



Safety Data Sheet

(SDS)

Product name	DS-8502SQN BS
---------------------	----------------------

1. Chemical product and enterprise logo

A. Name of product: DS-8502SQN-BS

B. Recommended use of the product and the limitation on use

Recommended use : Material for Printed Circuit Boards

Limitation on use : N/A

C. Producer and supplier:

Name of producing company : Doosan corporation

Address: 83-16, Gongdan 1-gil, Gimcheon-si, Gyeongsangbuk-do, Korea

Phone: 82 - 54 - 420 - 8137

FAX:

Department in charge: Production Team

Name of Supplier Company: Doosan corporation

Address: 83-16, Gongdan 1-gil, Gimcheon-si, Gyeongsangbuk-do, Korea

Phone: 82 - 54 - 420 - 8181

FAX:

Department in charge: Quality Assurance Team

2. Hazard overview

A. Classification of harmfulness. danger

Physical danger : N/A

Health harmfulness : N/A

Environmental harmfulness : N/A

B. Warning sign items including preventive measure phrases

Pictorial symbol:

Signal language: N/A

Harmfulness.Danger Phrases: N/A

Preventive measure phrases

Prevention: Keep away from heat, spark, flame, high temperature

Earth, join container and accommodating facilities.

Use explosion-preventive electricity, ventilation, illumination equipment

Put on protective gloves, protective clothe, protective glasses, protective face mask

Avoid inhaling dust, fume, mist, vapor, spray

Treat only outdoors or in the place ventilation is good

Response: In case of fire : Use Powder fire extinguishing chemicals, Carbon dioxide, Water spray, General foam to extinguish fire.

If you inhaled Remove the person to fresh air. Treat respiratory distress as appropriate. Provide oxygen if necessary.

If you feel discomfort see your doctor (go to the hospital).

Store : Preserve the container tightly sealed in the place with good ventilation.

Preserve tightly sealed.

Disposal : Dispose the content container following the regulation in case indicated in the waste management law.

C. Other harmfulness danger not included in the criteria of classification of harmfulness danger

Cas number	Health	Fire	Response
<input type="radio"/> 65997-17-3 :	-	-	-
<input type="radio"/> Resin blend :	-	-	-
<input type="radio"/> 35948-25-5 :	-	-	-
<input type="radio"/> Inorganic Filler :	-	-	-

3. Ingredient/composition information

Name of chemical	Usual name and other names	CAS Number / Identification number	Content(%)
Glass cloth	-	65997-17-3	20~60
Cured resin blend	-	Proprietary	10~35
Organic phosphorus-based reactive flame retardant	-	35948-25-5	3~10
Inorganic Filler	-	Proprietary	25~44

4. First-aid measures

A. Eye exposure

- Call a doctor and get medical advice/attention
- Remove contact lenses
- Immediately flush eyes with large amounts of temperate water for a minimum of 15 minutes
- When washing, open the eyelids and wash the eyeballs thoroughly.

B. Skin exposure

- Call a doctor and get medical advice/attention
- Remove/Take off immediately all contaminated clothing.
- Flush and wash with plenty of cold or lukewarm water and soap, etc.
- Obtain medical attention if appearance changes or pain occurs.

C. Inhalation

- Call a doctor and get medical advice/attention
- If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

D. Ingestion

- Call a doctor and get medical advice/attention

E. The most major symptom/influence of acute and chronic illness

No data available

F. First aid and the matters that require attention of doctors

No data available

5. Fire safety measures

A. Appropriate (inappropriate) fire extinguisher

- Appropriate fire extinguisher Powder fire extinguishing chemicals. Carbon dioxide. Water spray. General foam
- Inappropriate fire extinguisher No data available

B. Particular harmfulness generated from chemicals

- Risk of fire and explosion : No data available

C. Protective equipment to put on when extinguishing fire and preventive measures

Put on protective garment which can protect the whole body.

6. Leak Emergency Treatment

A. Measures and protective equipments necessary to protect human body

No data available

B. Measures necessary to protect environment

- Atmosphere: No materials available
- Earth : No materials available
- Under water : No materials available

C. Method of purification or removal

- In case of leaking a little amount : No materials available
- In case of leaking large amount : No materials available

7. Operation, Disposal and Storage

A. Safe treatment method :

Treat only in the place with good ventilation
 Minimize the generation and accumulation of dust.
 Avoid inhaling of dust and direct skin contact.
 Remove contaminated clothes and wash them before reuse.

