1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Oxy-Dry Anti-Offset Powder, Type Oxy-20  
CAS Number: 9005-25-8

Chemical Family: Carbohydrate

Company Identification: Oxy-Dry Corporation  
e-mail info@oxydry.com
1208 North Swift Road  
Addison, IL 60101 USA  
1-630-678-5300 (For product information)  
Web Site: www.oxydry.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
WARNING! NUISANCE DUST WITH POSSIBILITY OF DUST EXPLOSION

HMIS/NFPA Rating: See Section 16

POTENTIAL HEALTH EFFECTS

ROUTES OF ENTRY: Skin contact. Eye contact. Inhalation. Ingestion.

TARGET ORGANS: None known

INHALATION: Low order of toxicity

INGESTION: No hazard in normal industrial use.

SKIN CONTACT: Possible mechanical skin irritation.

EYE CONTACT: Particulate may scratch eye surfaces/cause mechanical irritation.

CHRONIC EXPOSURE: None known

AGGRAVATION OF PRE-EXISTING CONDITIONS: None known

3. COMPOSITION / INFORMATION ON INGREDIENTS

CONTAINING: HAZARDOUS AND/OR REGULATED COMPONENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Amount</th>
<th>CAS Number</th>
<th>Hazardous</th>
<th>OSHA PEL (ppm)</th>
<th>ACGIH STEL (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbohydrate</td>
<td>100%</td>
<td>9005-25-8</td>
<td>NO</td>
<td>500</td>
<td>500</td>
</tr>
</tbody>
</table>

California Prop 65: This product does NOT contain an ingredient(s), above the safe harbor limits, which are known to the state of California to cause cancer, birth defects, or other reproductive harm.

HAZARDS DISCLOSURE: This product does NOT contain known hazardous materials as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.
4. FIRST AID MEASURES

INHALATION FIRST AID: Remove to fresh air. If continuing to have breathing problems seek medical attention.

SKIN CONTACT FIRST AID: Wash with soap and water.

EYE CONTACT FIRST AID: Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.

INGESTION FIRST AID: Not applicable.

STATEMENT OF PRACTICAL TREATMENT: Always have plenty of water available for first aid. Get medical attention if any symptoms develop or persist.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES: Possible Combustible Dust.

AUTO IGNITION TEMPERATURE: 390 °C (750 °F)

FLASH POINT: Not applicable

FLAMMABLE LIMITS IN AIR, % by Volume: lel: NA; uel: NA

EXTINGUISHING MEDIA: Dry chemical, foam, carbon dioxide, or water fog.

FIRE & EXPLOSION HAZARDS: Minimum ignition temperature of dust cloud – approximately 390°C. Minimum energy to ignite cloud by electrical spark – approximately 0.10 joules.

SPECIAL INFORMATION:
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Carbon monoxide and carbon dioxide will be released if this product is involved in a fire.

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK PROCEDURES: Normal precautions for “nuisance dust” should be observed. Avoid prolonged inhalation of dust. Sweep up or vacuum up and place in suitable container for disposal. Waste disposal should be in accordance with existing Federal, State and Local environmental regulations.
7. HANDLING AND STORAGE

RECOMMENDED STORAGE CONDITIONS:

Storage Temperature: Ambient

Special Sensitivity: No special sensitivity.

Storage: Store in a clean, dry, well ventilated warehouse away from odorous materials.

Ventilation Requirements: General

Sensitive to Static Electricity: Yes

Sensitive to Mechanical Impact: No

SHELF LIFE: See Label on packaging.

HANDLING (PERSONNEL): Use good occupational work practices. Observe manufacturer's storing and handling recommendations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

AIRBORNE EXPOSURE LIMITS: See Section 3 above.

Starch:

- ACGIH Time Weighted Average Exposure Limit (TWA):
  10 mg/m3

VENTILATION SYSTEM: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

PERSONAL RESPIRATORS (NIOSH APPROVED): If the exposure limit is exceeded, a particulate filter respirator (NIOSH type N95) may be worn.

RESPIRATORY PROTECTION: Airborne concentrations should be kept to lowest levels possible. If dust is generated and the occupational exposure limit of the product is exceeded a particulate filter respirator (NIOSH type N95) is required.

GLOVE REQUIREMENTS: Gloves are recommended due to possible irritation.

CLOTHING REQUIREMENTS: Not Applicable.

EYE PROTECTION: Safety glasses recommended to prevent eye contact.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICAL FORM</td>
<td>Solid</td>
</tr>
<tr>
<td>COLOR</td>
<td>White</td>
</tr>
<tr>
<td>ODOR</td>
<td>Starch odor</td>
</tr>
<tr>
<td>BOILING POINT</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>SOLUBILITY IN WATER</td>
<td>Soluble; Hot water</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>MELTING/FREEZING POINT</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Evaporation Rate (BuAc=1)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>AUTO IGNITION TEMPERATURE</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>pH</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>VAPOR PRESSURE</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>% VOLATILES BY VOLUME</td>
<td>None</td>
</tr>
<tr>
<td>BULK DENSITY</td>
<td>ca. 0.5 g/cc</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

STABILITY: Stable under ordinary conditions of use and storage.

