1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier
Product Name: SD-20 ALL PURPOSE DEGREASER (AEROSOL)
Product Number: 6520
Recommended Use: Cleaning agent
Uses Advised Against: For Industrial and Institutional Use Only

Manufacturer/Supplier:
Spartan Chemical Company, Inc.
1110 Spartan Drive
Maumee, Ohio 43537 USA
800-537-8990 (Business hours)
www.spartanchemical.com

24 Hour Emergency Phone Numbers:
Medical Emergency/Information: 888-314-6171
Transportation/Spill/Leak: CHEMTREC 800-424-9300

2. HAZARDS IDENTIFICATION

GHS Classification
Serious Eye Damage/Eye Irritation: Category 2A
Flammable Aerosols: Category 1
Gases Under Pressure: Liquefied gas

GHS Label Elements
Signal Word: Danger
Symbols:

Hazard Statements:
Causes serious eye irritation
Extremely flammable aerosol.
Contains gas under pressure; may explode if heated

Precautionary Statements:
Prevention:
Wash hands and any exposed skin thoroughly after handling.
Wear eye / face protection
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Do not spray on an open flame or other ignition source
Pressurized container: Do not pierce or burn, even after use
Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.

Response:
-Eyes
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 attention.
See Safety Data Sheet Section 4: “FIRST AID MEASURES” for additional information.

-Specific Treatment:

Storage:
Protect from sunlight. Do not expose to temperatures exceeding 122°F (50°C) Store in a well-ventilated place

Disposal:
Not Applicable
Hazards Not Otherwise Classified: Not Applicable

Other Information:
- May be harmful if swallowed.
- Causes mild skin irritation.
- Inhalation of vapors or mist may cause respiratory irritation.
- Keep out of reach of children.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td>7732-18-5</td>
<td>60-100</td>
</tr>
<tr>
<td>diethylene glycol monobutyl ether</td>
<td>112-34-5</td>
<td>5-10</td>
</tr>
<tr>
<td>N-butane</td>
<td>106-97-8</td>
<td>3-7</td>
</tr>
<tr>
<td>isopropanol</td>
<td>67-63-0</td>
<td>1-5</td>
</tr>
<tr>
<td>alcohol ethoxylate</td>
<td>84133-50-6</td>
<td>1-5</td>
</tr>
</tbody>
</table>

Specific chemical identity and/or exact percentage of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

- **Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- **Skin Contact:** Wash with soap and water. If skin irritation occurs: Get medical attention.
- **Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or physician if you feel unwell.
- **Ingestion:** Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if you feel unwell.
- **Note to Physicians:** Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

- **Suitable Extinguishing Media:** Water spray (foam), Foam
- **Specific Hazards Arising from the Chemical:** Extremely flammable aerosol. Exposure to high temperature may cause containers to burst. Bursting aerosol containers may be propelled from fire at high speed.
- **Hazardous Combustion Products:** May include Carbon monoxide Carbon dioxide and other toxic gases or vapors.
- **Protective Equipment and Precautions for Firefighters:** Wear MSHA/NIOSH approved self-contained breathing apparatus (SCBA) and full protective gear. Water may be used to cool closed containers to prevent pressure build-up and possible auto ignition or explosion when exposed to extreme heat.

### 6. ACCIDENTAL RELEASE MEASURES

- **Personal Precautions:** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.
- **Environmental Precautions:** Do not rinse spill onto the ground, into storm sewers or bodies of water.
- **Methods for Clean-Up:** Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

### 7. HANDLING AND STORAGE

- **Advice on Safe Handling:** Handle in accordance with good industrial hygiene and safety practice. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Wash thoroughly after handling.
Storage Conditions: NFPA 30B Level 1 Aerosol. Do not store in direct sunlight or above 122 °F / 50 °C. Exposure to high temperature may cause containers to burst. Keep out of the reach of children.

8. EXPOSURE CONTROLS/PERSOINAL PROTECTION

Occupational Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-butane 106-97-8</td>
<td>TWA: 1000 ppm (vacated) TWA: 800 ppm (vacated) TWA: 1000 mg/m³</td>
<td>TWA: 800 ppm TWA: 1900 mg/m³</td>
<td></td>
</tr>
<tr>
<td>isopropanol 67-63-0</td>
<td>STEL: 400 ppm TWA: 200 ppm</td>
<td>TWA: 400 ppm TWA: 880 mg/m³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m³</td>
<td>TWA: 2000 ppm TWA: 880 mg/m³ TWA: 600 mg/m³ STEL: 500 ppm STEL: 1225 mg/m³</td>
</tr>
</tbody>
</table>

Engineering Controls: Provide good general ventilation. If work practices generate dust, fumes, gas, vapors or mists which expose workers to chemicals above the occupational exposure limits, local exhaust ventilation or other engineering controls should be considered.

Personal Protective Equipment: Wear splash goggles.

Eye/Face Protection: Not required with expected use.

Skin and Body Protection: Not required with expected use.

Respiratory Protection: If occupational exposure levels are exceeded or respiratory irritation occurs, use of a NIOSH/MSHA approved respirator suitable for the use-conditions and chemicals in Section 3 should be considered.