B. Method of safe storage :

Avoid direct contact with air.
 Preserve it in a tightly sealed container.
 Avoid contact with mixture-prohibited material.
 Storage in a cool and dark place
 Store in a place of good ventilation.

8. Exposure Control and Individual Protection

A. Standard of exposure of chemicals and biological standard of exposure etc.

Domestic regulation

	65997-17-3	Rresin blend	35948-25-5	Inorganic Filler
TWA	No data available	No data available	No data available	No data available
STEL	No data available	No data available	No data available	No data available

ACGIH Regulations

	65997-17-3	Rresin blend	35948-25-5	Inorganic Filler
TLV-TWA	No data available	No data available	No data available	No data available
STEL	No data available	No data available	No data available	No data available

OSHA Regulations

	65997-17-3	Rresin blend	35948-25-5	Inorganic Filler
TLV-TWA	No data available	No data available	No data available	No data available
STEL	No data available	No data available	No data available	No data available

NIOSH Regulations

	65997-17-3	Rresin blend	35948-25-5	Inorganic Filler
TLV-TWA(10 hours)	No data available	No data available	No data available	No data available
STEL	No data available	No data available	No data available	No data available

Biological exposure standard

: No data available

B. Appropriate engineering management

Install local ventilation apparatus and manage to maintain suitable controlled wind speed.

Confirm whether the work process is appropriate for allowed standard and exposure standard of the Ministry of Employment and Labor.

Install sealed facilities or local ventilation apparatus.

C. Personal Protective Apparatus

- Protection of respiratory organ : No data available
- Eye protection : : No data available
- Hands protection : : No data available
- Body protection : : No data available

9. Physical and Chemical Properties

구분	Characteristics			
	65997-17-3	Epoxy resin blend	35948-25-5	Inorganic Filler
A. Appearance	No data available	No data available	No data available	No data available
B. Smell	No data available	No data available	No data available	No data available
C. Smell Value	No data available	No data available	No data available	No data available
D. pH	No data available	No data available	No data available	No data available

E. Melting point/Freezing point	> 500 °C	No data available	No data available	No data available
F. Boiling point/boiling point extent	>1000 degree C at 1013 hPa	No data available	No data available	No data available
G. Flashing point	No data available	No data available	No data available	No data available
H. Evaporating rate	No data available	No data available	No data available	No data available
I. Flammability (solid, gas)	No data available	No data available	No data available	No data available
J. Ignition highest/lowest value	No data available	No data available	No data available	No data available
K. Steam pressure	No data available	No data available	No data available	No data available
L. Solubility	No data available	No data available	No data available	No data available
M. Vapor density	No data available	No data available	No data available	No data available
N. Specific gravity	No data available	No data available	No data available	No data available
O. n-octanol/water distribution coefficient	No data available	No data available	No data available	No data available
P. Spontaneous ignition temperature	No data available	No data available	No data available	No data available
Q. Decomposition temperature	No data available	No data available	No data available	No data available
R. Viscosity	No data available	No data available	No data available	No data available
S. Molecular weight	No data available	No data available	No data available	No data available

10. Stability and Reactivity

- A. Chemical stability :** Stable in normal temperature and pressure
- B. Possibility of harmful response :** No polymerization
- C. Condition to avoid :** Avoid contact with mixture-prohibited material.
- D. Material to avoid :** Water
- E. Harmful material generated when decomp** No data

11. Information on toxicity

A. Information on highly possible exposure route

- Inhaling through respiratory organ
: No data
- Taking through the mouth
: No data
- Skin contact
: No data
- Eyes contact
: No data

