Sigma Ink Inc.
12800 Brookprinter Place
Poway Ca, 92064

SAFETY DATA SHEET

1. Product and Company Identification

Product Name	Pad life
Product Identifier	Sigma Pad life
Recommended uses and restrictions	To use on pads
Manufacturer data	Sigma Inks (USA) 12800 Brookprinter place, Poway, CA 92064 US Phone: (888) 424-9300 Website: www.sigmainks.com Contact to the distributor: www.printexusa.com
Emergency number	Chemtrec (And.Or.): (800) 424-9300 Chemtrec (Out of And.Or.): (703) 527-3887 (Collect calls)

2. Hazard identification

Classification of the substance or mixture

Classification (GHS):

Not a hazardous substance or mixture.

Label elements

Labelling (GHS):

No labeling according to GHS required.

Other hazards

No data available.

3. Composition/information on components

Chemical characterization (substance)

CAS No.	Chemical characteristics
	Polydimethylsiloxane

Information on ingredients

This material does not contain any ingredients above the permitted limit(s). Substances listed in the Subsections "HAPS" and "California Proposition 65 Carcinogens / Reproductive Toxins" that are not listed in this section are only present at quantities below 0.1% for California Proposition 65 listed toxins or below 1% for noncarcinogenic HAPS or they are inextricably bound in the product. Specific chemical identities and/or exact percentage (concentration) of the composition may have been withheld as a trade secret.

This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57) in amounts above ≥ 0.1%.

4. First Aid

General information

Get medical attention if irritation or other symptoms occur. Before seeking medical attention remove contaminated clothing and shoes. Take a copy of the Safety Data Sheet when going for medical treatment.

After inhalation

Material cannot be inhaled under normal conditions. No special treatment required.

After contact with the skin

After skin contact wipe off excess material with cloth or paper. Use a waterless hand cleaner to remove as much of the remaining material as possible. Wash with soap and water.

After contact with the eyes

If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min.

After swallowing

No special measures are required after swallowing.

5. Firefighting measures

Flammable properties:

Property:	Value:	Method:
Flash point	> 250 °C (> 482 °F)	(ISO 2592)
Flash point	> 150 °C (> 302 °F)	(EN 22719)
Boiling point / boiling range	not determinable	(EU-GL.A.2)
Lower explosion limit (LEL)	not applicable	
Upper explosion limit (UEL)	not applicable	
Ignition temperature	395 °C (743 °F)	(EN 14522)
NFPA Hazard Class (comb./flam. Liquid)	IIIB	

Fire and explosion hazards

This material does not present any unusual fire or explosion hazards.

Recommended extinguishing media

Water-mist, carbon dioxide, sand, dry chemical or alcohol-resistant foam.

Unsuitable extinguishing media

Water-spray, sharp water jet.

Special exposure hazards arising from the substance or preparation itself, combustion products, and resulting gases

Hazardous decomposition products: carbon dioxide, carbon monoxide, formaldehyde, silicon dioxide and incompletely burnt hydrocarbons.

Firefighting procedures

Fire fighters should wear full protective clothing including a self-contained breathing apparatus. Cool endangered containers with water.

6. Accidental release measures

Precautions

Secure the area. Wear personal protection equipment (see section 8). Keep unprotected persons away. If material is released indicate risk of slipping. Do not walk through spilled material.

Containment

Prevent material from entering surface waters, drains or sewers and soil. Close leak if possible without risk. Contain any fluid that runs out using suitable material (e.g. earth). Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers. Inform authorities if substance leaks into surface waters, sewerage or ground.

Methods for cleaning up

Take up mechanically and dispose of according to local/state/federal regulations. Do not flush away with water. For small amounts: Absorb with a neutral (non-acidic / non-basic) liquid binding material such as diatomaceous earth and dispose of according to government regulations. For large amounts: Liquids may be recovered using suction devices or pumps. If flammable, only air driven or properly rated electrical equipment should be used. Clean any slippery coating that remains using a detergent / soap solution or another biodegradable cleaner. Silicone fluids are slippery; spills are a safety hazard. Apply sand or other inert granular material to improve traction.

