SAFETY DATA SHEET

1. Identification
   Product Identifier: BALL BUSTER
   Recommended use: Drilling fluid additive / food additive
   Recommended restrictions: None known
   Manufacturer/Importer/Supplier/Distributor information
     Manufacturer
     Company name: DCS Fluid Solutions
     Address: PO Box 1027, Graham, TX 76450
     Phone: 940-521-0500
     Website: www.dcsmud.com
     Email: don@dcsmud.com / randy@dcsmud.com
     Emergency phone number: 940-768-8071

2. Hazard(s) Identification
   Physical hazards: Eye irritant. Causes eye irritations
   Health hazards: Not classified
   Environmental hazards: Not classified
   OSHA defined hazards: The substance is classified and labeled according to OSHA 29 CFR 1910.1200 HCS.

   Label elements
     Hazard symbol: GHS07
     Signal word: Warning
     Hazard statement: Causes eye irritation
     Precautionary statement
       Prevention: Observe good industrial hygiene practices. Wear eye protection / face protection
       Response: Wash hands after handling. If in eyes, rinse continually with water for several minutes. If eye irritation persists seek medical advice / attention
       Storage: Store away from incompatible materials.
       Disposal: Dispose of waste and residues in accordance with local authority requirements.

   Hazard(s) not otherwise classified (HNOC): None known
### 3. Composition/Information of Ingredients

<table>
<thead>
<tr>
<th>Mixtures</th>
<th>Chemical Name</th>
<th>Common name and synonyms</th>
<th>CAS Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sodium Acid Pyrophosphate</td>
<td>Sodium Acid Pyrophosphate Di-phosphoric Acid, Disodium Salt; Disodium Di-hydrogen Di-phosphate; Disodium Di-hydrogen Pyrophosphate; Disodium Pyrophosphate*</td>
<td>7758-16-9</td>
<td>95</td>
</tr>
</tbody>
</table>

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First Aid Measures

**Inhalation**
Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact**
Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact**
Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion**
Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**Most important symptoms, effects, acute and delayed**
Direct contact with eyes may cause temporary irritation.

**Indication of immediate medical attention and special treatment needed**
No further relevant information available.

**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**

**Unsuitable extinguishing media**
None known

**Specific hazards arising from the chemical**
Not available.

**Special protective equipment and precautions for firefighters**
Wear self-contained respiratory protective device.

**Firefighting equipment/instructions**
Cool containers exposed to heat with water spray and remove container, if no risk is involved.

**Specific methods**
Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**
Combustible. No unusual fire or explosion hazards noted.

### 6. Accidental Release Measures

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Personal precautions, protective equipment, and emergency procedures

Methods and materials for containment and cleaning up

Environmental precautions

Keep unprotected personnel away.

Do not allow product to reach sewage system.

Dispose of the collected material according to regulations.

Do not allow product to reach sewage system

7. Handling and Storage

Precautions for safe handling

Conditions for safe storage, including any incompatibilities

Prevent formation of dust

Store in cool, dry conditions and well ventilated area. Keep packaging closed when not in use. Keep receptacle tightly sealed. No further relevant information available.

8. Exposure Controls/Personal Protection

Occupational exposure limits

No data available

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields or tightly sealed goggles.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Wear suitable protective clothing.

In case of insufficient ventilation, wear suitable respiratory equipment.

Other

Respiratory protection

Wear appropriate thermal protective clothing, when necessary.

Thermal hazards

General hygiene considerations

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

Form

Color

Dry

Powder

White

Odor

Odor threshold

pH

Melting point/freezing point

Initial boiling point and boiling range

Flash point

Evaporation rate

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Not available

4– 4.7 @ 10 g/l

>220° C (>428° F)

Undetermined

Not applicable

Not available
Flammability (solid, gas)  
Upper/lower flammability or explosive limits  
Flammability limit-lower (%)  
Flammability limit-upper (%)  
Explosive limit-lower (%)  
Explosive limit-upper (%)  
Vapor pressure  
Vapor density  
Relative density  
Solubility(ies)  
Solubility (water)  
Partition coefficient (n-octanol/water)  
Auto-ignition temperature  
Decomposition temperature  
Viscosity  
Other Information  
Density  
Flammability class  
Percent volatile  
Specific gravity  

