SAFETY DATA SHEET  
**VT-42 CCL**  

### 1. Identification

**Product name**  
VT-42 CCL

**Synonyms; trade names**  
Copper Clad Laminate with FR4 Epoxy Resin.

**Recommended use of the chemical and restrictions on use**  
**Application**  
Production of printed circuit board materials.

**Supplier**  
Ventec Electronics (Suzhou) Co. Ltd.
308, Taishan Road,
New District,
Suzhou Jiangsu,
P.R.C. 215129

**Manufacturer**  
Ventec Electronics (Suzhou) Co. Ltd.
308, TaiShan Road,
New District Suzhou,
Jiangsu,
P.R.China 215129

**sales@ventec.com.cn**

**Emergency telephone number**

**Emergency telephone**  
0086-512-68091810

### 2. Hazard(s) identification

**Classification of the substance or mixture**

**OSHA Regulatory Status**  
This Product is Not Hazardous under the OSHA Hazard Communication Standard.

**Physical hazards**  
Not Classified

**Health hazards**  
Not Classified

**Environmental hazards**  
Not Classified

**Label elements**

**Hazard statements**  
NC Not Classified
3. Composition/Information on ingredients

<table>
<thead>
<tr>
<th>Mixtures</th>
<th>Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy Resin - Fully Cured - Proprietary Formulation</td>
<td>50%</td>
</tr>
<tr>
<td>CAS number: 26265-08-7</td>
<td></td>
</tr>
<tr>
<td><strong>Classification</strong></td>
<td></td>
</tr>
<tr>
<td>Skin Irrit. 2 - H315</td>
<td></td>
</tr>
<tr>
<td>Glass cloth</td>
<td>35%</td>
</tr>
<tr>
<td>CAS number: 65997-17-3</td>
<td></td>
</tr>
<tr>
<td><strong>Classification</strong></td>
<td></td>
</tr>
<tr>
<td>Not Classified</td>
<td></td>
</tr>
<tr>
<td>Copper Foil</td>
<td>15%</td>
</tr>
<tr>
<td>CAS number: 7440-50-8</td>
<td></td>
</tr>
<tr>
<td><strong>Classification</strong></td>
<td></td>
</tr>
<tr>
<td>Not Classified</td>
<td></td>
</tr>
</tbody>
</table>

The full text for all hazard statements is displayed in Section 16.

Composition comments: Tested on 0.047” 1/1 (OA) material.

4. First-aid measures

**Description of first aid measures**

<table>
<thead>
<tr>
<th>General information</th>
<th>Get medical advice/attention if you feel unwell. Never give anything by mouth to an unconscious person.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>IF INHALED: Move affected person to fresh air at once. If breathing stops, provide artificial respiration. Consult a physician for specific advice.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>IF SWALLOWED: Rinse mouth thoroughly with water. Consult a physician for specific advice.</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>Remove contaminated clothing. Rinse immediately with plenty of water.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>If dust has entered the eyes, proceed as follows. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if symptoms are severe or persist after washing.</td>
</tr>
</tbody>
</table>

**Protection of first aiders**

If it is suspected that airborne contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus.

**Most important symptoms and effects, both acute and delayed**

<table>
<thead>
<tr>
<th>Inhalation</th>
<th>Inhalation of dust during cutting, grinding or sanding operations involving this product may cause irritation of the respiratory tract.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion</td>
<td>Due to the physical nature of this product, it is unlikely that ingestion will occur. May cause discomfort if swallowed.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Dust may cause slight irritation.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>Dust may cause slight irritation.</td>
</tr>
</tbody>
</table>

**Indication of immediate medical attention and special treatment needed**
VT-42 CCL

Notes for the doctor
Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media
Use fire-extinguishing media suitable for the surrounding fire. Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media
None known.

Special hazards arising from the substance or mixture

Specific hazards
The product is not flammable.

Hazardous combustion products
Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO2). Carbon monoxide (CO). Halogenated hydrocarbons. Acrid smoke or fumes. Toxic gases or vapors.

Advice for firefighters

Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions
Avoid inhalation of dust and contact with skin and eyes.

Environmental precautions

Environmental precautions
Avoid release to the environment. Avoid spreading dust or contaminated materials.

Methods and material for containment and cleaning up

Methods for cleaning up
Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into suitable waste disposal containers and seal securely.

7. Handling and storage

Precautions for safe handling

Usage precautions
No specific requirements are anticipated under normal conditions of use.

Advice on general occupational hygiene
No specific requirements are anticipated under normal conditions of use.

Conditions for safe storage, including any incompatibilities

Storage precautions
No specific requirements are anticipated under normal conditions of use.