9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Appearance/Physical State:</th>
<th>Aerosol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor:</td>
<td>Pleasant</td>
</tr>
<tr>
<td>pH:</td>
<td>10.5-11.5</td>
</tr>
<tr>
<td>Melting Point / Freezing Point:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Boiling Point / Boiling Range:</td>
<td>100 °C / 212 °F (Product without propellant)</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>&lt; -18 °C / &lt; 0 °F (Propellant-estimated)</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>No information available.</td>
</tr>
<tr>
<td>Upper Flammability Limit:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Lower Flammability Limit:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>1.0 (Product without propellant)</td>
</tr>
<tr>
<td>Solubility(ies):</td>
<td>No information available.</td>
</tr>
<tr>
<td>Partition Coefficient:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Autoignition Temperature:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Decomposition Temperature:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity: This material is considered to be non-reactive under normal conditions of use.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Not expected to occur with normal handling and storage.

Conditions to Avoid: Extremes of temperature and direct sunlight.

Hazardous Decomposition Products: May include carbon monoxide, carbon dioxide (CO2) and other toxic gases or vapors.

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Eyes, Skin, Ingestion, Inhalation.
Symptoms of Exposure:
- Eye Contact: Pain, redness, swelling of the conjunctiva and blurred vision.
- Skin Contact: Drying of the skin.
- Inhalation: Nasal discomfort and coughing.
- Ingestion: Pain, nausea, vomiting and diarrhea.
Immediate, Delayed, Chronic Effects: Data not available or insufficient for classification.

Target Organ Effects: Central nervous system. -Eyes. Respiratory System. -Skin.

Numerical Measures of Toxicity
The following acute toxicity estimates (ATE) are calculated based on the GHS document.

ATEmix (oral): 26014 mg/kg
ATEmix (dermal): 23457 mg/kg
ATEmix (inhalation-gas): 5243774 mg/l
ATEmix (inhalation-dust/mist): 3906 mg/l

Component Acute Toxicity Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>water 7732-18-5</td>
<td>&gt; 90 mL/kg ( Rat )</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>diethylene glycol monobutyl ether 112-34-5</td>
<td>= 3384 mg/kg ( Rat )</td>
<td>= 2700 mg/kg ( Rabbit )</td>
<td>Not Available</td>
</tr>
<tr>
<td>N-butane 106-97-8</td>
<td>Not Available</td>
<td>Not Available</td>
<td>= 658 mg/L ( Rat ) 4 h</td>
</tr>
<tr>
<td>iso propanol 67-63-0</td>
<td>= 4396 mg/kg ( Rat )</td>
<td>= 12800 mg/kg ( Rat ) = 12870 mg/kg ( Rabbit )</td>
<td>= 72.6 mg/L ( Rat ) 4 h</td>
</tr>
</tbody>
</table>

Carcinogenicity: No components present at 0.1% or greater are listed as to being carcinogens by ACGIH, IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/Aquatic Plants</th>
<th>Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>diethylene glycol monobutyl ether 112-34-5</td>
<td>100: 96 h Desmodesmus subspicatus mg/L EC50</td>
<td>1300: 96 h Lepomis macrochirus mg/L LC50 static</td>
<td>Not Available</td>
<td>2850: 24 h Daphnia magna mg/L EC50 100: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>iso propanol 67-63-0</td>
<td>1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>9640: 96 h Pimephales promelas mg/L LC50 flow-through 11130: 96 h Pimephales promelas mg/L LC50 static 1400000: 96 h Lepomis macrochirus μg/L LC50</td>
<td>Not Available</td>
<td>13299: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>alcohol ethoxylate 84133-50-6</td>
<td>Not Available</td>
<td>3.2: 96 h Pimephales promelas mg/L LC50</td>
<td>Not Available</td>
<td>3.2: 48 h water flea mg/L EC50</td>
</tr>
</tbody>
</table>

Persistence and Degradability: No information available.
Bioaccumulation: No information available.
Other Adverse Effects: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal of Wastes: Dispose of in accordance with federal, state and local regulations.
Contaminated Packaging: Pressurized container: Do not pierce or burn, even after use. Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT:
UN/ID No: UN1950
Proper Shipping Name: Aerosols
Hazard Class: 2.1
Special Provisions: This product meets the exception requirements of section 49 CFR 173.306 as a limited quantity and may be shipped as a limited quantity. Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Check with a trained hazardous materials transportation expert for information specific to your situation.

IMDG:
UN/ID No: UN1950
Proper Shipping Name: Aerosols
Hazard Class: 2.1
Additional information: Limited Quantity

15. REGULATORY INFORMATION

TSCA Status: (Toxic Substance Control Act Section 8(b) Inventory)
All chemical substances in this product are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

SARA 313
This product contains the following listed substances:
diethylene glycol monobutyl ether
CAS No 112-34-5 applies to R-((OCH2CH2)n-OR', where n = 1, 2, or 3, R=Alkyl C7 or less, or R = Phenyl or Alkyl substituted phenyl, R' = H or Alkyl C7 or less, or OR' consisting of Carboxylic acid ester, Sulfate, Phosphate, Nitrate, or Sulfonate, Chemical Category NZ30
Isopropanol
CAS No 67-63-0 only if manufactured by the strong acid process, no supplier notification

SARA 311/312 Hazard Categories
Acute Health Hazard: Yes
Chronic Health Hazard: No
Fire Hazard: No
Sudden release of pressure hazard: No
Reactive Hazard: No

California Proposition 65
This product is not subject to warning requirements under California Proposition 65.

16. OTHER INFORMATION

NFPA
Health Hazards: 2
Flammability: 1
Instability: 0
Special: N/A

HMIS
Health Hazards: 2
Flammability: 2
Physical Hazards: 2

Revision Date: 11-Aug-2015
Reasons for Revision: Section 14 and 15

Disclaimer:
The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.
End of Safety Data Sheet