Section 1. Identification

Trade Name: DSB 1520 Lubricant Adhesive

Relevant Identified Uses of the Substance or Mixture: Adhesive

Supplier/Manufacturer: The D.S. Brown Company
300 East Cherry Street
North Baltimore, Ohio 45872
419-257-3561

In Case of Emergency: Chemtrec 1-800-262-8200 International 01-703-741-5500

Information Department: Environmental, Health and Safety Department

Section 2. Hazards Identification

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS08 Health hazard

Resp. Sens. 1: H334 May Cause allergy or asthma symptoms or breathing difficulties if inhaled

Muta. 1B: H340 May cause genetic defects

STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure

Asp. Tox. 1: H304 May be fatal if swallowed and enters airways

GHS07

Skin Irrit. 2: H315 Causes skin irritation

Eye Irrit. 2A: H319 Causes serious eye irritation

Skin Sens. 1: H317 May cause an allergic skin reaction

STOT SE 3: H335 May cause respiratory irritation

LABEL ELEMENTS

GHS Label Elements: The product is classified and labeled according to the Globally Harmonized System (GHS)

Hazard Pictograms: GHS07 GHS08

Signal Word: Danger
Section 2. Hazards Identification  

Hazard Statements:
- 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 genetic defects.
- May cause respiratory irritation.
- May cause damage to organs through prolonged or repeated exposure.
- May be fatal if swallowed and enters airways.

Precautionary Statements:
- Do not breathe dust/fume/gas/mist/vapors/spray.
  (In case of inadequate ventilation) wear respiratory protection.
- Wear protective gloves.
- Wear eye protection/face protection.
- Wash thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Contaminated work clothing must not be allowed out of the workplace.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.

If Swallowed:
- Immediately call a POISON CENTER/doctor.

If In Eyes:
- Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Specific treatment (see on this label).

If Experiencing Respiratory Symptoms:
- Call a POISON CENTER/doctor.

If Inhaled:
- Remove person to fresh air and keep comfortable for breathing.
  Call a POISON CENTER/doctor if you feel unwell.
  Wash contaminated clothing before reuse.

If Exposed or Concerned:
- Get medical advice/attention.

If Skin Irritation or Rash Occurs:
- Get medical advice/attention.

If Eye Irritation Persists:
- Get medical advice/attention.
  Get medical advice/attention if you feel unwell.
  Do NOT induce vomiting.

If On Skin:
- Wash with plenty of water.
  Take off contaminated clothing and wash it before reuse.
  Store locked up.
  Store in a well-ventilated place. Keep container tightly closed.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification System:
- NFPA ratings (Scale 0-4)
  Health = 1
  Fire = 0
  Reactivity = 0
- HMIS-ratings (Scale 0-4)
  Health = 1
  Fire = 0
  Physical Hazard = 0
Section 2. Hazards Identification cont’d.

Other Hazards: Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

Section 3. Composition/Information on Ingredients

Chemical Characterization: Mixtures
Description: Mixture
Hazardous Components:

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Name</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-48-9</td>
<td>Naphtha (petroleum), hydrotreated heavy</td>
<td>5-20%</td>
</tr>
<tr>
<td>108-65-6</td>
<td>2-methoxy-1-methylethyl acetate</td>
<td>5-20%</td>
</tr>
<tr>
<td>101-68-8</td>
<td>4,4’-methylene diphenyl diisocyanate</td>
<td>2.5-10%</td>
</tr>
<tr>
<td>26447-40-5</td>
<td>methylene diphenyl diisocyanate</td>
<td>2.5-10%</td>
</tr>
<tr>
<td>9016-87-9</td>
<td>diphenylmethane diisocyanate, isomers and homologues</td>
<td>&lt; 2.5%</td>
</tr>
<tr>
<td>4083-64-1</td>
<td>4-isocyanatosulphonyltoluene</td>
<td>&lt; 2.5%</td>
</tr>
<tr>
<td>57-11-4</td>
<td>stearic acid, pure</td>
<td>&lt; 2.5%</td>
</tr>
<tr>
<td></td>
<td>polyester polyol</td>
<td>&lt; 2.5%</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

DESCRIPTION OF FIRST AID MEASURES

After Inhalation: Supply fresh air and to be sure call for a doctor. In case of unconsciousness place patient stably in side position for transportation.

