

**SECTION 1: IDENTIFICATION**

**Supplier:** Ammonia Nitrate Additives LLC  
211 Daybreak Rush  
Canton, Georgia  
30114

**Product Names and Synonyms:** OS5

**Intended Use:** As a commercial additive to explosives.

**Intended Users:** For use only under strictly controlled conditions and only by qualified personnel who are fully trained in the handling and use of this product.

**In Case of Emergency: Call 770-712-7281**

**SECTION 2: HAZARDS IDENTIFICATION**

**Hazard Classification – N/A**

**Physical Hazards:**

H205 – N/A  
H228 – Flammable solid, Hazard Category 2  
H272 – May intensify fire, Hazard Category 2

**Health Hazards:**

H304 – May be harmful if swallowed and enters airways, Hazard Category 1  
H315 – Causes skin irritation, Hazard Category 2  
H319 – Causes serious eye irritation, Hazard Category 2  
H332 – Harmful if inhaled, inhalation, Hazard Category 2  
H336 – May cause drowsiness or dizziness, Specific Target Organ Toxicity, single exposure, narcotic effects  
H373 – May cause damage to organs through prolonged or repeated exposure, Specific Target Organ Toxicity, repeated exposure, Hazard Category 2

**Signal Word:** Cautious

**Hazard Pictograms:** N/A

**Precautionary Statements:**

P210 – Keep away from heat, hot surfaces, open flames and other ignition sources. No smoking.  
P260 – Do not breathe dust or fumes.  
P250 – Do not subject to grinding, friction.  
P264 – Wash hands and other contact areas thoroughly after handling.  
P270 – Do not smoke when using this product.  
P273 – Avoid release to the environment.  
P280 – Wear eye protection, protective gloves recommended.  
P301+P310+P331– IF SWALLOWED: Get medical attention. DO NOT induce vomiting.  
P264+P302+P313+P332+P352+P362+P363 – IF ON SKIN: Wash contact area with soap and water. If irritation occurs, get medical attention. Take off contaminated clothing and wash before reuse.  
P304+P340 – IF INHALED: Remove person to fresh air. Keep at rest in a position comfortable for breathing.  
P305+P313+P337+P338+P351 – 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.  
P308+P313+P314 – If exposed or concerned or you do not feel well: Get medical attention.  
P370+P372+P273 – In case of fire: Extreme risk of explosion. Evacuate area. DO NOT fight fire when fire reaches explosives.  
P401+P403+P405 – Store in a ventilated space, in accordance with all applicable regulations.  
P501 – Dispose of contents/container in accordance with all applicable regulations.

**Unknown Acute Toxicity:** Not available

### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Oil Shale	No CAS Number	100%	H228 – Flammable solid H304 – May be harmful if swallowed and enters airways

### SECTION 4: FIRST AID MEASURES

#### First Aid

**Inhalation:** When symptoms occur: move to open air, keep at rest and in a position comfortable for breathing.

**Skin Contact:** Wash contact areas with soap and water.

**Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Get medical attention if irritation persists.

**Ingestion:** Rinse mouth. DO NOT induce vomiting. Get medical attention if needed.

#### Most Important Symptoms and Effects both Acute and Delayed

**Inhalation:** Prolonged exposure may cause irritation to the respiratory tract, symptoms include: sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing.

**Eye Contact:** May cause eye irritation. Symptoms may include redness, pain, swelling, itching, burning, tearing and blurred vision.

**Ingestion:** Signs and symptoms is nausea. Further manifestation is characterized by headache, dizziness, increased heart rate, fainting and possibly shock.

**Chronic Symptoms:** Prolonged exposure may cause irritation to the respiratory tract. May cause damage to organs through prolonged or repeated exposure.

**Indication of Any Immediate Medical Attention and Special Treatment Needed:** If exposed, concerned or you don't feel well, get medical attention.

### SECTION 5: FIRE FIGHTING MEASURES

#### Extinguishing Equipment

**Suitable Extinguishing Media:** ABC Fire Extinguisher

**Unsuitable Extinguishing Media:** Dry chemical, foams, steam and smothering devices.

**Special Hazards Arising From the Substance or Mixture:** Toxic Fumes

#### Advice for Firefighters

**Precautionary Measures:** It is recommended that the firefighters should be beware of the fumes.

**Firefighting Instructions:** When fighting the initial fire, firefighters should follow standard firefighting procedures for the materials involved.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

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

**General Measures:** Contact 770-712-7281. No smoking, open flames.

#### For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

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**Emergency Procedures:** Restrict the area from unnecessary personnel.