7. Handling and storage

Handling

Precautions for safe handling

Avoid formation of aerosols. In case of aerosol formation special protective measures are required (exhausting by suction, respiratory protection). Spilled substance increases risk of slipping. Observe information in section 8.

Precautions against fire and explosion

Observe the general rules for fire prevention.

Storage

Conditions for storage rooms and vessels

Observe local/state/federal regulations.

Advice for storage of incompatible materials

Observe local/state/federal regulations.

Further information for storage

Store in a dry and cool place.
Maximum temperature allowed during storage and transportation: 50 °C (122 °F).

8. Exposure controls/Personal protection

Engineering controls

Ventilation

Use with adequate ventilation.

Local exhaust

Not necessary

Associate substances with specific control parameters such as limit values

Maximum airborne concentrations at the workplace

None known

Personal protection equipment (PPE)

Respiratory protection

Respiratory protection is not normally required.

Hand protection

Recommendation: Any liquid-tight rubber or vinyl gloves.

Eye protection

Recommendation: Safety glasses with side shields.

Other protective clothing or equipment

Additional protective clothing or equipment is not normally required. Provide eye bath and safety shower.

General hygiene and protection measures

When handling do not eat, drink, smoke or apply cosmetics. Wash thoroughly after handling.

9. Physical and chemical properties

Appearance

Physical state	Liquid
Color	Colorless transparent
Odor	Odorless

Safety parameters

Property	Value	Method
Melting point / melting range	-55 °C (-67 °F)	
Boiling point / boiling range	Not determinable	(EU-GL.A.2)
Flash point	> 250 °C (> 482 °F)	(ISO 2592)
Flash point	> 150 °C (> 302 °F)	(EN 22719)
Ignition temperature	395 °C (743 °F) (EN 14522)	
Lower explosion limit (LEL)	Not applicable	
Upper explosion limit (UEL).	Not applicable	
Vapor pressure	Not determined	
Density	0.96 g/cm³ at 25 °C (77 °F)	
Water solubility / miscibility	Virtually insoluble	
Ph-Value	Approx. 7	
Viscosity (dynamic)	50 mPa.s at 25 °C (77 °F)	(DIN 53019)
Viscosity (kinematic)	Ca. 50 mm²/s at 25 °C (77 °F)	(DIN 53019)

Further information

Odor limit	No data available
Corrosive to Steel or Aluminum	Not corrosive to steel or aluminum.
Thermal decomposition	Decomposition begins at > 250 °C (> 482 °F)

10. Stability and reactivity

General information

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

Conditions to avoid

None known

Materials to avoid

None known

Hazardous decomposition products

If stored and handled properly: none known. Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150 °C (302 °F) through oxidation.

Further information

Hazardous polymerization cannot occur.

11. Toxicological information

Information on toxicological effects

Acute toxicity

Product details

Route of exposure	Result/Effect	Species/Test system	Source
Oral	LD50: > 5000 mg/kg Neither mortality nor clinical signs of toxicity were observed with the given dose.	Rat	Literature (Polydimethylsiloxane)
dermal	LD50: > 2008 mg/kg Neither mortality nor clinical signs of toxicity were observed with the given dose.	Rat	Literature (Polydimethylsiloxane)

Skin corrosion/irritation

Product details:

Result/Effect	Species/Test system	Source
Not irritating	Rabbit	Literature (Polydimethylsiloxane)

Serious eye damage / eye irritation

Product details:

Result/Effect	Species/Test system	Source
Not irritating	Rabbit	Literature (Polydimethylsiloxane)

Respiratory or skin sensitization

Product details:

Route of exposure	Result/Effect	Species/Test system	Source
Dermal	Not sensitizing	Guinea pig; Maximization Test	Literature (Polydimethylsiloxane) OECD 406

Germ cell mutagenicity

Assessment:

Based on known data a significant mutagenic potential may be excluded.