After Skin Contact: Immediately wash with water and soap and rinse thoroughly. If skin becomes irritated seek medical attention.

After Eye Contact: Rinse opened eye for 20 minutes under running water. If eye becomes irritated, obtain medical treatment.

After Swallowing: Seek medical treatment.

INFORMATION FOR DOCTOR

Most Important Symptoms and Effects, Both Acute and Delayed: No further relevant information available.

Indication of Any Immediate Medical Attention and Special Treatment Needed: No further relevant information available.
Section 5. Fire-Fighting Measures

**Extinquishing Media**

**Suitable Extinguishing Agents**: CO₂, extinguishing powder or water spray. Fight larger fires with water spray. Use fire fighting measures that suit the environment.

**Special Hazards Arising From the Substance or Mixture**: No further relevant information available.

**Advice for Firefighters**

Firefighters use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**Protective Equipment**: Protective clothing and respiratory protective device.

Section 6. Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures**

**For Safety Reasons**: Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation.

**Environmental Precautions**

**For Safety Reasons**: Do not allow to enter sewers/surface or ground water.

**Methods and Material for Containment and Cleaning Up**: Cover spilled material with neutralization solution (see below) and mix. Wait 15 minutes. Collect material in openhead metal containers. Repeat neutralization and cleaning process until surface is decontaminated. Apply drum lid but DO NOT secure. Allow containers to vent for 72 hours to let carbon dioxide escape. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste in accordance with federal state and local regulations. Ensure adequate ventilation.

**Reference to Other Sections**: See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.
### Section 7. Handling and Storage  cont’d.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES**

- **Requirements To Be Met By Storerooms and Receptacles**: Store in a cool location away from direct heat.
- **Information About Storage In One Common Storage Facility**: Store away from oxidizing agents.
- **Further Information About Storage Conditions**: Store in cool, dry conditions in well sealed receptacles. Protect from contamination.
- **Specific End User(s)**: No further relevant information available.

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### Section 8. Exposure Controls/Personal Protection

**Additional Information About Design of Technical Systems**: No further data; see item 7

**CONTROL PARAMETERS**

- **Components With Limited Values That Require Monitoring at the Workplace**: The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

<table>
<thead>
<tr>
<th>Component Description</th>
<th>WEEL Long-term Value</th>
<th>50 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-methoxy-1-methylethyl acetate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4,4’-methylene diphenyl diisocyanate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Additional Information**: The lists that were valid during the creation were used as basis.

**Exposure Controls**

- **Personal Protective Equipment**: See listings that follow.

**General Protective and Hygienic Measures**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes and skin.

**Breathing Equipment**

- Use approved respiratory protection equipment when airborne exposure is excessive. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by the manufacturer.
Section 8. Exposure Controls/Personal Protection cont’d.

Protection of Hands: Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Material of Gloves: Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration Time of Glove Material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye Protection: Safety glasses with side shields.

Tightly sealed goggles.
Use full face shield over protective eye wear when there is a risk of a splash.

Body Protection: Protective work clothing.

Section 9. Physical and Chemical Properties

Appearance
Form: Liquid
Color: Not determined.
Odor: Characteristic
Odor Threshold: Not determined.
pH-value: Not determined.

Change in Condition
Melting Point: Undetermined
Boiling Point: 124 °C (255 °F)

Flash Point: Not applicable.

Flammability (solid, gaseous): Not applicable.
Ignition Temperature: 240 °C (464 °F)
Decomposition Temperature: Not determined.
Auto Igniting: Product is not self-igniting.

