1. Identification

1.1. Product identifier

Product Identity: DS2
Alternate Names: DS2

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use: See Technical Data Sheet.
Application Method: See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name: DME Co
Address: 29111 STEPHENSON HWY
City: MADISON HEIGHTS, MI 48071

Emergency

CHEMTREC (USA): (800) 424-9300
24 hour Emergency Telephone No.: US CHEMTREC number 1-800-424-9300
Outside the US (Canada) number 1-703-527-3887
Mexico 1-800-681-9531 (CHEMTREC)

Customer Service: DME Co
800-626-6653 (U.S.), 800-387-6600 (Canada)
or 248-398-6000 (worldwide)

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Acute Tox. 5;H303 May be harmful if swallowed. (This category was not adopted by Canada)
Skin Irrit. 2;H315 Causes skin irritation.
Eye Dam. 1;H318 Causes serious eye damage.
Aquatic Acute 2;H401 Toxic to aquatic life.
Aquatic Chronic 1;H410 Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Danger

Page 1 of 10
H303 May be harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H401 Toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

[Prevention]:
P273 Avoid release to the environment.
P280 Wear protective gloves / eye protection / face protection.

[Response]:
P302+352 IF on skin: Wash with plenty of soap and water.
P305+351+338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P310 Immediately call a POISON CENTER or doctor / physician.
P312 Call a POISON CENTER or doctor / physician if you feel unwell.
P332+313 If skin irritation occurs: Get medical advice / attention.
P362+364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.

[Storage]:
No GHS storage statements

[Disposal]:
P501 Dispose of contents / container in accordance with local / national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the Controlled Products Regulations.

<table>
<thead>
<tr>
<th>Ingredient/Chemical Designations</th>
<th>Weight %</th>
<th>GHS Classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulphamic acid</td>
<td>65 - 85</td>
<td>Eye Irrit. 2;H319</td>
<td></td>
</tr>
<tr>
<td>CAS Number: 0005329-14-6 Synonyms: Sulphamic acid, Sulphamic acid</td>
<td></td>
<td>Skin Irrit. 2;H315 Aquatic Chronic 3;H412</td>
<td>[1]</td>
</tr>
<tr>
<td>Oxalic acid</td>
<td>7 - 13</td>
<td>Acute Tox. 4;H312</td>
<td>[1][2]</td>
</tr>
<tr>
<td>CAS Number: 0000144-62-7 Synonyms: Axit oxalic, Oxalic acid</td>
<td></td>
<td>Acute Tox. 4;H302 Combustible Dust</td>
<td></td>
</tr>
<tr>
<td>1,2,3-Benzotriazole</td>
<td>3 - 7</td>
<td>Acute Tox. 4;H319</td>
<td></td>
</tr>
<tr>
<td>CAS Number: 0000095-14-7 Synonyms: 1,2,3-Benzotriazole, 1H-Benzotriazole</td>
<td></td>
<td>Eye Irrit. 2;H319</td>
<td>[1]</td>
</tr>
<tr>
<td>Stannous chloride dihydrate</td>
<td>3 - 7</td>
<td>Acute Tox. 4;H302</td>
<td></td>
</tr>
<tr>
<td>CAS Number: 010025-69-1 Synonyms: Stannous chloride dihydrate</td>
<td></td>
<td>Skin Corr. 1B;H314 Aquatic Acute 1;H400</td>
<td>[1]</td>
</tr>
</tbody>
</table>

The actual concentration or concentration range is withheld as a trade secret.
[1] Substance with a health or environmental hazard.
*The full texts of the phrases are shown in Section 16.
Section 4. First aid measures

4.1. Description of first aid measures

General
In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation
Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes
Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention. Remove contacts immediately.

Skin
Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

Ingestion
If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview
No specific symptom data available. Treat symptomatically. See section 2 for further details.

Eyes
Causes serious eye damage.

