Design Report of Safety Data Sheet

(SDS)

Sample Name: SILICONE PIGMENT

Type/Model: /

Entrust Unit: HUIZHOU YIRUN SILICONE CO.,LTD.

Audited by: DAVE

Edited by: NICOK

（Stamp）

Unit: Guangfen Testing Institute (Guangzhou) Quality Inspection Co., Ltd.（GFQT）

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SAFETY DATA SHEET(SDS)
Silicone Pigment
***According to GHS (Tenth Revised Edition)**

SDS

Section 1 Identification of the chemical and supplier

◆ **Product identifier**	
Product Name	Silicone Pigment
Product Model	-
CAS No.	Not applicable
EC No.	Not applicable
Molecular Formula	Not applicable
◆ **Relevant identified uses of the substance or mixture and uses advised against**	
Relevant identified uses	Please consult the manufacturer.
Uses advised against	Please consult the manufacturer.
◆ **Details of the supplier of the Safety Data Sheet**	
Applicant Name	Huizhou Yirun Silicone Co.,Ltd.
Applicant Address	7th Building DongTaiHeng Industrial District, Xinxu ,HuiyangArea Huizhou city Guangdong province China 516223
Applicant Telephone	+86-752-3620489
Applicant Fax	-
Applicant E-mail	xgsilicon@163.com
Supplier Name	Huizhou Yirun Silicone Co.,Ltd.
Supplier Address	7th Building DongTaiHeng Industrial District, Xinxu ,HuiyangArea Huizhou city Guangdong province China 516223
Supplier Telephone	+86-752-3620489
Supplier Fax	-
Supplier E-mail	xgsilicon@163.com
◆ **Emergency phone number**	
Emergency phone number	+86-752-3620489

Section 2 Hazards identification

◆ **Hazard classification according to GHS**	
Hazard classification according to GHS	Not applicable

◆ **GHS Label elements**	
Hazard pictograms	Not applicable
Signal word	Not applicable
◆ **Hazard statements**	
Hazard statements	Not applicable
◆ **Precautionary statements**	
▲ **Prevention**	
Prevention	Not applicable
▲ **Response**	
Response	Not applicable
▲ **Storage**	
Storage	Not applicable
▲ **Disposal**	
Disposal	Not applicable
◆ **Hazard description**	
▲ **Physical and chemical hazards**	
Physical and chemical hazards	Liquid, fire can produce toxic smoke.
▲ **Health hazards**	
Inhaled	Inhalation of the product may produce adverse health effects or irritation of the respiratory tract following discomfort.
Ingestion	Accidental ingestion of the product may be harmful to the health of the individual
Skin Contact	Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.
Eye	This product may cause temporary discomfort following direct contact with the eye.
▲ **Environmental hazards**	
Environmental hazards	Please refer to 12th chapter of SDS.

Section 3 Composition/information on ingredients

◆ **Substance / mixture**

□**Substance** ☑**mixture**

Component	Cas No.	EC No.	Concentration (weight percent，%)

Vinyl silicone oil	26710-23-6	N/A	35
Silver powder	7429-90-5	231-072-3	12
Titanium dioxide	13463-67-7	236-675-5	12
Pigment yellow	5468-75-7	226-789-3	11
Pigment black	1333-86-4	215-609-9	10
Pigment red	6041-94-7	227-930-1	5
Pigment blue	147-14-8	205-685-1	5
Pigment green	1328-53-6	215-524-7	5
Amorphous silica	68083-18-1	614-273-4	5

Section 4 First aid measures

◆ **Description of first aid measures**

General advice	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Skin contact	Take off contaminated clothing and shoes immediately. Wash off with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Ingestion	Drink water, induce vomiting, and seek medical treatment.
Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen and consult a physician immediately.
Protecting of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

◆ **Most important symptoms/effects, acute and delayed**

1 Please see section 11.

◆ **Indication of any immediate medical attention and special treatment needed**

1 Treat symptomatically.

2 Symptoms may be delayed.

Section 5 Firefighting measures

◆ **Extinguishing media**

Suitable extinguishing media	Foam, powder,CO2, sand fire.
Unsuitable extinguishing media	There is no restriction on the type of extinguisher which may be used.

◆ **Specific hazards arising from the substance or mixture**

1	Harmful combustible gas or vapor may be produced in case of fire.
◆	**Special protective equipment and precautions for fire-fighters**
1	As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear
2	Fight fire from a safe distance, with adequate cover.
3	Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6 Accidental release measures

◆	**Personal precautions, protective equipment and emergency procedures**
1	Ensure adequate ventilation. Remove all ignition sources.
2	Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
3	Use personal protective equipment. Avoid inhaling smoke or dust.
◆	**Environmental precautions**
1	Prevent further leakage or spillage if safe to do so.
2	Discharge into the environment must be avoided.
◆	**Methods and materials for containment and cleaning up**
1	For a small amount of leakage, dry sand or inert absorbent materials can be used to absorb the leakage, and for a large amount of leakage, it is necessary to build a dike to control it.
2	Attachments or collections should be stored in suitable airtight containers and disposed of in accordance with relevant local laws and regulations.