Danger of Explosion: Product is not explosive. However, formation of explosive air / vapor mixtures are possible.

Flammable Limits
Lower: 0.6 Vol %
Upper: 10.8 Vol %
Section 9. Physical and Chemical Properties cont’d.

Vapor Pressure at 20°C (68°F) : 3.4 hPa (3 mm Hg)

Specific Gravity
  Relative Density : Not determined.
  Vapor Density : Not determined.
  Evaporation Rate : Not determined.

Solubility In / Miscibility with Water : Not miscible or difficult to mix.

Partition Coefficient (n-octanol / water) : Not determined.

Viscosity
  Dynamic : Not determined.
  Kinematic : Not determined.

Solvent Content
  Solids Content : Not available.

Other Information : No further relevant information available.

Section 10. Stability and Reactivity

Reactivity : No further relevant information available.

Chemical Stability : No decomposition if used according to specifications.

Thermal Decomposition / Conditions to Avoid : Contact with moisture, other materials that react with isocyanates, or temperatures above 350 °F, may cause polymerization.

Possibility of Hazardous Reactions : Exposure to high temperatures

Conditions to Avoid : Reacts with alkalis (bases) copper and copper alloys, amines, alcohols

Incompatible Materials : Reacts with water.

Hazardous Decomposition Products : Carbon monoxide and carbon dioxide Nitrogen oxides Isocyanate Isocyanic acid
Section 11. Toxicological Information

Acute Toxicity: LD/LC50 values that are relevant for classification:

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-48-9</td>
<td>Naphtha (petroleum), hydrotreated heavy</td>
<td>Oral</td>
<td>LD50 &gt;5000 mg/kg (rat)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dermal</td>
<td>LD50 &gt;3000 mg/kg (rabbit)</td>
</tr>
<tr>
<td>101-68-8</td>
<td>4,4’-methylenediphenyl diisocyanate</td>
<td>Oral</td>
<td>LD50 2200 mg/kg (mouse)</td>
</tr>
</tbody>
</table>

Primary Irritant Effect:

- **On the Skin**: Irritant to skin and mucous membranes.
- **On the Eye**: Causes serious eye irritation.

Sensitization:

- Inhalation - Sensitization possible through inhalation.
- Skin Contact - Sensitization possible through skin contact.

Additional Toxicological Information:

The product shows the following dangers according to internally approved calculation methods for preparations:

- Harmful
- Irritant
- The product can cause inheritable damage.

Carcinogenic Categories:

- **IARC (International Agency for Research on Cancer)**: None of the ingredients is listed.
- **NTP (National Toxicology Program)**: None of the ingredients is listed.
- **OSHA-Ca (Occupational Safety & Health Administration)**: None of the ingredients is listed.

Section 12. Ecological Information

Toxicity:

- **Aquatic Toxicity**: No further relevant information available.
- **Persistence and Degradability**: No further relevant information available.

Behavior in Environment Systems:

- **Bioaccumulative Potential**: No further relevant information available.
- **Mobility in Soil**: No further relevant information available.

Additional Ecological Information:

- **General Notes**: Water hazard class 2 (Self-assessment): hazardous for water
- **Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.**

Results of PBT and vPvB Assessment:

- **PBT**: Not applicable.
- **vPvB**: Not applicable.

Other Adverse Effects:

- No further relevant information available.
Section 13. Disposal Considerations

Waste Treatment Methods  Recommendation: Must be specially treated adhering to official regulations.
Uncleaned Packagings  Recommendation: Disposal must be made according to official regulations.

Section 14. Transport Information

UN-Number
DOT, ADR, ADN, IMDG
IATA  : Not regulated.
UN Proper Shipping Name
DOT, ADR, ADN, IMDG
IATA  : Not regulated.
Transport Hazard Class(es)
DOT, ADR, ADN, IMDG
IATA Class  : Not regulated.
Packaging Group
DOT, ADR, IMDG, IATA  : Not regulated.
Environment Hazards  : Not applicable.
Special Precautions For Users  : Not applicable.
Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code  : Not applicable.
UN “Model Regulation”  : Not regulated.

