

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 06/09/2015 Revision date: 07/30/2021 Version: 1.3

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

1.1. Product identifier

Product form : Mixture

Name : SI-PZ1053 External Cleaner

Product code : SI-PZ1053 Cleaner

Synonyms : SI-PZ1053-Q, SI-PZ1053-G, SI-PZ1053-T, SI-PZ1053-P

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

Use of the substance/mixture : External Inkjet Cleaner

1.3. Details of the supplier of the safety data sheet

Squid Ink Manufacturing, Inc. 1173 Osborne Road Spring Lake Park, MN 55432 United States of America

phone: 763-795-8856 fax: 763-795-8867

email: kschneider@squidink.com

1.4. Emergency telephone number

24hr Emergency number : +1 800-424-9300 - Chemtrec

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Flam. Liq. 3 H226 Skin Irrit. 2 H315 Skin Sens. 1 H317

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)





GHS02

)2 GHS07

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H226 - Flammable liquid and vapor

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

Precautionary statements (GHS-US) : P210 - Keep away from heat, open flames, sparks. - No smoking

P233 - Keep container tightly closed

P261 - Avoid breathing fume, vapors, mist, spray

P280 - Wear eye protection, face protection, protective clothing, protective gloves

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

Not applicable

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SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
(R)-p-mentha-1,8-diene, d-limonene	(CAS No) 5989-27-5	70-100%	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1,2-Dihydroxypropane	(CAS No) 57-55-6	0-20%	Not Classified

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash

with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Gently wash with plenty of soap and water. Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries after inhalation : May cause an allergic skin reaction.

Symptoms/injuries after skin contact : Causes skin irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapor.

Explosion hazard : May form flammable/explosive vapor-air mixture.

Reactivity : May form peroxides.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No

smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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6.3. Methods and material for containment and cleaning up

Methods for cleaning up

: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed

: Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Avoid breathing fume, Vapors.

Hygiene measures

: Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Wash Skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

 Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof/flame proof, lighting, electrical equipment and ventilation equipment.

Storage conditions

: Keep container tightly closed. Keep only in the original container in a cool, well ventilated place away from direct sunlight, heat-ignition.

: Strong bases. Strong acids.

Incompatible products
Incompatible materials

: Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

SI-PZ1053 Cleaner		
ACGIH	Not applicable	
OSHA	Not applicable	
(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)		
ACGIH	Not applicable	
OSHA	Not applicable	

8.2. Exposure controls

Appropriate engineering controls Personal protective equipment : Provide adequate general and local exhaust ventilation.

: Protective clothing. Protective goggles. Gloves.







Hand protection

: Wear protective gloves.

Eye protection
Skin and body protection

Chemical goggles or safety glasses.Wear suitable protective clothing.

Respiratory protection

: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Clear to amber liquid.

Color : clear
Odor : characteristic

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Odor threshold : No data available pH : No data available Melting point : No data available Freezing point : No data available : No data available

Boiling point : 176 °C

Flash point : 48,88 °C Pensky Martens closed cup.

Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : No data available
Explosion limits : 0,7 - 6,1 vol %
Explosive properties : No data available
Oxidizing properties : No data available
Vapor pressure : 0,192 kPa 77°F / 25°C

Relative density : No data available

Relative vapor density at 20 °C : 4,73

Specific gravity / density : 0,8405 g/cm³ 77.0°F / 25.0°C

Solubility : Negligible.

Water: Solubility in water of component(s) of the mixture :
• (R)-p-mentha-1,8-diene, d-limonene:
• 1,2-propanediol:

Log Pow : No data available
Log Kow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available

9.2. Other information

VOC content : 100 %

SECTION 10: Stability and reactivity

10.1. Reactivity

May form peroxides.

10.2. Chemical stability

Stable under normal conditions. Flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

SI-PZ1053 Cleaner		
LD50 oral rat	> 5000 mg/kg	
LD50 dermal rat	> 5000 mg/kg	
(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)		
LD50 oral rat	4400 mg/kg body weight (Rat; OECD 423: Acute Oral Toxicity – Acute Toxic Class Method; Literature study: > 2000 mg/kg bodyweight; Rat; Read-across)	

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(R)-p-mentha-1,8-diene, d-limonene (5989-27-	5)
LD50 dermal rabbit	> 5000 mg/kg body weight (Rabbit; Weight of evidence; Equivalent or similar to OECD 402)
ATE US (oral)	4400,000 mg/kg body weight
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Not classified

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified : Not classified Carcinogenicity

(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)

IARC group 3 - Not classifiable

Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified Specific target organ toxicity (repeated : Not classified

exposure)

Aspiration hazard : Not classified

Potential Adverse human health effects and

: Based on available data, the classification criteria are not met.

symptoms

Symptoms/injuries after inhalation

: May cause an allergic skin reaction.

