Version: V1.0.0.1 Revision Date: 2022/03/06

Safety Data Sheet

Siliform™ Resin SF-24E Comp.B

Version: V1.0.0.1

Report No.: LB-202203-0602 Creation Date: 2022/03/06 Revision Date: 2022/03/06

*Prepared according to GB/T 17519 and GB/T 16483



Identification of the chemical and supplier

| Product identifier

Product Name	Siliform™ Resin SF-24E Comp.B
CAS No.	Not applicable
EC No.	Not applicable
Molecular Formula	Not applicable

Recommended use of the product and restrictions on use

· ·	
Relevant identified uses	Municipal Engineering.
Uses advised against	No special note.

Details of the supplier of the Safety Data Sheet

Name of the company	Suzhou Lubin Hi-Tech Material Co.,Ltd.
Address of the company	NO.69 WEXIN RD SUZHOU, CHINA, BUIDING 5, ROOM 202,OET PARK
Post code	215000
Telephone number	+86 187 6286 7422
Fax number	+86 512 6818 6081
E-mail address	service-lubin@hotamail.com

| Emergency phone number

Emergency phone number +86 512 6818 6081

2 Hazard(s) identification

| Hazard classification according to GHS

Not applicable	Hazard classification
	according to GHS

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		
	P403+P233	Store in a well-ventilated place. Keep container tightly closed.
Disposal		
	P501	Dispose of contents/container in accordance with local/regional/national/

Hazard description

Physical and chemical hazards

Liquid, toxic smoke/fumes in a fire.

international regulations.

Health hazards

Inhaled	According to the material form, it is not the normal way of contacting.
Ingestion	Accidental ingestion of the product may be harmful to the health of the individual
Skin Contact	No harm in general situation.
Eye	This product may cause temporary discomfort following direct contact with the eye.

Please refer to 12th chapter of SDS.

3 Composition/information on ingredients

| Substance/mixture

Mixture

Component	CAS No.	EC No.	Concentration (wt, %)
Sodium silicate	1344-09-8	215-687-4	40
Water	7732-18-5	231-791-2	60

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 soap and water for at least 15 minutes and consult a physician if feel uncomfortable.
Ingestion	Never give anything by mouth to an unconscious person. Call a physician immediately
Inhalation	According to the material form, it is not the normal way of contacting.
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, acute and delayed

1 Please see section 11.

Advice for protecting the rescuer

- 1 Remove all sources of ignition and increase ventilation.
- 2 Avoid contact with skin and eyes.

Special note to the doctor

1 Treat symptomatically.

5 Fire-fighting measures

| Extinguishing media

Suitable extinguishing media

Use extinguishing media suitable for surrounding area.

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 May expansion or decompose explosively when heated or involved in fire.
- 2 Development of hazardous combustion gases or vapor possible in the event of fire.

Fire precautions and protective measures

- 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.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

- 1 Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
- 2 Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
- 3 Use personal protective equipment. Avoid breathing mist 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

- Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
- Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.
- 3 Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

7 Handling and storage

Handling

- 1 Handling is performed in a well ventilated place.
- 2 Wear suitable protective equipment.

- 3 Avoid contact with skin and eyes.
- 4 Keep away from heat/sparks/open flames/ hot surfaces.

Storage

- 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.
- 8 Exposure controls/personal protection

| Control parameters

Occupational Exposure limit values (Chemical Harmful Factors)

Occupational exposure limit No relevant regulations

Biological limit values

Biological limit values No relevant regulations

- Monitoring methods
- 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 300.1~GBZ/T 300.160-2017; GBZ/T 300.161~GBZ/T 300.164-2018 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	No special requirements, please see the description below
Eye protection	In general situation, eye protection is not needed. In the production process, when contacting with dust, tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US).
Hand protection	In general situation, hand protection is not needed.
Respiratory protection	In general situation, respiratory protection is not needed. If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.
Skin and body protection	In general situation, skin and body protection are not needed.

9 Physical and chemical properties

| Physical and chemical properties

Appearance	Colorless and transparent			
Odor	No information available			
Odor threshold	No information available			
рН	No information available			

Melting point/freezing point(°C)	No information available
Initial boiling point and boiling	No information available
range(°C)	
Flash point(Closed cup,°C)	No information available
Evaporation rate	No information available
Flammability	No information available
Upper/lower explosive	Upper limit: No information available; Lower limit: No information available
limits[%(v/v)]	
Vapor pressure	No information available
Vapor density(Air = 1)	No information available
Relative density(Water=1)	No information available
Solubility	No information available
n-octanol/water partition	No information available
coefficient	
Auto-ignition temperature(°C)	No information available
Decomposition temperature(°C)	No information available
Viscosity	No information available

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	No information available.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Toxicological information

Acute toxicity

Acute toxicity No information available.