Section 15. Regulatory Information

SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR SUBSTANCE/MIXTURE

SARA
Section 355 (Extremely Hazardous Substances)  : None of the ingredients is listed.
Section 313 (Specific Toxic Chemical Listings)  : 101-68-8 4,4'-methylene diphenyl diisocyanate
9016-87-9 diphenylmethanediisocyanate, isomers and homologues

TSCA (Toxic Substances Control Act)  : All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

Proposition 65
Chemicals Known to Cause Cancer  : None of the ingredients is listed.
Chemicals Known to Cause Reproductive Toxicity.  : None of the ingredients is listed.
## Section 15. Regulatory Information  cont’d.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chemicals Known to Cause Developmental Toxicity.</strong></td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>(DSL) Canada Domestic Substance List</td>
<td>All components of this product are on the DSL or are exempt from DSL requirements.</td>
</tr>
<tr>
<td>New Jersey Right-to-Know List</td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>New Jersey Special Hazardous Substance List</td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>Pennsylvania Right-to-Know List</td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>Pennsylvania Special Hazardous Substance List</td>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

### CANCEROGENICITY CATEGORIES

<table>
<thead>
<tr>
<th>Agency/Major Reference</th>
<th>CAS Number</th>
<th>Chemical Name</th>
<th>EPA</th>
<th>TLV</th>
<th>MAK</th>
<th>NIOSH-Ca</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA (Environmental Protection Agency)</td>
<td>101-68-8</td>
<td>4,4' -methylene diphenyl diisocyanate</td>
<td>D, CBD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9016-87-9</td>
<td>diphenylmethanediisocyanate, isomers and homologues</td>
<td>CBD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TLV (Threshold Limit Value Established by ACGIH)</td>
<td>None of the ingredients listed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAK (German Maximum Workplace Concentration)</td>
<td>101-68-8</td>
<td>4,4' -methylene diphenyl diisocyanate</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9016-87-9</td>
<td>diphenylmethanediisocyanate, isomers and homologues</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NIOSH-Ca (National Institute for Occupational Safety and Health)</td>
<td>None of the ingredients is listed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### NATIONAL REGULATIONS

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information About Limited Use</td>
<td>Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.</td>
</tr>
<tr>
<td>Water Hazard Class</td>
<td>Water Hazard Class 2 (Self-assessment): Hazardous for water.</td>
</tr>
<tr>
<td>Chemical Safety Assessment</td>
<td>A Chemical Safety Assessment has not been carried out.</td>
</tr>
</tbody>
</table>
Section 16. Other Information

Although the information and recommendations set forth in this SDS are presented in good faith and are believed to be correct as of the date of this SDS, Royal Adhesives & Sealants makes no representations as to the completeness or accuracy thereof. Information is supplied on the condition that the persons receiving and using it will make their own determination as to the suitability for their purpose prior to use. In no event will The D. S. Brown Company or any affiliate thereof be responsible for damages of any nature whatsoever resulting from the use or reliance on the information set forth in the SDS.

Creation Date: 04/01/2020
Date of Preparation/Last Revision: 04/01/2020

Abbreviations and Acronyms:
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- ACGIH: American Conference of Governmental Industrial Hygienists
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- NIOSH: National Institute for Occupational Safety
- OSHA: Occupational Safety & Health
- TLV: Threshold Limit Value
- PEL: Permissible Exposure Limit
- REL: Recommended Exposure Limit
- BEI: Biological Exposure Limit
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
- Resp. Sens. 1: Respiratory sensitisation – Category 1
- Skin Sens. 1: Skin sensitisation – Category 1
- Muta. 1B: Germ cell mutagenicity – Category 1B
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
- Asp. Tox. 1: Aspiration hazard – Category 1