Skin
Causes skin irritation.

Ingestion
May be harmful if swallowed.

Inhalation
May cause irritation of mucous membranes.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO₂, powder, water spray. Do not use: water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

5.3. Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

ERG Guide No. ---

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).
6.2. Environmental precautions
Do not allow spills to enter drains or waterways.
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up
Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.
Contain and absorb spillage with non-combustible materials e.g. sand, earth, and vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations.

Section 7. Handling and storage

7.1. Precautions for safe handling
Handle containers carefully to prevent damage and spillage.
See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities
Incompatible materials: No data available.
See section 2 for further details. - [Storage]:

7.3. Specific end use(s)
No data available.

Section 8. Exposure controls and personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000095-14-7</td>
<td>1,2,3-Benzotriazole</td>
<td>OSHA</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
<tr>
<td>0000144-62-7</td>
<td>Oxalic acid</td>
<td>OSHA</td>
<td>TWA 1 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA: 1 mg/m3 STEL: 2 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>TWA 1 mg/m3 ST 2 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
<tr>
<td>0005329-14-6</td>
<td>Sulphamic acid</td>
<td>OSHA</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
</tbody>
</table>
8.2. Exposure controls

Respiratory
If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

Eyes
Wear safety glasses with side shields to protect the eyes. An eye wash station is suggested as a good workplace practice.

Skin
Wear PVC or rubber gloves to keep skin contact to a minimum. Refer to the manufacturer's recommendations regarding the suitability of any gloves used.

Engineering Controls
Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.

Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White Powder Solid</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH</td>
<td>Not Available</td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>Not Available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not Available</td>
</tr>
<tr>
<td>Evaporation rate (Ether = 1)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Lower Explosive Limit: Not Available</td>
</tr>
<tr>
<td></td>
<td>Upper Explosive Limit: Not Available</td>
</tr>
<tr>
<td>Vapor pressure (Pa)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not Available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not Available</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Not Available</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water (Log Kow)</td>
<td>Not Available</td>
</tr>
</tbody>
</table>
Auto-ignition temperature: Not Available
Decomposition temperature: Not Available
Viscosity (cSt): Not applicable

9.2. Other information
No other relevant information.

### Section 10. Stability and reactivity

**10.1. Reactivity**
Product is reactive. It does not undergo hazardous polymerization.

**10.2. Chemical stability**
Stable under normal circumstances.

**10.3. Possibility of hazardous reactions**
No data available.

**10.4. Conditions to avoid**
Avoid sources of heat, direct sunlight and overheating. Protect from moisture.

**10.5. Incompatible materials**
Strong oxidants, bases.

**10.6. Hazardous decomposition products**
During the fire, the product may produce harmful fumes containing carbon oxides and other unidentified products of thermal decomposition. Do not inhale combustion products, they can be dangerous for human health.

### Section 11. Toxicological information

**Acute toxicity**

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Oral LD50, mg/kg</th>
<th>Skin LD50, mg/kg</th>
<th>Inhalation Vapor LC50, mg/L/4hr</th>
<th>Inhalation Dust/Mist LC50, mg/L/4hr</th>
<th>Inhalation Gas LC50, ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulphamic acid - (5329-14-6)</td>
<td>2,140.00, Rat - Category: 5</td>
<td>&gt;2,000.00, Rat - Category: 5</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxalic acid - (144-62-7)</td>
<td>375.00, Rat - Category: 4</td>
<td>20,000.00, Rabbit - Category: NA</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>1,2,3-Benzotriazole - (95-14-7)</td>
<td>500.00, Rat - Category: 4</td>
<td>&gt;2,000.00, Rabbit - Category: 5</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Stannous chloride dihydrate - (10025-69-1)</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Carcinogen Data

