1. Identification
Product identifier: Spartacote Flex SB Part B
Other means of identification: None.
Recommended use: Decorative coating.
Recommended restrictions: None known.

2. Hazard(s) identification
<table>
<thead>
<tr>
<th>Physical hazards</th>
<th>Health hazards</th>
<th>Environmental hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable liquids</td>
<td>Acute toxicity, inhalation</td>
<td>Hazardous to the aquatic environment, acute hazard</td>
</tr>
<tr>
<td>Category 3</td>
<td>Category 4</td>
<td>Category 2</td>
</tr>
<tr>
<td></td>
<td>Skin corrosion/irritation</td>
<td>Hazardous to the aquatic environment, long-term hazard</td>
</tr>
<tr>
<td></td>
<td>Category 2</td>
<td>Category 2</td>
</tr>
<tr>
<td></td>
<td>Serious eye damage/eye irritation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Category 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sensitization, respiratory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Category 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sensitization, skin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Category 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Specific target organ toxicity, single exposure</td>
<td>Category 3 narcotic effects</td>
</tr>
<tr>
<td></td>
<td>Category 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aspiration hazard</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Category 1</td>
<td></td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>Hazardous to the aquatic environment, acute hazard</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Category 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hazardous to the aquatic environment, long-term hazard</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Category 2</td>
<td></td>
</tr>
<tr>
<td>OSHA defined hazards</td>
<td>Not classified.</td>
<td></td>
</tr>
</tbody>
</table>

Label elements
Signal word: Danger
Hazard statement: Flammable liquid and vapor. Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects.
Precautionary statement

Prevention
Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment.

Response
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center/doctor. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. Collect spillage.

Storage
Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)
Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homopolymer of Hexamethylene Diisocyanate</td>
<td>28182-81-2</td>
<td>65-70</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light aromatic</td>
<td>64742-95-6</td>
<td>25-33</td>
</tr>
<tr>
<td>Hexamethylene-1, 6-diisocyanate</td>
<td>822-06-0</td>
<td>0.5 - 0.8</td>
</tr>
<tr>
<td>Hydroxyphenyl - benzotriazole derivatives</td>
<td>104810-48-2</td>
<td>0.4-0.6</td>
</tr>
<tr>
<td>Hydroxyphenyl-benzotriazole derivatives</td>
<td>104810-47-1</td>
<td>0.4-0.6</td>
</tr>
<tr>
<td>Bis(1,2,2,6,6-pentamethyl-4-1-peridyl) sebacate</td>
<td>41556-26-7</td>
<td>0.2-0.3</td>
</tr>
</tbody>
</table>

Composition comments
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation
Move into fresh air and keep at rest. If breathing stops, provide artificial respiration. Get medical attention if any discomfort continues.

Skin contact
Flush thoroughly with water for at least 15 minutes. If skin rash or an allergic skin reaction develops, get medical attention. Get medical attention if irritation develops and persists.

Eye contact
Flush thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention immediately.

Ingestion
Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable take to hospital along with these instructions. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed
Irritating to eyes, respiratory system and skin. Irritation of nose and throat. Irritating to mucous membranes.

Indication of immediate medical attention and special treatment needed
Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. Treat symptomatically. Symptoms may be delayed.

General information
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media
Water spray, carbon dioxide, dry chemical or alcohol-resistant foam.
Unsuitable extinguishing media
Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed. Solvent vapors may form explosive mixtures with air.

Special protective equipment and precautions for firefighters
Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
In case of fire and/or explosion do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Move containers from fire area if you can do it without risk.

General fire hazards
The product is flammable, and heating may generate vapors which may form explosive vapor/air mixtures.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Do not breathe mist or vapor. Avoid contact with skin and eyes. Local authorities should be advised if significant spillages cannot be contained. Stay upwind. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Ventilate closed spaces before entering. Use personal protection recommended in Section 8 of the SDS.

Methods and materials for containment and cleaning up
ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Prevent entry into waterways, sewers, basements or confined areas. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water.

Large Spills: Dike the spilled material, where this is possible. Following product recovery, flush area with water. Cover with plastic sheet to prevent spreading. Absorb spillage with non-combustible, absorbent material.