CONDITIONS TO AVOID: Heat, flames, ignition sources, electrostatic discharge, dust accumulations and water (absorbs readily)

HAZARDOUS DECOMPOSITION: Carbon dioxide, nitrogen, carbon monoxide and water may form when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

PRODUCT TOXICOLOGY:
- Notes on Eye Irritation: Physical form may cause irritation
- Notes on Dermal Toxicity: Non-Hazardous
- Notes on Oral Toxicity: Low order of Toxicity

CHRONIC LONG TERM EFFECTS OF EXPOSURE:
- Route of Entry: Eye contact, skin contact, inhalation, ingestion
- Effects of Chronic Exposure: Not Established
- Target Organs: Not Applicable
- Special Health Effects: None Known

Carcinogenicity:
- Carcinogenic effects: None known
- Mutagenic effects: None known
- Teratogenic effects: None known

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Known</th>
<th>Anticipated</th>
<th>IARC Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbohydrate (9005-25-8)</td>
<td>No</td>
<td>No</td>
<td>None</td>
</tr>
</tbody>
</table>
12. **ECOLOGICAL INFORMATION**

**POTENTIAL EFFECT ON ENVIRONMENT:** Contributes to effluent BOD

- **Mobility:** Unknown
- **Persistence and Degradability:** Biodegradable
- **Potential to Bio-Accumulate:** Low – degrades rapidly
- **Ecotoxicity:** Low, but has a BOD contribution
- **Aquatic Toxicity:** None Established

13. **DISPOSAL CONSIDERATIONS**

**WASTE DISPOSAL:** Waste dispose of container and unused contents in accordance with federal, state and local requirements.

**EMPTY CONTAINER WARNINGS:** Not needed.

14. **TRANSPORTATION INFORMATION**


- **CLASS:** Non-Hazardous
- **PRODUCT LABEL:** Modified Starch
- **UN NUMBER:** N/A
- **PACKING GROUP:** N/A
- **D.O.T. SHIPPING NAME:** Modified starch
- **PRODUCT RQ (LBS):** N/A
- **ERG Guide Number:** N/A
- **SUPPLEMENTAL HAZARD:** N/A
- **Vessel Stowage: Location:** N/A

15. **REGULATORY INFORMATION**

**FEDERAL REGULATORY STATUS**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>EC</th>
<th>Japan</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbohydrate</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>

**Chemical Inventory Status - Part 2**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Korea</th>
<th>DSL</th>
<th>NDSL</th>
<th>Phil.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbohydrate</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>
Chemical Weapons Convention: No  TSCA 12(b): No  CDTA: No
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.
Clean Air Act (CAA) 112 No products were found.
Clean Air Act (CAA) 112 No products were found.
Clean Air Act (CAA) 112 No products were found.
SARA 311/312: Acute: No  Chronic: No  Fire: No  Pressure: No
Reactivity: No (Pure / Liquid)

STATE REGULATIONS:
None

PROP 65 - WARNING: NONE
THIS PRODUCT DOES NOT CONTAIN A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

RCRA 40 CFR: N/A.

INTERNATIONAL REGULATIONS:

Canadian Environmental Protection Act: All of the components of this product are included on the Canadian Domestic Substances List (DSL)

Canadian Workplace hazardous Materials Information System (WHMIS):
This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.
WHMIS Classification: None

European Inventory of Existing Chemical (EINECS): All of the componenets of this product are included on EINECS,

EU Classification:
EU Risk (R) and (S) Phrases:
R 36 IRRITATING TO EYES
R 38 IRRITATING TO SKIN
16. OTHER INFORMATION

LABEL REQUIREMENTS: WARNING! NUISANCE DUST COULD CAUSE COMBUSTIBLE DUST EXPLOSION.

Hazardous Material Information System (HMIS):

<table>
<thead>
<tr>
<th></th>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>A</td>
</tr>
</tbody>
</table>

National Fire Protection Association (NFPA):

1 1 1 0

NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

Protective Equipment: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES; CLASS B EXTINGUISHER.

Prepared By: Paul Eigbrett (MSDS Authoring Services)  Part Number: Oxy-20
Approved By: Oxy-dry Corporation  Environmental Health and Safety Department
Approval Date: April 20, 2009  Supersedes Date: January 2, 2007

ADDITIONAL INFORMATION:

The data in this Material Safety Data Sheet relates only to the specific material designated herein. It does not relate to use in combination with any other material or in any process.

This information given and the recommendations made herein apply to our product. Such are based on our research and on data from other reliable sources and are believed to be accurate, no guaranty of accuracy is made. It is the purchaser’s responsibility before using any product to verify this data under their own operating conditions and to determine whether the product is suitable for their purposes.

END OF MSDS