability

: Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure. Vapour can travel considerable distance and flashback to a source of ignition. Vapours are heavier than air and collect in confined and low-lying areas.

Flammability classification (OSHA 29 CFR 1910.106)

: Flammable Liquids - Category 2

Hazardous combustion products

: Carbon dioxide and carbon monoxide. Other unidentified organic compounds .

Special protective equipment and precautions for firefighters

Protective equipment for fire-fighters

: Firefighter should wear full protective clothing including self contained

breathing apparatus. Special fire-fighting procedures

Evacuate personnel to safe areas. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. Dike for water control. Avoid release to the environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Keep all other personnel upwind and away from the spill/release. Restrict access to area until completion of clean-up. Refer to Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

Environmental precautions

: Ensure spilled product does not enter drains, sewers, waterways, or confined spaces. For large spills, dike the area to prevent spreading.

Methods and material for containment and cleaning up

: Remove all sources of ignition. Ventilate the area. Prevent further leakage or spillage if safe to do so.Dike for water control.Use only non-sparking tools and equipment in the clean-up process. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13). Contact the proper local authorities.

Special spill response procedures

If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8802). Ethyl acetate (5000 lbs / 2270 kg) Methyl methacrylate (1000 ibs/ 454 kg)

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

: Use only outdoors or in a well-ventilated area. Wear suitable protective equipment. Avoid breathing mist or vapours. Avoid contact with skin, eyes and clothing. Keep away from heat and open flames. - No smoking. Use only non-sparking tools. Use explosion-proof electrical/ventilating/lighting/equipment. Keep away from oxidizing agents. Keep away from incompatibles. Label containers appropriately. Wash thoroughly after handling. Keep containers closed when not in use. Persons with recurrent skin eczema or sensitization problems should be excluded from working with this product. Once a person is sensitized, no further exposure to the material that caused the sensitization should be permitted.

Conditions for safe storage Keep away from heat, sparks and open flame. - No smoking. Store in a cool, dry,

well-ventilated area. Store away from incompatibles and out of direct sunlight. Keep cool. Keep container tightly closed. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect

periodically for damage or leaks.

Incompatible materials Strong oxidizers (e.g. Chlorine, Peroxides, etc.).

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:				
			OSHA PI	<u>EL</u>
Chemical Name	ACGIH	<u>TLV</u>	<u>PEL</u>	
	<u>TWA</u>			
		<u>STEL</u>		<u>STEL</u>
Ethyl acetate	400 ppm	N/Av	400 ppm (1400 mg/m³)	N/Av

Exposure controls

Ventilation and engineering measures

: Provide exhaust ventilation or other engineering controls to keep the airborne

concentration of vapours below their respective threshold limit value.

Respiratory protection Respiratory protection is required if the concentrations exceed the TLV. Use a NIOSH

approved dust respirator if dust levels exceed exposure limits. Seek advice from

respiratory protection specialists.

Skin protection Wear protective gloves. The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye / face protection Chemical goggles must be worn to prevent dusts from entering the eyes.

Other protective equipment Wear appropriate protective clothing to prevent skin contact, such as coveralls or long

> sleeved shirt, long pants, and shoes and socks. Wear protective gloves. An eyewash station and safety shower should be made available in the immediate working area.

Other equipment may be required depending on workplace standards.

General hygiene considerations

Avoid breathing mist or vapours. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke or use cosmetics while working with this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove

soiled clothing and wash it thoroughly before reuse.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Golden viscous liquid.

Odour Solvent odor. **Odour threshold** 18-32 ppm

No information available.

Melting/Freezing point Not available.

Initial boiling point and boiling range

: Not available.

Flash point -4°C Flashpoint (Method)

closed cup

Evaporation rate (BuAe = 1) No information available.

Not applicable. Flammability (solid, gas)

Lower flammable limit (% by vol.)

Upper flammable limit (% by vol.)

Not available.

Not available.

Oxidizing properties None known. Not explosive **Explosive properties** Vapour pressure 9.7 kPa Vapour density

:

Relative density / Specific gravity

Not available.