Small Spills: Clean surface thoroughly to remove residual contamination.

Environmental precautions
Never return spills in original containers for re-use.

7. Handling and storage

Precautions for safe handling
The product is flammable, and heating may generate vapors which may form explosive vapor/air mixtures. Do not handle or store near an open flame, heat or other sources of ignition. Avoid inhalation of vapors or mists. Avoid contact with skin, eyes and clothing. Do not smoke. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Use only in well-ventilated areas. Avoid prolonged exposure. Wash thoroughly after handling. Handle and open container with care.

Conditions for safe storage, including any incompatibilities

8. Exposure controls/personal protection

Occupational exposure limits
US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexamethylene-1, 6-diisocyanate (CAS 822-06-0)</td>
<td>TWA</td>
<td>0.005 ppm</td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexamethylene-1, 6-diisocyanate (CAS 822-06-0)</td>
<td>Ceiling</td>
<td>0.14 mg/m3</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.02 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.035 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.005 ppm</td>
</tr>
</tbody>
</table>
Biological limit values
No biological exposure limits noted for the ingredient(s).

Exposure guidelines
Follow standard monitoring procedures.

Appropriate engineering controls
Explosion proof exhaust ventilation should be used. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment. Provide easy access to water supply or an emergency shower.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear goggles/face shield.

Skin protection

Hand protection
Wear protective gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.

Other
Wear appropriate chemical resistant clothing. Wear appropriate chemical resistant gloves. Structural firefighters protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations. Wear chemical protective equipment that is specifically recommended by the Personal Protective Equipment manufacturer.

Respiratory protection
If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Launder contaminated clothing before reuse. Remove and isolate contaminated clothing and shoes.

9. Physical and chemical properties

Appearance

Physical state
Liquid.

Form
Liquid.

Color
Not available.

Odor
Not available.

Odor threshold
Not available.

pH
Not available.

Melting point/freezing point
Not available.

Initial boiling point and boiling range
280 °F (137.78 °C)

Flash point
115.0 °F (46.1 °C)

Evaporation rate
Not available.

Flammability (solid, gas)
Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)
0.9 %

Flammability limit - upper (%)
6.4 %

Explosive limit - lower (%)
Not available.

Explosive limit - upper (%)
Not available.

Vapor pressure
11 mm Hg (100°F)

Vapor density
3.99 (air = 1)

Relative density
1.045

Solubility(ies)

Solubility (water)
Insoluble

Partition coefficient (n-octanol/water)
Not available.
Auto-ignition temperature  Not available.
Decomposition temperature  Not available.
Viscosity  Not available.
Other information
Oxidizing properties  Not oxidizing.

10. Stability and reactivity
Reactivity  The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability  Risk of ignition. Stable at normal conditions.
Possibility of hazardous reactions  Hazardous polymerization does not occur.
Conditions to avoid  Heat, flames and sparks.

11. Toxicological information
Information on likely routes of exposure
   Inhalation  May cause respiratory irritation.
   Skin contact  Causes skin irritation.
   Eye contact  Causes serious eye irritation.
   Ingestion  Ingestion may cause irritation and malaise.
Symptoms related to the physical, chemical and toxicological characteristics
   Irritating to eyes, respiratory system and skin. Irritation of nose and throat. Irritating to mucous membranes.
Information on toxicological effects
   Acute toxicity  Harmful if inhaled.
Components  Species  Test Results
Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate (CAS 41556-26-7)
   Acute
   Oral  Rat  2369 - 4247 mg/kg
   LD50  Rat  2369 - 4247 mg/kg
Homopolymer of Hexamethylene Diisocyanate (CAS 28182-81-2)
   Acute
   Inhalation  Rat  4.62 mg/l, 4 h
   LC50  Rat  4.62 mg/l, 4 h
Skin corrosion/irritation  Causes skin irritation.
Serious eye damage/eye irritation  Causes serious eye irritation.
Respiratory or skin sensitization
   Respiratory sensitization  May cause allergy or asthma symptoms or breathing difficulties if inhaled.
   Skin sensitization  May cause allergic skin reaction.
Germ cell mutagenicity  No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity  Not classified.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
   Not listed.
Reproductive toxicity  Not classified.
Specific target organ toxicity - single exposure  May cause drowsiness or dizziness.
Specific target organ toxicity - repeated exposure  Not classified.
Aspiration hazard  May be fatal if swallowed and enters airways.
Further information

Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

12. Ecological information

Ecotoxicity

Toxic to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bis(1,2,5,6-pentamethyl-4-piperidyl) sebacate (CAS 41556-26-7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Bluegill (Lepomis macrochirus)</td>
</tr>
<tr>
<td>Hydroxyphenyl - benzotriazole derivatives (CAS 104810-48-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Algae</td>
<td>EC50</td>
<td>Algae</td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia magna</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Oncorhynchus masou ishikawae</td>
</tr>
<tr>
<td>Hydroxyphenyl-benzotriazole derivatives (CAS 104810-47-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
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<tr>
<td>Algae</td>
<td>EC50</td>
<td>Algae</td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia magna</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Oncorhynchus masou ishikawae</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light aromatic (CAS 64742-95-6)</td>
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</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EL50</td>
<td>Daphnia</td>
</tr>
<tr>
<td>Fish</td>
<td>LL50</td>
<td>Oncorhynchus mykiss</td>
</tr>
</tbody>
</table>

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

No data available for this product.

Mobility in soil

No data available.

Mobility in general

The product is insoluble in water.

Other adverse effects

No data available.

13. Disposal considerations

Disposal instructions

Dispose of this material and its container at hazardous or special waste collection point. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.

Hazardous waste code

Waste codes should be assigned by the user based on the application for which the product was used.

Waste from residues / unused products

Dispose of in accordance with local regulations.

Contaminated packaging

Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN1139</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>Coating solution</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td>3</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Label(s)</td>
<td>3</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td></td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>Yes</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Read safety instructions, SDS and emergency procedures before handling.</td>
</tr>
</tbody>
</table>
Special provisions: B1, IB3, T2, TP1
Packaging exceptions: 150
Packaging non bulk: 203
Packaging bulk: 242

IATA
UN number: UN1139
UN proper shipping name: Coating solution
Transport hazard class(es):
  - Class: 3
  - Subsidiary risk: -
  - Label(s): 3
Packing group: III
Environmental hazards: Yes
ERG Code: 3L

Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.

IMDG
UN number: UN1139
UN proper shipping name: COATING SOLUTION
Transport hazard class(es):
  - Class: 3
  - Subsidiary risk: -
  - Label(s): 3
Packing group: III
Environmental hazards: Yes
EmS: F-E, S-E

Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:
Not available.

General information: IATA classification is not relevant as the material is not transported by air.

15. Regulatory information
US federal regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)
Hexamethylene-1, 6-diisocyanate (CAS 822-06-0) LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories:
  - Immediate Hazard - Yes
  - Delayed Hazard - Yes
  - Fire Hazard - Yes
  - Pressure Hazard - No
  - Reactivity Hazard - No

SARA 302 Extremely hazardous substance:
Not listed.

SARA 311/312 Hazardous chemical:
Yes

SARA 313 (TRI reporting):

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexamethylene-1, 6-diisocyanate</td>
<td>822-06-0</td>
<td>0.5 - 0.8</td>
</tr>
</tbody>
</table>
Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Hexamethylene-1, 6-diisocyanate (CAS 822-06-0)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
US state regulations
This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List
Hexamethylene-1, 6-diisocyanate (CAS 822-06-0)

US. New Jersey Worker and Community Right-to-Know Act
Hexamethylene-1, 6-diisocyanate (CAS 822-06-0)

US. Pennsylvania Worker and Community Right-to-Know Law
Not listed.

US. Rhode Island RTK
Hexamethylene-1, 6-diisocyanate (CAS 822-06-0)

US. California Proposition 65
Not Listed.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A “Yes” indicates this product complies with the inventory requirements administered by the governing country(s).
A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 19-May-2015
Revision date -
Version # 01

NFPA ratings

References
HSDB® - Hazardous Substances Data Bank
Registry of Toxic Effects of Chemical Substances (RTECS)

Disclaimer
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