10. Stability and Reactivity  
Reactivity  
The product is stable and non-reactive if used according to specifications of use, storage and transport.  
Chemical stability  
Material is stable under normal conditions.  
Possibility of hazardous reactions  
No dangerous reaction known under conditions of normal use.  
Conditions to avoid  
Extreme heat. Excessive moisture  
Incompatible materials  
No further relevant information available  
Hazardous decomposition products  
Phosphorus oxides (P2O5)  
Sodium oxide (NaO)  

11. Toxicological Information  
Information on likely routes of exposure  
Inhalation  
Prolonged inhalation may be harmful.  
Skin contact  
No adverse effects due to skin contact are expected.  
Eye contact  
Direct contact with eyes may cause temporary irritation.  
Ingestion  
Expected to be a low ingestion hazard.  
Symptoms related to the physical, chemical and toxicological characteristics  
Direct contact with eyes may cause temporary irritation.  
Information on toxicological effects  
LD/LC50 values that are relevant for classification:  
Rat oral LD50 [mg/kg] : > 2000  
Rat inhalation LC50 [mg/kg] : No data available. Rabbit dermal LD50 [mg/kg] : >7940
Skin corrosion/irritation
Serious eye damage/eye irritation
Respiratory or skin sensitization
  Respiratory sensitization
  Skin sensitization
Germ cell mutagenicity
Carcinogenicity
  IARC Monographs. Overall Evaluation of Carcinogenicity
  OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Reproductive toxicity
Specific target organ toxicity - single exposure
Specific target organ toxicity - repeated exposure
Aspiration hazard
Chronic effects

Prolonged skin contact may cause temporary irritation.
Direct contact with eyes may cause serious irritation.
Not a respiratory sensitizer.
This product is not expected to cause skin sensitization.
No data available
Substance is not listed
Substance is not listed
This product is not expected to cause reproductive or developmental effects.
Not classified
Not classified
Not an aspiration hazard
Not determined

12. Ecological Information
Ecotoxicity
Persistence and degradability
Bio-accumulative potential
Mobility in soil
Other adverse effects
No further relevant information available
No further relevant information available
No further relevant information available
No further relevant information available
No further relevant information available

13. Disposable Considerations
Disposal instructions
Must not be disposed of together with household garbage. Dispose of product according to local and state regulations

Local disposal regulations
Hazardous waste code
Dispose in accordance with all applicable regulations. The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues.

Waste from residues/unused products

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This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not regulated as dangerous goods

15. Regulatory Information

US Federal regulations
This substance is classified and labeled according to OSHA 29 CFR 1910.1200 HCS.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Substance is listed

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Not regulated.

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

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Immediate Hazard:

Hazard Categories

SARA 302 Extremely hazardous substance
SARA 311/312 Hazardous chemical
SARA 313 (TRI reporting)

Other federal regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Clean Air Act (CAA) Section 112(r)
Accidental Release Prevention (40 CFR 68.130)
Safe Drinking Water Act (SDWA)
US state regulations
US California Controlled Substances. CA
Department of Justice (California Health and Safety Code Section 11100)
US Massachusetts RTK – Substance List
US New Jersey Worker and Community Right-to-Know Act
US Pennsylvania Worker and Community Right-to-Know Law
US Rhode Island RTK
US California Proposition 65

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>Yes</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 that all components of this product comply 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
Date Prepared: April 5, 2016
Revision Date: September 18, 2017
Version Number: 02

Disclaimer: The information provided in this 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 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. All information and recommendations concerning this product is based on tests and data believed to be reliable, however, it is the user's responsibility to determine the safety, toxicity and suitability for the user's own use of the product described herein. Since the actual use by others is beyond our control, no guarantee expressed or implied is made. Nor is the information herein to be construed as absolutely complete since additional information may be necessary or desirable when particular conditions exist or because of applicable laws or government regulations.

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