Solubility in water : Insoluble.

Other solubility(ies) : No information available.

Partition coefficient: n-octanol/water or Coefficient of water/oil distribution

: Not available.

Auto-ignition temperature : Not available.

Decomposition temperature: No information available.

Viscosity : 275
Volatiles (% by weight) : 68%
Volatile organic Compounds (VOC's)

: 675 g/L

Absolute pressure of container

: N/Ap

Flame projection length : N/Ap

Other physical/chemical comments

: No additional information.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not normally reactive.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions

Hazardous polymerization does not occur.

Conditions to avoid : Keep away from heat, direct flame and other ignition sources. Do not use in areas

without adequate ventilation. Keep away from direct sunlight. Avoid contact with

incompatible materials.

Incompatible materials : Strong oxidizers (e.g. Chlorine, Peroxides, etc.).

Hazardous decomposition products

: None known, refer to hazardous combustion products in Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry inhalation : YES Routes of entry skin & eye : YES Routes of entry Ingestion

: YES

Routes of exposure skin absorption

: NO

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

: May cause respiratory tract irritation. Symptoms may include coughing, choking and

wheezing.

Sign and symptoms ingestion

: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Sign and symptoms skin : May cause mild skin irritation on prolonged contact.

Sign and symptoms eyes : Direct eye contact may cause slight redness.

Potential Chronic Health Effects

: Prolonged exposure can cause redness, swelling, itching, cracking of the skin,

dermatitis and sensitization.

Mutagenicity : Not expected to be mutagenic in humans.

:

Sign and symptoms Inhalation

Carcinogenicity No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Reproductive effects & Teratogenicity

: Not expected to have other reproductive effects.

Sensitization to material : This material is classified as hazardous under U.S. OSHA regulations (29CFR

1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Skin sensitization - Category 1 May cause

allergic skin reaction. Not expected to be a respiratory sensitizer.

Specific target organ effects : This material is classified as hazardous under U.S. OSHA regulations (29CFR

1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products

Regulations) (WHMIS 2015). Classification:

Specific target organ toxicity, single exposure Category 3

May cause drowsiness and dizziness. May cause respiratory irritation.

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Medical conditions aggravated by overexposure

<u>Ingredients</u>	CAS No	Toxicity to Daphnia					Toxicity to Daphnia	
		EC50 / 48h	NOEC / 21 day	Factor				
Ethyl acetate	141-78-6	> 100 mg/L	N/Av	None.				

: Pre-existing skin, eye and respiratory disorders.

Synergistic materials

: No information available.

Toxicological data

There is no available data for the product itself, only for the ingredients. See

below for individual ingredient acute toxicity data.

	LC50(4hr)	LDe	:0
Chemical name	<u>inh, rat</u>	(Oral, rat)	(Rabbit, dermal)
Ethyl acetate	8000 - 16 000 ppm (28.8 - 57.7 mg/L) (vapour)	10 200 mg/kg	> 18 000 mg/kg

Other important toxicological hazards

: See Section 2 for additional information.

:

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

:

The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.

See the following tables for individual ingredient ecotoxicity data.

Ecotoxicity data:

		Toxicity to Fish				
<u>Ingredients</u>	CAS No	LC50 / 96h	M Factor			
Ethyl acetate	141-78-6	> 100 mg/L	N/Av	None.		

<u>Ingredients</u>	CAS No	Toxicity to Algae			
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor	
Ethyl acetate	141-78-6	> 100 mg/L/72hr	N/Av	None.	

Persistence and degradability

No data is available on the product itself.

Bioaccumulation potential: No data is available on the product itself.

Components	Partition coefficent n-octanol/ater (log Kow)	Bioconcentration factor (BCF)
Ethyl acetate (CAS 141-78-6)	0.73	30 species: fish

Mobility in soil

: This material has low solubility and floats, and is expected to migrate from water to the $\,$

land

Other Adverse Environmental effects

: No data is available on the product itself.