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000095-14-7</td>
<td>1,2,3-Benzo-triazole</td>
<td>OSHA</td>
<td>Regulated Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: No; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;</td>
</tr>
<tr>
<td>0000144-62-7</td>
<td>Oxalic acid</td>
<td>OSHA</td>
<td>Regulated Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: No; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;</td>
</tr>
<tr>
<td>0005329-14-6</td>
<td>Sulphamic acid</td>
<td>OSHA</td>
<td>Regulated Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: No; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;</td>
</tr>
<tr>
<td>0010025-69-1</td>
<td>Stannous chloride dihydrate</td>
<td>OSHA</td>
<td>Regulated Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: No; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;</td>
</tr>
</tbody>
</table>

Classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
<th>Hazard Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (oral)</td>
<td>5</td>
<td>May be harmful if swallowed. (This category was not adopted by Canada)</td>
</tr>
<tr>
<td>Acute toxicity (dermal)</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Acute toxicity (inhalation)</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>2</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>1</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

Possible routes of entry: No data available.

Symptoms and effects, both acute and delayed:
No specific symptom data available.
Treat symptomatically.

Inhalation

Eyes Causes serious eye damage.
Skin Causes skin irritation.
Section 12. Ecological information

12.1. Toxicity
Very toxic to aquatic life with long lasting effects.
Toxic to aquatic life
Aquatic Ecotoxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>96 hr LC50 fish, mg/l</th>
<th>48 hr EC50 crustacea, mg/l</th>
<th>ErC50 algae, mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulphamic acid - (5329-14-6)</td>
<td>70.30, Pimephales promelas</td>
<td>71.60, Daphnia magna</td>
<td>48.00 (72 hr), Desmodesmus subspicatus</td>
</tr>
<tr>
<td>Oxalic acid - (144-62-7)</td>
<td>325.00, Leuciscus idus</td>
<td>162.20, Daphnia magna</td>
<td>19.14 (72 hr), Pseudokirchneriella subcapitata</td>
</tr>
<tr>
<td>1,2,3-Benzotriazole - (95-14-7)</td>
<td>55.00, Cyprinodon variegatus</td>
<td>137.00, Daphnia magna</td>
<td>75.00 (72 hr), Pseudokirchnerella subcapitata</td>
</tr>
<tr>
<td>Stannous chloride dihydrate - (10025-69-1)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
Do not expect bioaccumulation.
oxalic acid log Po/w -1.7
sulphamic acid log Kow -4.3438

12.3. Bioaccumulative potential
Oxalic acid undergoes biological degradation (73 %/ 30 days)

12.4. Mobility in soil
Mobility of components of the mixture depends on the hydrophilic and hydrophobic properties and biotic and abiotic conditions of soil, including its structure, climatic conditions, seasons and soil organisms.

12.5. Results of PBT and vPvB assessment
This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects
No data available.

Section 13. Disposal considerations

13.1. Waste treatment methods
Observe all federal, state and local regulations when disposing of this substance.
Section 14. Transport information

14.1. UN number
TDG (Domestic Surface Transportation) Not Regulated
14.2. UN proper shipping name
Not Regulated
14.3. Transport hazard class(es)
TDG Hazard Class: Not Applicable
IMDG: Not Applicable
Sub Class: Not Applicable
Air Class: Not Applicable
14.4. Packing group
Not Applicable
14.5. Environmental hazards
IMDG Marine Pollutant: Yes; ( 1,2,3-Benzotriazole )
14.6. Special precautions for user
Not Applicable

Section 15. Regulatory information

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by those regulations.

WHMIS 1988 Classification
D2B E

Canadian Domestic Substance List (DSL):
1,2,3-Benzotriazole
Oxalic acid
Sulphamic acid

Canadian Non-Domestic Substance List (NDSL):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Section 16. Other information

SDS Revision Date 02/22/2019
The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

The information contained herein is furnished without warranty of any kind. The above information is believed to be correct but does not purport to be all inclusive and should be used only as a guide. Users should make independent determinations of the suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers.

End of Document