B. Delayed, acute and chronic influence by short-term and long-term exposure

- Acute toxicity:
- Through the mouth: No data available within the extent of selected DATABASE
 - Through the skin : No data available within the extent of selected DATABASE
 - Inhaling : No data available within the extent of selected DATABASE
- Skin corrosiveness/ stimulation: No data available within the extent of selected DATABASE
- Severe eyes damage/Stimulation: No data available within the extent of selected DATABASE
- Respiratory organ hypersensitiveness: No data available within the extent of selected DATABASE
- Skin hypersensitiveness: No data available within the extent of selected DATABASE
- Carcinogenic: No data available within the extent of selected DATABASE
- Reproductive cell mutagenicity: No data available within the extent of selected DATABASE
- Reproductive toxicity: No data available within the extent of selected DATABASE
- Target organ whole body toxicity (1 time) No data available within the extent of selected DATABASE
- Target organ whole body toxicity (repeated) No data available within the extent of selected DATABASE
- Inhale harmfulness : No data available within the extent of selected DATABASE

C. Numerical measure of toxicity (acute toxicity assumed values) : No data

12. Ecological Information

A. Aquatic and land animal ecological toxicity:

- Fishes : No data available
 Crustacean : No data available
 Algal : No data available

B. Residual and resolvability:

- Residual : No data available
 Resolvability: No data available

C. Living organism condensability:

- Biodegradability : No data available
 Condensability : No data available

D. Soil movability: No data available

E. Other harmful influence: No data available

13. Waste Disposal

A. Method of disposal

Dispose the content container following the regulation in case indicated in the waste management law.

B. Matters that require attention when disposing(including the method of disposing contaminated container and packing)

Please consider the matters that require attention in case indicated in the waste management law.

14. Transport Information

Glass cloth

A. UN number : No data available

B. UN optimal shipping name : No data available

C. Degree of danger in transportation : No data available

D. Container grade : No data available

E. Marine pollution material : No data available

F. Special safety measures necessary, or necessary for user to know about the transportation or means of transportation :

- Kinds of emergency measures in case of fire: F-G
 Kinds of emergency measures in case of leaking: S-G

15. Information on Laws and Regulations

Glass cloth

A. Regulation by Industry Safety and Health Law : Not applicable

B. Regulation by Harmful Chemical Material Management Law : Not applicable

C. Regulation by Dangerous Material Safety Management Law : Not applicable

D. Regulation by Waste Management Law : Designated Waste

E. Other regulation by domestic and foreign laws :

Residual organic pollution material management law: Not applicable

EU Classification Information

- Determined classification result: No data available

- Danger phrase: No data available

- Prevention measure phrase: No data available

US management information

'- OSHA Regulation: Not Applicable

'- CERCLA 103 Regulation (40CFR302.4) : Not Applicable

'- EPCRA 302 Regulation (40CFR355.30) :	Not Applicable
'- EPCRA 304 Regulation (40CFR355.40) :	Not Applicable
'- EPCRA 313 Regulation (40CFR372.65) :	Not Applicable
○ Rotterdam Agreement Material:	Not Applicable
○ Stockholm Agreement material :	Not Applicable
○ Montreal Protocol material :	Not Applicable

16. Other information

A. Source of the material :

OECD Screening Information Data Set(<http://webnet.oecd.org/hpv/UI/Search.aspx>)
European chemical Substances Information System(ECB-ESIS)(<http://ecb.jrc.it/esis>)
International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>)
National Library of Medicine(NLM)(<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?CHEM>)
National Library of Medicine/Hazardous Substances Data Bank(NLM/HSDB)(<http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB>)
International Chemical Safety Cards (ICSC)(<http://www.ilo.org/public/english/protection/safework/cis/products/icsc/dtasht/index.htm>)
National Emergency Management Agency(<http://www.nema.kr/hazmat/main/main.jsp>)
Chemical Substances Hazard Assessment Report/Initial Risk Assessment Report(http://www.safe.nite.go.jp/english/sougou/view/TotalSrchInput_en.faces)
NITE(http://www.safe.nite.go.jp/ghs/h18_list.html)
The ECOTOXicology database (ECOTOX)(http://cfpub.epa.gov/ecotox/quick_query.htm)
Akron University(<http://ull.chemistry.uakron.edu/erd/>)
Emergency Response Guidebook(2008)
International Agency for Research on cancer(IARC)(<http://monographs.iarc.fr/ENG/Classification/index.php>)

B. The first date of making : 22-Jun-2020

C. Number of Amendment and the last date of amendment : 2, 08-Apr-2024

D. Others

The contents of this material cannot be modified arbitrarily or used in commercial purpose.