SECTION 13. DISPOSAL CONSIDERATIONS

Handling for Disposal : Handle waste according to recommendations in Section 7. Empty containers may contain

hazardous residues.

Methods of Disposal : Dispose in accordance with all applicable federal, state, provincial and local regulations.

RCRA : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of

a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method.

SECTION 14. TRANSPORTATION INFORMATION

Regulatory nformation	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
TDG	UN1210	PRINTING INK	3	II	3
TDG Additional information		is a Limited Quantity when transported in containers no larger th (66 pounds) gross mass.	n 5 L (1.3 gallon	s); in packa	es not
49CFR/DOT	UN1210	PRINTING INK	3	II	3
49CFR/DOT Additional information	Limited Quantity CFR.	exemption may be used if product is in containers or 5 Litres or I	ss, per Section	173.150 of 4)

Special precautions for user

Appropriate advice on safety must accompany the package.

Environmental hazards

See ECOLOGICAL INFORMATION, Section 12.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC

Code: This information is not

available.

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

Components listed below are present on the following U.S. Federal chemical lists:

Ingredients	CAS#	TSCA Inventory	CERCLA Reportable	SARA TITLE III: Sec. 302, Extremely Hazardous	Sec. 302, CFR Extremely 372	
3.000			Quantity(RQ) (40 CFR 117.302):	Substance, 40 CFR 355:	Toxic Chemical	de minimus Concentration
Ethyl acetate	141-78-6	Yes	5000 lb/ 2270 kg	None.	No	N/Ap

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Acute Health Hazard Fire Hazard

US State Right to Know Laws:

The following chemicals are specifically listed by individual States:

	. ,	,							
Ingradianta	Ingredients CAS#		California Proposition 65			State "Right to Know" Lists			
<u>Ingredients</u>	CAS#	Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Ethyl acetate	141-78-6	No	N/Ap	Yes	Yes	Yes	Yes	Yes	Yes

Canadian Information:

All ingredients are present on the DSL. WHMIS

Classification: See Section 2.

International Information:

Components listed below are present on the following International Inventory list:

<u>Ingredients</u>	CAS#	European EINECs	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	NewZealand IOC		
Ethyl acetate	141-78-6	205-500-4	Present	Present	(2)-726	KE-00047	Present	HSR001041		
SECTION 16. OTHER INFORMATION										

Legend

: ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstract Services

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of

1980

CFR: Code of Federal Regulations CNS: Central Nervous System DOT: Department of Transportation EPA: Environmental Protection Agency

EINECS: European Inventory of Existing Commercial chemical Substances

IARC: International Agency for Research on Cancer

IBC: Intermediate Bulk Container

IMDG: International Maritime Dangerous Goods

Inh: Inhalation

LC: Lethal Concentration LD: Lethal Dose N/Ap: Not

Applicable

N/Av: Not Available

NIOSH: National Institute of Occupational Safety and Health

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

PEL: Permissible exposure limit

RCRA: Resource Conservation and Recovery Act RTECS: Registry of Toxic Effects of Chemical Substances SARA: Superfund Amendments and Reauthorization Act

STEL: Short Term Exposure Limit

TDG: Canadian Transportation of Dangerous Goods Act & Regulations

TLV: Threshold Limit Values TWA: Time Weighted Average

WHMIS: Workplace Hazardous Materials Identification System

References : 1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents &

Biological Exposure Indices for 2015.

2. International Agency for Research on Cancer Monographs, searched 2015 3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2015

(Chempendium, HSDB and RTECs).

4. Material Safety Data Sheets from manufacturer.

5. US EPA Title III List of Lists - 2015.6. California Proposition 65 List - 2015

Preparation Date (mm/dd/yyyy)

: 03/04/2019

Other special considerations for handling

: Provide adequate information, instruction and training for operators.

Prepared by:

Quest Inks& Coatings 2401 Anson Drive Mississauga, ON L5S 1G1 905-405-0041 www.questinks.com

DISCLAIMER

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

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