1. Chemical product and company identification

Product name Multilon® DN-3520F
SDS Number DN3520F-JpE
Version number 01
Issue date 04-01-2013
Revision date -
Company name TEIJIN Limited.
Address 2-1, Kasumigaseki 3-chome, Chiyoda-ku, Tokyo 100-8585, Japan
Division Environment Quality Assurance Department, Resin & Plastic Processing BU
Telephone number +81 3-3506-4717
Fax +81 3-3580-6680

Recommended use of the chemical and restrictions on use
Intended use Molding material for industry use

2. Hazards identification

GHS-classification

- Physical hazards: Not classified
- Health hazards: Skin sensitization Category 1
- Environmental hazards: Not classified

*Hazards not stated here are "Not applicable" or "Classification not possible".

GHS label elements

- Symbols
- Signal words Warning
- Hazard statement May cause an allergic skin reaction.

Precautionary statement

- Prevention: Avoid breathing dust/fume. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves.
- Response: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
- Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

National/local information
See section 15 for regulatory information.

3. Composition/information on ingredients

Substance or Mixture Mixture

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>ENCS no.</th>
<th>ISHL no.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polycarbonate resin</td>
<td>25971-63-5</td>
<td>(7)-738</td>
<td>(7)-738</td>
<td>50 – 60</td>
</tr>
<tr>
<td>Acrylonitrile butadiene styrene resin</td>
<td>9003-56-9</td>
<td>(6)-176</td>
<td>(6)-176</td>
<td>10 – 20</td>
</tr>
<tr>
<td>Wollastonite</td>
<td>13983-17-0</td>
<td>Exempted</td>
<td>Exempted</td>
<td>&lt;= 20</td>
</tr>
<tr>
<td>Phosphorous flame retardant</td>
<td>Proprietary</td>
<td>Proprietary</td>
<td>Proprietary</td>
<td>&lt;= 10</td>
</tr>
<tr>
<td>Modifier</td>
<td>Proprietary</td>
<td>Proprietary</td>
<td>Proprietary</td>
<td>&lt;= 10</td>
</tr>
</tbody>
</table>

Chemical formula: (C15H16O2.CCl2O)x (25971-63-5), (C8H8.C4H6.C3H3N)x (9003-56-9), Ca.H2-O3-Si (13983-17-0)

4. First aid measures

If inhaled In case of inhalation of dusts or fumes from heated product: Move injured person into fresh air and keep person calm under observation. Get medical attention if any discomfort continues.
If on skin
Rinse with water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. If burned by contact with hot material, cool molten material adhering to skin as quickly as possible with water, and see a physician for removal of adhering material and treatment of burn.

If in eyes
Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

If swallowed
Rinse mouth thoroughly. Large quantities: Get medical attention if symptoms occur.

Expected acute and delayed Symptoms
Chronic inhalation of fumes or dust may cause irritation or other respiratory conditions (e.g., bronchitis). May cause eczema-like skin disorders (dermatitis).

Protection of first-aid responders
First aid personnel must be aware of own risk during rescue.

Notes to physician
Symptoms may be delayed.

5. Fire-fighting measures
Extinguishing media
Extinguish with foam, carbon dioxide, dry powder or water fog.
Extinguishing media to avoid
None.
Specific hazards
During fire, gases hazardous to health may be formed.
Special fire fighting procedures
Use standard firefighting procedures and consider the hazards of other involved materials.
Protection of fire-fighters
Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

6. Accidental release measures
Personal precautions, protective equipment and emergency measures
Avoid inhalation of dust and contact with skin and eyes. Avoid vapors from heated materials to prevent exposure to potentially toxic/irritating fumes.
Environmental precautions
Do not allow to enter drains, sewers or watercourses.
Clean-up methods and materials and containment measures
Collect and dispose of spillage as indicated in Section 13 of the SDS.

7. Handling and storage
Handling
Technical measures
Use explosion-proof electrical equipment if airborne dust levels are high.
Local and general ventilation
Provide adequate ventilation.
Precautions
Use work methods which minimize dust production. Wear appropriate personal protective equipment.
Safe handling advice
Avoid inhalation of dust. Avoid prolonged or repeated contact with skin. Avoid vapors from heated materials to prevent exposure to potentially toxic/irritating fumes.
Storage
Technical measures
Avoid dust formation.
Suitable storage conditions
Store in closed original container in a dry place.
Safe packaging materials
Keep in original container.