Not established

Not established

Symptoms/injuries after skin contact : Causes skin irritation.

SECTION 12: Ecological information

12.1. Toxicity

SI-PZ1053 Cleaner	
LC50 fish 1	0,61 - 0,79 mg/l 96h flow-through test LC 50 Fathead minnow (Pimephales promelas) Method: Flow through; Mortality
EC50 Daphnia 1	69,6 mg/l 48h static test Water flea (Daphnia pulex): Method: Static Intoxication
(R)-p-mentha-1,8-diene, d-limonen	e (5989-27-5)
LC50 fish 1	720 μg/l (96 h; Pimephales promelas; Lethal)
EC50 Daphnia 1	0,36 mg/l (48 h; Daphnia magna; GLP)
LC50 fish 2	702 μg/l (96 h; Pimephales promelas)
Threshold limit algae 1	150 mg/l (72 h; Desmodesmus subspicatus; GLP)
Threshold limit algae 2	2,62 mg/l (72 h; Desmodesmus subspicatus)
1,2-Dihydroxypropane (57-55-6)	
LC50 fish 1	Not established
EC50 Daphnia 1	Not established
LC50 fish 2	Not established

Persistence and degradability 12.2.

Threshold limit algae 1

Threshold limit algae 2

SI-PZ1053 Cleaner		
Persistence and degradability	Not established.	
(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)		
Persistence and degradability	Readily biodegradable in water. Forming sediment in water. Adsorbs into the soil.	
ThOD	3,29 g O ₂ /g substance	

12.3. **Bioaccumulative potential**

SI-PZ1053 Cleaner		
Bioaccumulative potential Not established.		
(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)		
BCF fish 1	864,8 - 1022 (Pisces; Fresh weight)	
Log Pow	4,38 (Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method; 37 °C)	

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(R)-p-mentha-1	l,8-diene,	d-limonene	(5989-27-5))

Potential for bioaccumulation (4 ≥ Log Kow ≤ 5) Bioaccumulative potential

Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. : Handle empty containers with care because residual vapors are flammable. Additional information

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1210 Printing ink related material (CONTAINS (R)-p-mentha-1,8-diene, d-limonene(5989-

27-5)), 3, III

UN-No.(DOT) : UN1210

Proper Shipping Name (DOT) : Printing ink related material

> CONTAINS (R)-p-mentha-1,8-diene, d-limonene(5989-27-5) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Department of Transportation (DOT) Hazard

Classes

Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : III - Minor Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 173 DOT Packaging Bulk (49 CFR 173.xxx) : 242 DOT Special Provisions (49 CFR 172.102)

: B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this

subchapter are applicable.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

T2 - 1.5 178.274(d)(2) Normal...... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) DOT Quantity Limitations Passenger aircraft/rail : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

Additional information

Other information : No supplementary information available.

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ADR

No additional information available

Transport by sea

UN-No. (IMDG) : 1210

Proper Shipping Name (IMDG) : PRINTING INK RELATED MATERIAL

Class (IMDG) : 3 - Flammable liquids

Packing group (IMDG) : III - substances presenting low danger

Air transport

UN-No. (IATA) : 1210

Proper Shipping Name (IATA) : Printing ink related material Class (IATA) : 3 - Flammable Liquids Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

National regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

Revision date : 07/30/2021 Other information : None.

Full text of H-phrases:

Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Flam. Liq. 3	Flammable liquids Category 3
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
H226	Flammable liquid and vapor
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

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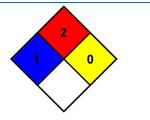
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NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard : 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions,

and are not reactive with water.



HMIS III Rating

Physical

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

* - Chronic (long-term) health effects may result from repeated overexposure

Flammability : 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient

temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F

but below 200 F. (Classes II & IIIA)

: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT

react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal Protection : E

B - Safety glasses, Gloves

SDS US (GHS HazCom 2012)

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