Section 7 Handling and storage

◆	**Precautions for safe handling**
1	Operate in a well ventilated area.
2	Wear suitable personal protective equipment.
3	Avoid contact with skin and eyes.
4	Keep away from heat sources, sparks, open flames and hot surfaces.
◆	**Conditions for safe storage, including any incompatibilities**
1	Keep containers tightly closed.
2	Keep containers in a dry, cool and well-ventilated place.
3	Keep away from heat/sparks/open flames/hot surfaces.
4	Store away from incompatible materials and foodstuff containers.

Section 8 Exposure controls/personal protection

◆ **Control parameters**

▲ **Occupational Exposure limit values**

Component	Country/Region	Limit value - Eight hours		Limit value - Short term	
		ppm	mg/m³	ppm	mg/m³
Silver powder	Australia	-	5	-	-
	Germany (DFG)	-	5	-	-
	New Zealand	-	5	-	-
	Norway	-	5	-	-
	South Korea	-	5	-	12
Titanium dioxide	Australia	-	10	-	-
	Ireland	-	10	-	-
	New Zealand	-	10	-	-
	South Korea	-	10	-	-
	USA - OSHA	-	15	-	-
Pigment black	Australia	-	3	-	-
	Ireland	-	3	-	-
	New Zealand	-	3	-	-
	South Korea	-	3,5	-	-
	USA - OSHA	-	3,5	-	-
Pigment blue	Latvia		5		

▲ **Biological limit values**

No information available

▲ **Monitoring methods**

1	EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
2	GBZ/T 160.1~GBZ/T 160.81-2004 Determination of toxic substances in workplace air (Series standard)

▲ **Engineering controls**

1	Ensure adequate ventilation, especially in confined areas.
2	Ensure that eyewash stations and safety showers are close to the workstation location.
3	Set up emergency exit and necessary risk-elimination area.
4	Handle in accordance with good industrial hygiene and safety practice.

▲ **Personal protection equipment**

General requirement	
Eye protection	Must wear appropriate safety goggles.
Hand protection	Must wear appropriate chemical protective gloves.
Respiratory protection	Must wear appropriate personal respiratory protective equipment.
Skin and body protection	Must wear appropriate Work clothes.

Section 9 Physical and chemical properties

◆ **Physical and chemical properties**

Appearance	Deep grey paste
Odor	Weak odor
pH	No information available\Not applicable.
Melting point/freezing point(℃)	No information available\Not applicable.
Initial boiling point and boiling range(℃)	No information available\Not applicable.
Flash point(Closed cup,℃)	No information available\Not applicable.
Evaporation rate	No information available\Not applicable.
Flammability	Not flammable
Upper/lower explosive limits[%(v/v)]	No information available\Not applicable.
Vapor pressure(KPa)	No information available\Not applicable.
Vapor density(Air = 1)	No information available\Not applicable.
Relative density(Water=1)	No information available\Not applicable.
Solubility(mg/L)	No information available\Not applicable.
n-octanol/water partition coefficient:	No information available\Not applicable.
Auto-ignition temperature(℃)	No information available\Not applicable.
Decomposition temperature(℃)	No information available\Not applicable.
Viscosity(mm2/s)	No information available\Not applicable.
Particle characteristics	No information available\Not applicable.
Explosive properties	Not explosive
Oxidizing properties	Not oxidizing

Section 10 Stability and reactivity

◆ Stability and reactivity	
Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
Chemical stability	Stable under proper operation and storage conditions.
Possibility of hazardous reactions	No information available
Conditions to avoid	Incompatible materials, heat, flame and spark.
Incompatible materials	Strong oxidizing agent. Strong acid, strong base.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11 Toxicological information

◆ **Acute toxicity**

Component	LD_{50}(oral)	LD_{50}(dermal)	LC_{50}(inhalation,4h)
Pigment black	> 15400 mg/kg(Rat)	> 3000 mg/kg(Rabbit)	No information available

◆ **Carcinogenicity**

Component	IARC	NTP
Vinyl silicone oil	Not Listed	Not Listed
Silver powder	Not Listed	Not Listed
Titanium dioxide	Category 2B	Not Listed
Pigment yellow	Not Listed	Not Listed
Pigment black	Category 2B	Not Listed
Pigment red	Not Listed	Not Listed
Pigment blue	Not Listed	Not Listed
Pigment green	Not Listed	Not Listed
Amorphous silica	Not Listed	Not Listed

◆ **Others**

Skin corrosion/irritation	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Based on available data, the classification criteria are not met
Skin sensitization	Based on available data, the classification criteria are not met
Respiratory sensitization	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-single exposure	Based on available data, the classification criteria are not met

STOT-repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met
Reproductivetoxicity(additional)	Based on available data, the classification criteria are not met