8. Exposure controls/personal protection
Engineering measures
Provide adequate ventilation. Japan Society of Occupational Health, class 3 dust (limestone, other inorganic and organic dusts): respirable dust 2 mg/m3, total dust 8 mg/m3.
Personal protective equipment
Respiratory protection
Wear respirator if there is dust formation. When the product is heated, use suitable respiratory equipment with gas filter for organic gas.
Hand protection
Wear protective gloves. When material is heated, wear gloves to protect against thermal burns.
Eye protection
Use tight fitting goggles if dust is generated. If contact with hot material may occur, safety glasses and face shield are recommended.
Skin and body protection
Wear suitable protective clothing.
Hygiene measures
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
9. Physical and chemical properties

Appearance
- **Physical state**: Solid.
- **Form**: Pellets.
- **Color**: Natural.
- **Odor**: None.
- **pH**: Not applicable.
- **Melting point/Freezing point**: Not available.
- **Boiling point, initial boiling point, and boiling range**: Not available.
- **Flash point**: Not available.
- **Auto-ignition temperature**: Not available.
- **Combustion characteristics (solid, gas)**: Not available.
- **Flammability limit - lower (%)**: Not available.
- **Flammability limit - upper (%)**: Not available.
- **Vapor pressure**: Not applicable.
- **Vapor density**: Not applicable.
- **Specific gravity**: 1.34
- **Solubility**: Insoluble in water
- **Partition coefficient (n-octanol/water)**: Not available.
- **Decomposition temperature**: Not available.

10. Stability and reactivity

**Stability**: Stable under normal temperature conditions.

**Possibility of hazardous reactions**: Will not occur.

**Conditions to avoid**: None known.

**Incompatible materials**: No data available.

**Hazardous decomposition products**: During combustion: Carbon monoxide, Carbon Dioxide, Acrylonitrile, Hydrogen cyanide, Nitrogen oxides (NOx), Oxides of phosphorus.

11. Toxicological information

**Acute toxicity**: May cause discomfort if swallowed.

<table>
<thead>
<tr>
<th>Component</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphorous flame retardant (Proprietary)</td>
<td>Acute Dermal LD50 Rat: &gt;= 2000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Acute Oral LD50 Rat: &gt;= 2000 mg/kg</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**: Dust may irritate skin.

**Serious eye damage/eye irritation**: Dust in the eyes will cause irritation. May cause redness and pain.

**Respiratory sensitizer**: None known.

**Skin sensitizer**: May cause allergic skin reaction.

**Germ cell mutagenicity**: None known.

**Carcinogenicity**: The product contains a small amount substance that is suspected of causing cancer.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

- Acrylonitrile butadiene styrene resin (CAS 9003-56-9) 3 Not classifiable as to carcinogenicity to humans.
- Wollastonite (CAS 13983-17-0) 3 Not classifiable as to carcinogenicity to humans.

**Carcinogenicity**: None known.

**Toxic to reproduction**: None known.

**Specific target organ toxicity - single exposure**: None known.

**Specific target organ toxicity - repeated exposure**: The product contains a substance that may cause damage to organs through prolonged or repeated exposure. Chronic inhalation of fumes or dust may cause irritation or other respiratory conditions (e.g., bronchitis).
12. Ecological information

Ecotoxicity
The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence/degradability
None known.

Bioaccumulation
None known.

Mobility in soil
The product is insoluble in water and will sediment in water systems.

Other hazardous effects
None known.

13. Disposal considerations

Residual waste
Dispose of waste at a facility with special permission to dispose industrial wastes. Waste should be accompanied by a manifest for the industrial waste. Dispose of in accordance with local regulations. Do not discharge into rivers, lakes, mountains, etc. because the product may affect the environment.

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

International regulations
Not regulated as dangerous under UN transport regulation.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

15. Regulatory information

Industrial Safety and Health Act
Specified substances regulation Not regulated.

Organic solvents regulation Not regulated.

Notifiable substances Not regulated.

Labeling substances Not regulated.

Poisonous and Deleterious Substances Control Act 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.

Law concerning Pollutant Release and Transfer Register
Specified class 1 substances (substance name, ordinance number and content) Not regulated.

Class 1 substances (substance name, ordinance number and content) Not regulated.

Class 2 substances (substance name, ordinance number and content) Not regulated.

Fire Service Act
Not dangerous goods under Fire Service Law

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

Air Law, Enforcement Rule Not regulated.

Explosives Control Act Not regulated.

High Pressure Gas Safety Act Not regulated.

Act on Prevention of Marine Pollution and Maritime Disaster
Not regulated.

16. Other information

The information about colorant is not contained in this SDS.

This information is provided without warranty. The information is believed to be correct. The precautions in this SDS are intended for normal use. Please take safety measures appropriate to the use and the application when handling the product in a special way. This information should be used to make an independent determination of the methods to safeguard workers and the environment.