SAFETY DATA SHEET

Issued Date: 26th August 2016
Analytical Products Department
Product Business Center
IA Platform Business Headquarters
Yokogawa Electric Corporation
2-9-32 Naka-cho, Musashino, Tokyo 180-8750, Japan
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Part Number K9044FX

Product name: Conductive silicone grease

Hazards identification
GHS label elements: No hazard

Composition/information on ingredients
Chemical identity: Carbon black (mixed with Silicone).

Refer to next page SDS regarding other information and detail.
SDS supplies only handling information, and does not always guarantee all contents.
1. Chemical product and company identification

Product name: KS-660

MANUFACTURER

COMPANY NAME: Shin-Etsu Chemical Co., Ltd.
ADDRESS: 13-1, Isobe 2-chome, Annaka-shi, Gunma 379-0195, JAPAN
CONTACT: Quality Assurance Department (Gunma Complex)
TELEPHONE: 027-385-2172
NUMBER:
FAX NUMBER: 027-385-2753

SUPPLIER

COMPANY NAME: Shin-Etsu Chemical Co., Ltd.
ADDRESS: 6-1, Ohtemachi 2-chome, Chiyoda-ku, Tokyo 100-0004, JAPAN
CONTACT: Planning & Administration Department Silicone Division
TELEPHONE: 03-3246-5121
NUMBER:
FAX NUMBER: 03-3246-5381
EMERGENCY: 027-385-2172 (Holiday/Nighttime: 027-385-2111)

Recommended use of the chemical and restrictions on use

Intended use: Greases and fluid compounds
 restrictive conditions: Industrial use only.

2. Hazards identification

GHS classification
The product is not classified according to GHS.

3. Composition/information on ingredients

Substance or mixture: Mixture
(Silicone mixture)

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS Number</th>
<th>Gazette notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 - 15</td>
</tr>
</tbody>
</table>

All components are listed on ENCS under CSCL.

4. First aid measures

If inhaled: Not applicable.
If on skin: Wash skin with soap and water. Get medical attention if irritation develops and persists.
If in eyes: Rinse immediately with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
If swallowed: Rinse mouth. Get medical attention immediately.
Notes to physician: Treat symptomatically.

5. Fire-fighting measures

Extinguishing media to avoid: None.
Specific hazards: By heating and fire, harmful vapors/gases may be formed.
Special fire-fighting procedures: Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray.
Protection of fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet, gloves, rubber boots, and self-contained breathing apparatus.
6. Accidental release measures

Personal precautions, protective equipment and emergency measures
Wear appropriate personal protective equipment.

Environmental precautions
Prevent further leakage or spillage if safe to do so.

Clean-up methods and materials and containment measures
Eliminate sources of ignition. Collect spillage. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use.

7. Handling and storage

Handling
Technical measures
No specific recommendations.

Local and general ventilation
Provide adequate ventilation.

Precautions
Use care in handling/storage.

Safe handling advice
None specific.

Storage
Technical measures
No specific recommendations.

Suitable storage conditions
Keep container tightly closed. Store in a cool, dry place out of direct sunlight.

Incompatible products
Refer to section 10: stability and reactivity.

Safe packaging materials
Keep in original container.

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA</td>
<td>4 mg/m3</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 mg/m3</td>
<td>Respirable dust.</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA</td>
<td>3 mg/m3</td>
<td>Inhalable fraction.</td>
</tr>
</tbody>
</table>

Engineering measures
Provide eyewash station.

Personal protective equipment

Respiratory protection
No personal respiratory protective equipment normally required.

Hand protection
Wear protective gloves.

Eye protection
Wear safety glasses with side shields (or goggles).

Skin and body protection
No special protective equipment required.

Hygiene measures
Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance
Form
Paste.

Color
Black.

Odor
Odorless.

pH
Not available.

Melting point/Freezing point
Not applicable

Boiling point, initial boiling point, and boiling range
Not applicable

Flash point
> 212 °F (> 100 °C) Closed Cup

Auto-ignition temperature
No data

Flammability limit - lower (%)
No data

Flammability limit - upper (%)
No data
Vapor pressure Negligible (25 °C)
Vapor density Not applicable
Evaporation rate Negligible (Butyl Acetate=1)
Specific gravity 1.04 (25 °C)
Solubility (Water) Not soluble
Partition coefficient (n-octanol/water) Not applicable
Decomposition temperature Not available.