**For Emergency Personnel**

**Protective Equipment:** Provide cleanup crew with proper PPE.

**Emergency Procedures:** Stop the discharge if safe to do so. Ventilate area.

**Environmental Precautions:** Avoid release to the environment.

**Methods and Material for Containment and Cleaning Up:** Contact 770-712-7281

## SECTION 7: HANDLING AND STORAGE

**Precautions for Safe Handling**

**Additional Hazards When Processed:** Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained. A "hot work" program consistent with OSHA requirements at 29 CFR 1910.252 must be used when performing hot work on storage areas or containers.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with soap and water before eating, drinking, or smoking and again when leaving work. Wash contaminated clothing before reuse.

**Conditions for Safe Storage, Including Any Incompatibilities**

**Technical Measures:** Smoking, open flames are prohibited.

**Storage Conditions:** Storage areas should be inspected regularly by an individual trained to identify potential hazards and ensure that all safety and security control measures are being properly implemented.

**Incompatible Materials:** Avoid contamination with combustible or flammable materials.

**Special Rules on Packaging:** Packaging in accordance with USDOT or Transport Canada regulations.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

**Occupational exposure limits:** No exposure limits are assigned for this specific material.

**Appropriate Engineering Controls:** Product should be handled and used under strictly controlled conditions.

**Personal Protective Equipment**

**Hand Protection:** Chemically resistant gloves are recommended.

**Eye Protection:** Safety glasses with side shields or safety goggles.

**Respiratory Protection:** Approved respiratory protection should be worn when recommended by a risk assessment or if irritation is experienced.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Appearance (physical state, color, etc.):** Black cubes

**Upper/lower flammability or explosive limits:** N/A

**Odor:** Slight carbon odor

**Vapor pressure:** N/A

**Odor threshold:** N/A

**Vapor density:** N/A

**pH:** N/A

**Relative density:** 2.04

**Melting point/freezing point:** N/A

**Solubility:** Insoluble in water

**Initial boiling point and boiling range:** N/A

**Flash point:** N/A

**Evaporation rate:** N/A

**Flammability:** N/A

**Partition coefficient: n-octanol/water:** N/A

**Auto-ignition temperature:** N/A

**Decomposition temperature:** N/A

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**Viscosity:** N/A

### SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Non-reactive under normal conditions of transportation, storage, handling and use.

**Chemical Stability:** Stable under normal conditions of transportation, storage, handling and use.

**Possibility of Hazardous Reactions:** Stable under normal

**Conditions to Avoid:** Avoid extreme exposure to heat, sources of ignition and open flame.

**Incompatible Materials:** N/A

**Hazardous Decomposition Products:** No unusual fumes or decomposition products expected.

### SECTION 11: TOXICOLOGY INFORMATION

#### Information on Toxicological Effects

**Acute Toxicity:** Not classified

**LD50 and LC50 Data:** Not available for product

**Skin Corrosion/Irritation:** May cause skin irritation

**Eye Damage/Irritation:** May cause eye irritation

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Teratogenicity:** Not available

**Carcinogenicity:** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** May cause drowsiness or dizziness

**Specific Target Organ Toxicity (Repeated Exposure):** May cause damage to organs (respiratory tract) through prolonged or repeated exposure.

**Aspiration Hazard:** Not classified

**Symptoms/Injuries after Inhalation:** Harmful if inhaled, Symptoms may include headache, dizziness, nausea and a loss of coordination.

**Symptoms/Injuries after Skin Contact:** May cause mild skin irritation. Symptoms may include: redness, pain, swelling, itching, burning, dryness and dermatitis. May cause a more severe or allergic reaction in sensitive individuals.

**Symptoms/Injuries after Eye Contact:** May cause serious eye irritation. Symptoms may include redness, pain, swelling, itching, burning, tearing and blurred vision.

**Symptoms/Injuries after Ingestion:** Burning sensation. Abdominal pain. Abdominal cramps. Vomiting.

**Chronic Symptoms:** Although none are expected under normal conditions, prolonged or repeated inhalation exposure may damage respiratory tract.

### SECTION 12: ECOLOGICAL INFORMATION

**Toxicity Ecology:** Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

**Persistence and Degradability:** Not available

**Bio accumulative Potential:** Not available

**Mobility in Soil:** Not available

**Other Adverse Effects:** Not available

### SECTION 13: DISPOSAL CONSIDERATIONS

**Disposal Methods:** Contact 770-712-7281

### SECTION 14: TRANSPORTATION INFORMATION

DOT Classifications: N/A  
Shipping Name: Oil Shale

### SECTION 15: REGULATORY INFORMATION

US Federal Regulations:  
Oil Shale is non-classified

### SECTION 16: OTHER INFORMATION

**Preparation date:** 12/01/2015

**Revision date:** 12/01/2015

**Changes made to prior versions:** N/A