Product details:

Result/Effect	Species/Test system	Source
Negative	Mutation assay (in vitro) bacterial cells	Literature (Polydimethylsiloxane) OECD 471

Carcinogenicity

Assessment:

Animal tests have not revealed any carcinogenic effects.

Product details:

Result/Effect	Species/Test system	Source
NOAEL: >= 1000 mg/kg NOAEL= NOAEL (carcinogenic effects)	Carcinogenicity study rat (F344) Oral (feed) 2 a	Literature (Polydimethylsiloxane)

Reproductive toxicity

Assessment:

Animal tests have shown no indications of possibility of damage to embryo and impairment of fertility.

Product details:

Result/Effect (Examinations of developmental toxicity and teratogenicity)	Species/Test system	Source
NOAEL (developmental): >= 1000 mg/kg NOAEL (maternal): >= 1000 mg/kg Symptoms/Effect: Nothing abnormal detected.	Developmental Toxicity Study Rabbit Oral (gavage); day 6 - 19 of gestation	Literature (Polydimethylsiloxane)

Specific target organ toxicity (single exposure)

Assessment:

For this endpoint no toxicological test data is available for the whole product.

Specific target organ toxicity (repeated exposure)

Assessment:

For this endpoint no toxicological test data is available for the whole product.

Product details:

Result/Effect	Species/Test system	Source
NOAEL: >= 1000 mg/kg NOAEL = NOAEL (systemic effects)	Chronic study Rat Oral (feed) 1 a Follow-up observation period: 1 a	Literature (Polydimethylsiloxane)

Aspiration hazard

Assessment:

For this endpoint no toxicological test data is available for the whole product.

Further toxicological information

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by

NTP. No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Other information: Human patch test: Product displays good compatibility with the skin.

12. Ecological information

Toxicity

Assessment:

Based on available data no effects on aquatic organisms that are relevant for classification must be expected for the product up to its limits of water solubility. According to current knowledge adverse effects on water purification plants are not expected.

Product details:

Result/Effect	Species/Test system	Source
> 1000 mg/l (nominal) Effect level > maximum achievable concentration	Static (water-accommodated fraction) Fish (96 h)	Literature
EC50: > 0.0001 mg/l (measured) Effect level > maximum achievable concentration	Static (water-accommodated fraction) Daphnia magna (48 h)	Literature

IC50 (growth rate): > 100000 mg/l (nominal)	Static (water-accommodated fraction) Marine alga (skeleonema costatum) (72 h)	Literature
NOEC: > 10000 mg/kg	Feeding study Rainbow trout (Oncorhynchus mykiss) (28 d)	Literature
NOEC (mortality, growth, reproduction): > 500 mg/kg The exposure to treated sediment did not result in effects.	Exposure via sediment Daphnia magna (21 d)	Literature

Persistence and degradability

Assessment:

Silicone content: biologically not degradable. Elimination by adsorption to activated sludge. Polydimethylsiloxanes are degradable to a certain extent in abiotic processes.

Bioaccumulative potential

Assessment:

Polymer component: Bioaccumulation is not expected to occur.

Mobility in soil

Assessment:

Polymer component: insoluble in water. Adsorbs on soil.

Results of PBT and vPvB assessment

No data available.

Other adverse effects

None known

13. Disposal Considerations

Product disposal

Recommendation:

Material that cannot be used, reprocessed or recycled should be disposed of in accordance with Federal, State, and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.

Packaging disposal

Recommendation:

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleansed packaging should be treated with the same precautions as the material.