Carcinogenicity

Component	List of carcinogens by the IARC Monographs	Report on Carcinogens by NTP					
Sodium silicate	Not Listed	Not Listed					
Water	Not Listed	Not Listed					

Others

Siliform™ Resin SF-24E Comp.B					
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
Reproductive toxicity(additional)	Based on available data, the classification criteria are not met

12 Ecological information

Acute aquatic toxicity

Acute aquatic toxicity No information available

| Chronic aquatic toxicity

Chronic aquatic toxicity No information available

| Persistence and degradability

Persistence and degradability

No information available

Bioaccumulative potential

Bioaccumulative potential

No information available

| Mobility in soil

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]							
Sodium silicate	Not PBT/vPvB							
Water	Not PBT/vPvB							

13 Disposal considerations

Disposal considerations

Waste chemicals	Before disposal should refer to the relevant national and local laws and				
	regulation. Recommend the use of incineration disposal.				
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.				

14 Transport information

Label and Mark

Transporting Label Not applicable

| IMDG-CODE

IMDG-CODE NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

IATA-DGR	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
UN-ADR	
UN-ADR	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
Others	
Methods of packing	Packaging as recommended by manufacturer.
Precautions for transport	Transport vehicles should be equipped with the appropriate variety and quantity of fire equipment and emergency equipment leakage during transport. Before

transport, should be preceded by checking whether container integrity, sealing.

15 Regulatory information

International chemical inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AIIC	ENCS
Sodium silicate	V	√	√	1	1	√	√	√	√
Water	√	√	V	√	√	√	√	V	√

[EINECS] 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] Korea Existing Chemicals Inventory

[AIIC] Australia. Inventory of Industrial Chemicals (AIIC)
[ENCS] Japan Inventory of Existing & New Chemical Substances

| Chinese chemical inventory

Component	Α	В	С	D	E	F	G	Н	I	J	K	L	M	N	0
Sodium silicate	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Water	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×

- [A] Catalog of Hazardous Chemicals(2015 Edition), Notice 5th 2015, the former China State Administration of Work Safety together with the Ministry of Industry and Information Technology, etc.
- [B] List of Toxic Chemicals Restricted in China, Notice 60th 2019, the Ministry of Ecology and Environment, Ministry of Commerce, General Administration of Customs.
- [C] List of Ozone Depletion Chemicals Controlled to be Imported/Exported in China (First to Sixth batches), Notice from 2000 to 2012, the former Ministry of Environmental Protection of PRC.
- [D] Catalog of Hazardous Chemicals for Priority Management (First and Second batches), Notice 95th, 2011, Notice 12th 2013, China State Administration of Work Safety.
- [E] Catalog of Hazardous Chemicals for Environmental Management, Notice 33th 2014, The former Ministry of Environmental Protection.
- [F] List of Various Monitoring Chemicals, 52th 2020, the Ministry of Industry and Information Technology.
- [G] List of Priority Controlled Chemicals (the First batch), 83th 2017, the former Ministry of Environmental Protection, Ministry of Industry and Information Technology, the former National Health And Family Planning Commission.
- [H] Catalog of Specially Controlled Hazardous Chemicals (First Edition), 1st 2020, the Ministry of Emergency Management, Ministry of Industry and Information Technology, Ministry of Public Security, Ministry of Transport.
- [1] List of Toxic and Harmful Water Pollutants (First batch), 28th 2019, the Ministry of Ecology and Environment, National Health Commission.
- [J] Catalog of Highly Toxic Chemicals, Notice 142th 2003, the former Ministry of Health of P.R.China.
- [K] Dangerous Chemicals Directory Used to Manufacure Exploder (2017 Edition), Notice 11th May. 2017, Ministry of Public Security of P.R.China.
- [L] Catalog of Stupefacient and Psychotropic Substances(2013 Edition), Notice 230th 2013, China Food and Drug Administration.

- [M] Catalog of Classification and Varieties of Precursor Chemicals, 120th 2017, series of announcements issued by the Ministry of Public Security and other ministries and commissions.
- [N] Catalog of Import and Export Management of Precursor Chemicals, 7th 2006, the Ministry of Commerce.
- [O] International Verification of Precursor Chemicals Management Catalog, 8th 2006, the Ministry of Commerce, Ministry of Public Security.

Note:

- " $\sqrt{}$ " Indicates that the substance included in the regulations.
- "x" No data or not inlouded in the regulations.

16 Other information

Information on revision

Creation Date	2022/03/06
Revision Date	2022/03/06
Reason for revision	-

Reference

- [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: https://www.echemportal.org/echemportal/substancesearch/index.action。
- [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	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	very Persistent, very Bioaccumulative
Pow	Partition coefficient Octanol: Water	CMR	Carcinogens, mutagens or substances toxic to reproduction
BCF	Bioconcentration factor	RPE	Respiratory Protective Equipment
ED	Endocrine disruptor		

Disclaimer

This Safety Data Sheet (SDS) was prepared according to GB/T 16483 and GB/T 17519. The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.