AAT Bioquest, Inc.
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# Safety Data Sheet

## Section 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

| | |
|---|---|
| Product name: | Cal-520® NHS Ester |
| Product number: | 20609 |

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

| | |
|---|---|
| Identified uses: | For research use only. Not intended for diagnostic or therapeutic use. |

### 1.3 Details of the supplier of the datasheet

| | |
|---|---|
| Company: | AAT Bioquest, Inc. |
| Address: | 5775 W Las Positas Blvd, Pleasanton, CA 94588 |
| Telephone: | (408)-733-1055 |
| Fax: | (408)-733-1304 |
| Email: | info@aatbio.com |

### 1.4 Emergency telephone number

| | |
|---|---|
| Chemtrec (Within USA): | 1-(800)-424-9300 |
| Chemtrec (Outside USA): | 1-(703)-527-3887 |

## Section 2: Hazard identifications

### 2.1 Classification of the substance or mixture

| | |
|---|---|
| Serious eye damage/eye irritation: | Not a dangerous substance or mixture according to the Globally Harmonized System (GHS) |

### 2.2 Label elements

| | |
|---|---|
| Signal word: | Not applicable |
| Hazard statements: | None |
| Symbols/Pictograms: | None |
| Precautionary statements - prevention: | Wash hands thoroughly after handling |
| Precautionary statements - response: | IF exposed concerned: Get medical advice/attention |
| Precautionary statements - storage: | None |
| Precautionary statements - disposal: | None |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

| | |
|---|---|
| Hazards not otherwise classified (HNOC): | None |

### 2.4 Other information

| | |
|---|---|
| Other hazards: | None |

## Section 3: Composition/information on ingredients

### 3.1 Substances

| | |
|---|---|
| Chemical name: | Cal-520® NHS Ester |
| CAS No.: | |
| Molecular weight: | 1048.9 |
| Formula: | |

## Section 4: First aid measures

### 4.1 First-aid measures

| | |
|---|---|
| General advice: | If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on the skin, or on clothing. |
| Eye contact: | Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician. |
| Skin contact: | Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water. Immediate medical attention is not required. |
| Inhalation: | Remove to fresh air If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use a barrier to give mouth-to-mouth resuscitation. Artificial respiration and/or oxygen may be necessary. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician. |
| Ingestion: | Do NOT induce vomiting. Rinse/clean mouth with water and drink plenty of water afterward. Never give anything by mouth to an unconscious person. Consult a physician. |
| Self-protection of the first aider: | Use personal protective equipment. |

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

| | |
|---|---|
| Symptoms: | No information available. |

### 4.3 Indication of any immediate medical attention and special treatment needed

| | |
|---|---|
| Note to physicians: | Treat symptomatically. |

## Section 5: Firefighting measures

### 5.1 Suitable extinguishing media

| | |
|---|---|
| Suitable extinguishing media: | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media: | No information available. |

### 5.2 Specific hazards arising from the chemical

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|---|---|
| Specific hazards arising from the chemical: | In the event of a fire and/or explosion, do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can lead to the release of irritating and toxic gases and vapors. |
| Hazardous combustion products: | Carbon oxides, sulfur oxides |

### 5.3 Explosion data

| | |
|---|---|
| Sensitivity to mechanical impact: | No information available. |
| Sensitivity to static discharge: | No information available. |

### 5.4 Protective equipment and precautions for firefighters

| | |
|---|---|
| Protective equipment and precautions for firefighters: | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. |

## Section 6: Accidental release measures

### 6.1 Personal precautions, protective equipment, and emergency procedures

| | |
|---|---|
| Personal precautions: | Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. |

### 6.2 Environmental precautions

| | |
|---|---|
| Environmental precautions: | Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information. |

### 6.3 Methods and material for containment and cleaning up

| | |
|---|---|
| Methods for containment: | Prevent further leakage or spillage if safe to do so. Cover powder spill with a plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal. |
| Methods for cleaning up: | Use personal protective equipment as required. Cover powder spill with a plastic sheet or tarp to minimize spreading and keep the powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surfaces thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges. |

## Section 7: Handling and storage

### 7.1 Precautions for safe handling

| | |
|---|---|
| Advice on safe handling: | Avoid contact with skin, eyes, or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation. |

### 7.2 Conditions for safe storage, including any incompatibilities

| | |
|---|---|
| Storage conditions: | Keep the container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. May form explosive peroxides. |
| Incompatible materials: | None known based on information supplied. |

## Section 8: Experimental controls/personal protection

### 8.1 Control parameters

| | |
|---|---|
| Exposure guidelines: | This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies. |