10. Stability and reactivity
Stability Stable at normal conditions.
Possibility of hazardous reactions Hazardous polymerization does not occur.
Conditions to avoid None specific.
Incompatible materials Strong oxidizing agents.
Hazardous decomposition products Thermal breakdown of this product during fire or very high heat condition may evolve the following hazardous decomposition product:
- Carbon oxides and traces of incompletely burned carbon compounds.
- Silicon dioxide.
- Formaldehyde.

11. Toxicological information
Acute toxicity
Components Species Test Results
Carbon black (CAS 1333-86-4)
Acute
Oral Rat > 8000 mg/kg
LD50
Carcinogenicity
The following material is embedded in the product and not available as respirable dusts. When used as intended or as supplied, the product will not pose hazards.
Carbon black.

ACGIH Carcinogens
Carbon black (CAS 1333-86-4) A3 Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity
Carbon black (CAS 1333-86-4) 2B Possibly carcinogenic to humans.

Japan Society for Occupational Health: Carcinogen
Carbon black (CAS 1333-86-4) 2B Possibly carcinogenic to humans.

12. Ecological information
Ecotoxicity None known.

13. Disposal considerations
Local disposal regulations Incinerate. Incinerator should be appropriately equipped for silica and other fine powder which the product will generate in incineration. Workers should wear appropriate personal protective equipment(s) such as respirator. Contract with a disposal operator licensed by the Law on Disposal and Cleaning. Dispose of contents/container in accordance with local/regional/national/international regulations.

14. Transport information
International regulations
IATA Not regulated as dangerous goods.
IMDG Not regulated as dangerous goods.
Domestic regulation Follow regulation in section 15 for domestic transportation.
15. Regulatory information

Industrial Safety and Health Act

Specified substances regulation
- Class 1 designated chemical substances
  Not regulated.
- Class 2 designated chemical substances
  Not regulated.
- Class 3 designated chemical substances
  Not regulated.

Organic solvent regulation
- Class 1 organic solvents
  Not regulated.
- Class 2 organic solvents
  Not regulated.
- Class 3 organic solvents
  Not regulated.

Notifiable substances
- CARBON BLACK 10 - 15 %

Labeling substances
- Not applicable

Poisonous and Deleterious Substances Control Act

Specified poisonous substances
- Not regulated.

Poisonous substances
- Not regulated.

Deleterious substances
- Not regulated.

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.

Class I specified chemical substances
- Not regulated.

Class II specified chemical substances
- Not regulated.

Monitoring chemical substances
- Not regulated.

Priority Assessment Chemical Substances (PACs)
- Not regulated.

Law concerning Pollutant Release and Transfer Register

Specified class 1 substances (substance name, ordinance number and content)
- Not applicable

Class 1 substances (substance name, ordinance number and content)
- Not applicable

Class 2 substances (substance name, ordinance number and content)
- Not applicable

Fire Service Act
- Designated combustible material (Synthetic resins, others)
- Not regulated.

Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule
- Not regulated.

Air Law, Enforcement Rule
- Not regulated.

Explosives Control Act
- Not applicable.

High Pressure Gas Safety Act
- Not applicable.

Act on Prevention of Marine Pollution and Maritime Disaster
- Not applicable.

16. Other information

Bibliography
- HSDB® - Hazardous Substances Data Bank
- IARC Monographs. Overall Evaluation of Carcinogenicity
- National Toxicology Program (NTP) Report on Carcinogens
- ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
- Japan Society for Occupational Health, Recommendation of Occupational Exposure Limits
- JIS Z 7250: 2010 Safety data sheet for chemical products-Content and order of sections
- JIS Z 7251: 2010 Labeling of chemicals based on GHS
This safety data sheet was prepared in accordance with the Safety Data Sheet for Chemical Products (JIS Z 7250:2010). This information is offered in good faith as typical values and not as a product specification. No warranty, expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate. This product has been designed, manufactured and developed solely for general industrial use only. This product is not designed for, intended for use as, or suitable for, medical, surgical or other particular purposes. Users have the sole responsibility and obligation to determine the suitability of this product for any application, to make preliminary tests, and to confirm the safety of this product for their use. Users must never use this product for the purpose of implantation into the human body and/or injection into humans.

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01

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