Specific end use(s)
The identified uses for this product are detailed in Section 1.

8. Exposure controls/Personal protection

Control parameters
OCCUPATIONAL EXPOSURE LIMITS
In relation to copper dust only.
In relation to glass fiber only.

Glass cloth
VT-42 CCL

In relation to glass fiber only.
Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ total dust
Long-term exposure limit (8-hour TWA): ACGIH 1 1 fiber/cm³

Copper Foil
Long-term exposure limit (8-hour TWA): ACGIH 0.2 mg/m³ fume
Long-term exposure limit (8-hour TWA): OSHA 1 mg/m³ dusts and mists
Long-term exposure limit (8-hour TWA): ACGIH 1 mg/m³ dusts and mists
Long-term exposure limit (8-hour TWA): OSHA 0.1 mg/m³ fume
ACGIH = American Conference of Governmental Industrial Hygienists.
OSHA = Occupational Safety and Health Administration.

Ingredient comments
No data available on the specific mixture.

Exposure controls
Appropriate engineering controls
Mechanical ventilation or local exhaust ventilation may be required.

Personal protection
The following personal protection may be needed if long term exposure during machining, grinding and sawing.

Eye/face protection
Wear eye protection.

Hand protection
Wear protective gloves.

Other skin and body protection
No specific requirements are anticipated under normal conditions of use.

Hygiene measures
Good personal hygiene procedures should be implemented.

Respiratory protection
Wear a suitable dust mask.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance
Solid.

Odor
No characteristic odor.

Odor threshold
Does not apply, as product is odorless.

Flammability (solid, gas)
UL-94 V0

Relative density
~ 1.6 - 1.9

Decomposition Temperature
310°C

Comments
Information given is applicable to the product as supplied.

10. Stability and reactivity

Reactivity
Not reactive under normal use and conditions.

Stability
Stable under normal use and conditions.

Possibility of hazardous reactions
Product is stable. Hazardous polymerisation will not occur.

Conditions to avoid
Avoid generation and spreading of dust.

Materials to avoid
VT-42 CCL

Hazardous decomposition products
Will decompose at temperatures exceeding 310°C. Carbon monoxide (CO). Carbon dioxide (CO2). Hydrogen bromide (HBr). Nitrous gases (NOx).

11. Toxicological information

Information on toxicological effects
Toxicological effects
No data available on the specific mixture.

Skin Contact
Powder may irritate skin.

Eye contact
Powder may irritate the eyes.

12. Ecological information

Ecotoxicity
There are no data on the ecotoxicity of this product.

Persistence and degradability
Persistence and degradability
The product is not biodegradable.

Bioaccumulative potential
Bio-Accumulative Potential
No data available on bioaccumulation.

Mobility in soil
Mobility
No data available.

13. Disposal considerations

Waste treatment methods
General information
External recovery, treatment, recycling and disposal of waste should comply with all applicable local and/or national regulations.

Waste class
As supplied, this material is not regulated as hazardous waste under the US EPA Resources Conservation and Recovery Act (RCRA).

14. Transport information

General
The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

15. Regulatory information

Regulatory Status
Information on safety, health and environmental regulations specific to this product are referred to where data is available.

US Federal Regulations
SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
Not listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
Not listed.

SARA 313 Emission Reporting
Some of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories
None
VT-42 CCL

OSHA  Highly Hazardous Chemicals
Not listed.

US State Regulations
California Proposition 65 Carcinogens and Reproductive Toxins
The product does not contain any substances restricted under Proposition 65.

Massachusetts "Right To Know" List
Some of the ingredients are listed or exempt.

Minnesota "Right To Know" List
Some of the ingredients are listed or exempt.

New Jersey "Right To Know" List
Some of the ingredients are listed or exempt.

Pennsylvania "Right To Know" List
Some of the ingredients are listed or exempt.

Inventories
Canada - DSL/NDSL
All the ingredients are listed or exempt.

US - TSCA
All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification
Not listed.

16. Other Information

Issued by  HS&E Manager.
Revision date  3/11/2020
Revision  Issue 2
SDS No.  4538
SDS status  Approved.
Hazard statements in full  H315 Causes skin irritation.
NFPA - health hazard  Exposure to dust could cause irritation but only minor residual injury even if no treatment given
NFPA - flammability hazard  Material is self extinguishing.
NFPA - instability hazard  Normally stable, even under fire exposure conditions, and is not reactive with water.
ACA HMIS Flammability rating.  Minimal Hazard.
ACA HMIS Physical hazard rating.  Normally stable. (0)

This information relates only 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 the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.