### 8.2 Appropriate engineering controls

| | |
|---|---|
| Engineering controls: | Showers, eyewash stations, ventilation systems |

### 8.3 Individual protection measures, such as personal protective equipment

| | |
|---|---|
| Eye/face protection: | Tight sealing safety goggles. Face protection shield. |
| Skin and body protection: | Wear protective gloves and protective clothing. |
| Respiratory protection: | If exposure limits are exceeded, or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |
| General hygiene considerations: | When using, do not eat, drink or smoke. Regular cleaning of equipment, work area, and clothing is recommended. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling. Keep away from food, drink, and animal feeding stuff. |

## Section 9: Physical and chemical properties

| | |
|---|---|
| Physical state: | solid |
| Solubility in water: | low |
| Appearance: | No information available |
| Odor/odor threshold: | No information available |
| pH: | No information available |
| Melting point/freezing point: | No information available |
| Boiling point: | No information available |
| Flashpoint: | No information available |
| Liquid density: | No information available |
| Evaporation rate: | No information available |
| Upper flammability limit: | No information available |
| Lower flammability limit: | No information available |
| Vapor pressure: | No information available |
| Vapor density: | No information available |
| Specific gravity: | No information available |
| Water solubility: | No information available |
| Solubility in other solvents: | No information available |
| Partition coefficient: | No information available |
| Autoignition temperature: | No information available |
| Decomposition temperature: | No information available |
| Viscosity: | No information available |

| | |
|---|---|
| Explosive properties: | No information available |
| Oxidizing properties: | No information available |

## Section 10: Stability and reactivity

| | |
|---|---|
| Reactivity: | No data available |
| Chemical stability: | May form explosive peroxides |
| Possibility of hazardous reactions: | None under normal processing |
| Hazardous polymerization: | No information available |
| Conditions to avoid: | Extremes of temperatures and direct sunlight |
| Incompatible materials: | Strong oxidizing agents |
| Hazardous decomposition products: | Carbon oxides |

## Section 11: Toxicological information

### 11.1 Information on likely routes of exposure

| | |
|---|---|
| Inhalation: | No data available |
| Eye contact: | No data available |
| Skin contact: | No data available |
| Ingestion: | No data available |

### 11.2 Information on toxicological effects

| | |
|---|---|
| Symptoms: | No information available |

### 11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|---|---|
| Chronic toxicity: | Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure. |

### 11.4 Numerical measures of toxicity - product information

| | |
|---|---|
| Unknown acute toxicity: | No information available |

## Section 12: Ecological information

| | |
|---|---|
| Ecotoxicity: | May cause long-lasting harmful effects to aquatic life. |
| Persistence and degradability: | No information available |
| Bioaccumulation: | No information available |
| Mobility: | No information available |

## Section 13: Disposal consideration

| | |
|---|---|
| Disposal of wastes: | Disposal should be in accordance with applicable regional, national and local laws and regulations. |
| Contaminated packaging: | Do not reuse container |
| Other information: | Waste codes should be assigned by the user based on the application for which the product was used. |

## Section 14: Transport information

| | |
|---|---|
| DOT: | Not regulated |
| IMDG: | Not regulated |
| IATA: | Not regulated |

## Section 15: Regulatory information

### 15.1 International Inventories

| | |
|---|---|
| US Toxic Substances Control Act (TSCA): | Not listed |
| Canada (DSL/NDSL): | Not listed |
| Europe (EINECS/ELINCS/NLP): | Not listed |
| Australia (AICS): | Not listed |
| South Korea (KECL): | Not listed |
| China (IECSC): | Not listed |
| Japan (ENCS): | Not listed |
| Phillipines (PICCS): | Not listed |

### 15.2 US Federal Regulations

| | |
|---|---|
| SARA 313: | Not listed |
| SARA 311/312 components: | Not listed |
| CWA (Clean Water Act): | This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR122.21 and 40CFR 122.42). |

### 15.3 US State Regulations

| | |
|---|---|
| California Proposition 65: | Not listed |
| Massachusetts-RTK: | Not listed |
| New Jersey-RTK: | Not listed |
| Pennsylvania-RTK: | Not listed |
| U.S. State Right-To-Know Regulations: | This product does not contain any substances regulated by state right-to-know regulations. |

## Section 16: Other information

### 16.1 HMIS

| | |
|---|---|
| Health hazards: | - |
| Flammability: | - |
| Reactivity: | - |
| Personal protection: | - |

### 16.2 NFPA

| | |
|---|---|
| Health hazards: | - |
| Flammability: | - |
| Stability: | - |
| Physical and chemical properties: | - |