Section 12 Ecological information

◆ **Acute aquatic toxicity**

Component	Fish	Crustaceans	Algae
Titanium(IV) oxide	No information available	LC_{50}：5,5 mg/L (48h)(Crustaceans)	No information available

◆ **Chronic aquatic toxicity**

No information available

◆ **Persistence and degradability**

No information available

◆ **Bioaccumulative potential**

No information available

◆ **Mobility in soil**

No information available

◆ **Results of PBT and vPvB assessment**

Component	Results of PBT and vPvB assessment (according to (EC) No 1907/2006)
Vinyl silicone oil	not PBT/vPvB
Silver powder	not PBT/vPvB
Titanium dioxide	not PBT/vPvB
Pigment yellow	not PBT/vPvB
Pigment black	not PBT/vPvB
Pigment red	not PBT/vPvB
Pigment blue	not PBT/vPvB
Pigment green	not PBT/vPvB
Amorphous silica	not PBT/vPvB

Section 13 Disposal considerations

Waste chemicals	Before disposal should refer to the relevant national and local laws and regulation. Preferably via a certified collector or company.

Contaminated packaging	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.
Disposal recommendations	Refer to section waste chemicals and contaminated packaging.

Section 14 Transport information

◆ **Label and Mark**

Transporting Label	Not applicable

◆ **IMDG-CODE**

IMDG-CODE	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

◆ **CAO/IATA-DG**

ICAO/IATA-DG	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

◆ **UN-ADR**

UN-ADR	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Section 15 Regulatory information

◆ **International list of chemicals**

Component	EC Inventory	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AICS	ENCS
Vinyl silicone oil	×	×	×	×	×	×	×	×	×
Silver powder	√	√	√	√	√	√	√	√	×
Titanium dioxide	√	√	√	√	√	√	√	√	√
Pigment yellow	√	√	√	√	√	√	√	√	√
Pigment black	√	√	√	√	√	√	√	√	×
Pigment red	√	√	√	√	√	√	√	√	√
Pigment blue	√	√	√	√	√	√	√	√	√
Pigment green	√	√	√	√	√	√	√	√	√
Amorphous silica	×	√	√	√	√	√	√	√	√

【EC inventory】European Inventory of Existing Commercial Chemical Substances
【TSCA】United States Toxic Substances Control Act Inventory
【DSL】Canadian Domestic Substances List
【IECSC】China Inventory of Existing Chemical Substances
【NZIoC】New Zealand Inventory of Chemicals
【PICCS】Philippines Inventory of Chemicals and Chemical Substances
【KECI】Existing and Evaluated Chemical Substances
【AICS】Australia Inventory of Chemical Substances

【ENCS】Japan Inventory of Existing & New Chemical Substances

Note :

"√" Indicates that the substance included in the regulations

"×" That no data or included in the regulations

Section 16 Additional Information

Information on revision

Creation Date	2024/01/17
Revision Date	2024/01/24 (Explanation:The report is valid for one year)
Reason for revision	-

References:

【1】IPCS:The International Chemical Safety Cards (ICSC) ,website: http://www.ilo.org/dyn/icsc/showcard.home.
【2】IARC，website: http://www.iarc.fr/.
【3】OECD: The Global Portal to Information on Chemical Substances, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en。
【4】CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple.
【5】NLM:ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp.
【6】EPA: Integrated Risk Information System, website: http://cfpub.epa.gov/iris/.
【7】U.S. Department of Transportation:ERG, website: http://www.phmsa.dot.gov/hazmat/library/erg.
【8】Germany GESTIS-database on hazard substance, website: http://gestis-en.itrust.de/.

Abbreviations and acronyms

CAS	Chemical Abstracts Service	UN	The United Nations
PC-STEL	Short term exposure limit	OECD	Organization for Economic Co-operation and Development
PC-TWA	Time Weighted Average	IMDG	International Maritime Dangerous Goods
MAC	Maximum Allowable Concentration	IARC	International Agency for Research on Cancer
DNEL	Derived No Effect Level	ICAO	ICAO-International Civil Aviation Organization
PNEC	Predicted No Effect Concentration	IATA	International Air Transportation Association
NOEC	No Observed Effect Concentration	ACGIH	American Conference of Governmental Industrial Hygienists
LC_{50}	Lethal Concentration 50%	NFPA	National Fire Protection Association
LD_{50}	Lethal Dose 50%	NTP	National Toxicology Program
EC_{50}	Effective Concentration 50%	PBT	Persistent, Bioaccumulative, Toxic
ECX	Effective Concentration X%	vPvB	vPvB -High very Persistent, High very Bioaccumulative
P_{OW}	Partition coefficient Octanol:Water	CMR	Carcinogens, mutagens or substances toxic to reproduction
BCF	Bioconcentration factor (BCF)	RPE	Respiratory Protective Equipment
ED	Endocrine disruptors	-	-

Disclaimer

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