14. Transport Information

UD DOT & CANADA TDG SURFACE

Valuation…… Not Regulated for Transport

Transport By Sea IMDG-Code

Valuation……. Not Regulated for Transport

Air Transport ICAO-TI/IATA-DGR

Valuation…….. Not Regulated for Transport

15. Regulatory information

U.S. Federal regulations

TSCA inventory status and TSCA information:
This material or its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory.

TSCA 12(b) Export Notification:
This material does not contain reportable amounts of any TSCA 12(b) listed chemicals.

CERCLA Regulated Chemicals:
This material does not contain any CERCLA regulated chemicals.

SARA 302 EHS Chemicals:
This material does not contain any SARA extremely hazardous substances.

SARA 311/312 Hazard Class:
This product does not present any SARA 311/312 hazards.

SARA 313 Chemicals:
This material does not contain any SARA 313 chemicals above de minimums levels.

HAPS (Hazardous Air Pollutants):
This material does not contain any hazardous air pollutants.

U.S. State regulations

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):
This material does not contain any chemicals known to the State of California to cause cancer.
This material does not contain any chemicals known to the State of California to cause reproductive effects.

Massachusetts Substance List:
This material contains no listed components.

New Jersey Right-to-Know Hazardous Substance List:
This material contains no listed components.

Pennsylvania Right-to-Know Hazardous Substance List:
This material contains no listed components.

Details of international registration status

Relevant information about individual substance inventories, where available, is given below.

Japan	ENCS (Handbook of Existing and New Chemical Substances): This product is listed in, or complies with, the substance inventory.
New Zealand	NZIoC (New Zealand Inventory of Chemicals): This product is listed in, or complies with, the substance inventory. (For a correct interpretation of the New Zealand status, additional information like GHS classification or Group Standard is required.)
Australia	AICS (Australian Inventory of Chemical Substances): This product is listed in, or complies with, the substance inventory.
China	IECSC (Inventory of Existing Chemical Substances in China): This product is listed in, or complies with, the substance inventory.
Canada	DSL (Domestic Substance List): This product is listed in, or complies with, the substance inventory.
Philippines	PICCS (Philippine Inventory of Chemicals and Chemical Substances): This product is listed in, or complies with, the substance inventory.
United States of America (USA)	TSCA (Toxic Substance Control Act Chemical Substance Inventory): All components of this product are listed as active or are in compliance with the substance inventory.
Taiwan	TCSI (Taiwan Chemical Substance Inventory): This product is listed in, or complies with, the substance inventory. General note: The Taiwanese chemicals regulation requires a phase 1 registration for TCSI-listed or TCSI-compliant substances if imports to Taiwan or manufacturing in Taiwan exceed the trigger quantity of 100 kg/a (for mixtures to be calculated per each ingredient). It is the duty of the importing/manufacturing legal entity to take care of this obligation.
European Economic Area (EEA).	REACH (Regulation (EC) No 1907/2006): General note: the registration obligations for substances imported into the EEA or manufactured within the EEA by the supplier mentioned in section 1 are fulfilled by the said supplier. The registration obligations for substances imported into the EEA by customers or other downstream users must be fulfilled by the latter.

South Korea (Republic of Korea)	AREC (Act on Registration and Evaluation of Chemicals; “K-REACH”): General note: in case of registration obligations for substances or polymers imported into Korea or manufactured within Korea these are fulfilled by the supplier mentioned in section 1. The registration obligations for substances or polymers imported into Korea by customers or other downstream users must be fulfilled by the latter.

16. Another information

Technical information:

It is recommended to spread silicone fluid on the surface of the pad with a piece of cloth and remove any excess with the help of another dry piece of cloth. This could help to prolong the pad's life.

Additional information:

This Safety Data Sheet (SDS) meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200).This information relates 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 our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee expressed or implied, is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license under valid patents. This SDS provides selected regulatory information on this product, including its components. This is not intended to include all regulations. It is the responsibility of the user to know and comply with all applicable rules, regulations and laws relating to the product being used.