

## 1. Identification

**Product identifier**                      **ACTIVATE® DA**  
**Other means of identification**        None.  
**Recommended use**                      Organic acid combination to improve gut health and production parameters.  
**Recommended restrictions**            None known.

### Manufacturer/Importer/Supplier/Distributor information

**Company name**                      Novus International, Inc.  
**Address**                                20 Research Park Drive  
     St. Charles, MO 63304  
     United States

**Telephone**                            +1 (314) 576-8434  
     +1 (800) 568-0088

**E-mail**                                Not available.

**Contact person**                      Not available.

### Emergency phone number

**3E Global Incident  
Response Hotline:**  
**US/Canada/Mexico**                866 519 4752 (Toll free)

    (+)1 760 476 3962

**Europe**                                (+)1 760 476 3961

**Asia Pacific**                        (+)1 760 476 3960

**Middle East/Africa**                (+)1 760 476 3959

**Contract Number:**                334040

## 2. Hazard(s) identification

**Physical hazards**                      Not classified.

|                       |  |                    |
|-----------------------|--|--------------------|
| <b>Health hazards</b> | Skin corrosion/irritation                                      | Category 2         |
|                       | Serious eye damage/eye irritation                              | Category 1         |
|                       | Specific target organ toxicity, repeated exposure (inhalation) | Category 1 (Lungs) |

**OSHA defined hazards**                Not classified.

### Label elements



**Signal word**                            Danger

**Hazard statement**                      Causes skin irritation. Causes serious eye damage. Causes damage to organs (Lungs) through prolonged or repeated exposure by inhalation.

### Precautionary statement

**Prevention**                            Do not breathe dust. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear eye protection/face protection. Wear protective gloves.

**Response**                              If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

|  |   |
|--|---|
| <b>Storage</b>                                   | Store away from incompatible materials.   |
| <b>Disposal</b>                                  | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| <b>Hazard(s) not otherwise classified (HNOC)</b> | None known.   |
| <b>Supplemental information</b>                  | None.   |

### 3. Composition/information on ingredients

#### Mixtures

| Chemical name                             | CAS number  | %     |
|---|-------------|-------|
| FUMARIC ACID                              | 110-17-8    | 38    |
| Calcium bis (Methionine hydroxy analogue) | 4857-44-7   | 33    |
| BENZOIC ACID                              | 65-85-0     | 18    |
| Amorphous silica                          | 112926-00-8 | 10.27 |
| MINERAL OIL                               | 8042-47-5   | 0.73  |

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

|   |  |
|---|--|
| <b>Inhalation</b>   | Move to fresh air. Call a physician if symptoms develop or persist.  |
| <b>Skin contact</b>   | Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.  |
| <b>Eye contact</b>  | Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.   |
| <b>Ingestion</b>  | Rinse mouth. Get medical attention if symptoms occur.  |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Dusts may irritate the respiratory tract, skin and eyes. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects. |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.   |
| <b>General information</b>  | If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.  |

### 5. Fire-fighting measures

|  |   |
|--|---|
| <b>Suitable extinguishing media</b>                                  | Water spray. Foam. Powder. Carbon dioxide (CO <sub>2</sub> ).   |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.  |
| <b>Specific hazards arising from the chemical</b>                    | During fire, gases hazardous to health may be formed.   |
| <b>Special protective equipment and precautions for firefighters</b> | Self-contained breathing apparatus and full protective clothing must be worn in case of fire.   |
| <b>Fire fighting equipment/instructions</b>                          | Use water spray to cool unopened containers.  |
| <b>Specific methods</b>  | Use standard firefighting procedures and consider the hazards of other involved materials.  |
| <b>General fire hazards</b>  | Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. |

### 6. Accidental release measures

|  |   |
|--|---|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |
|--|---|

## Methods and materials for containment and cleaning up

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect dust using a vacuum cleaner equipped with HEPA filter. This product is miscible in water. Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

## Environmental precautions

## 7. Handling and storage

### Precautions for safe handling

Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Do not get this material in contact with eyes. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

### Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

US. OSHA Table Z-3 (29 CFR 1910.1000)

| Components                         | Type | Value                 |
|------------------------------------|------|-----------------------|
| Amorphous silica (CAS 112926-00-8) | TWA  | 0.8 mg/m <sup>3</sup> |
|                                    |      | 20 mppcf              |

### Biological limit values

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

### Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. Eye wash facilities and emergency shower must be available when handling this product.

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

#### Eye/face protection

Wear approved safety goggles.

#### Skin protection

##### Hand protection

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

#### Skin protection

##### Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

#### Respiratory protection

Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Chemical respirator with organic vapor cartridge, full facepiece, dust and mist filter.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### 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

Solid.

#### Form

Powder.

|   |                    |
|---|--------------------|
| <b>Color</b>  | Light brown.       |
| <b>Odor</b>   | Characteristic.    |
| <b>Odor threshold</b>                               | Not available.     |
| <b>pH</b>   | 2.9 (1% solution)  |
| <b>Melting point/freezing point</b>                 | Not available.     |
| <b>Initial boiling point and boiling range</b>      | Not available.     |
| <b>Flash point</b>                                  | Not available.     |
| <b>Evaporation rate</b>                             | Not available.     |
| <b>Flammability (solid, gas)</b>                    | Not available.     |
| <b>Upper/lower flammability or explosive limits</b> |                    |
| <b>Flammability limit - lower (%)</b>               | Not available.     |
| <b>Flammability limit - upper (%)</b>               | Not available.     |
| <b>Explosive limit - lower (%)</b>                  | Not available.     |
| <b>Explosive limit - upper (%)</b>                  | Not available.     |
| <b>Vapor pressure</b>                               | Not available.     |
| <b>Vapor density</b>                                | Not available.     |
| <b>Relative density</b>                             | Not available.     |
| <b>Solubility(ies)</b>                              |                    |
| <b>Solubility (water)</b>                           | 1 % at 25°C        |
| <b>Partition coefficient (n-octanol/water)</b>      | Not available.     |
| <b>Auto-ignition temperature</b>                    | Not available.     |
| <b>Decomposition temperature</b>                    | Not available.     |
| <b>Viscosity</b>                                    | Not available.     |
| <b>Other information</b>                            |                    |
| <b>Bulk density</b>                                 | 1 g/cc at 25°C     |
| <b>Explosive properties</b>                         | No data available. |
| <b>Oxidizing properties</b>                         | No data available. |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.                                   |
| <b>Conditions to avoid</b>                | Contact with incompatible materials. Minimize dust generation and accumulation.               |
| <b>Incompatible materials</b>             | Strong bases. Strong oxidizing agents.  |
| <b>Hazardous decomposition products</b>   | Carbon oxides.  |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause damage to organs through prolonged or repeated exposure by inhalation. Dust may irritate respiratory system. |
| <b>Skin contact</b> | Causes skin irritation.  |
| <b>Eye contact</b>  | Causes serious eye damage.   |
| <b>Ingestion</b>    | May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.    |

|   |  |
|---|--|
| <b>Symptoms related to the physical, chemical and toxicological characteristics</b> | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Dusts may irritate the respiratory tract, skin and eyes. Skin irritation. May cause redness and pain. |
|---|--|

## Information on toxicological effects

**Acute toxicity** Not expected to be acutely toxic.

**Skin corrosion/irritation** Causes skin irritation.

**Serious eye damage/eye irritation** Causes serious eye damage.

## Respiratory or skin sensitization

**Respiratory sensitization** Not classified.

**Skin sensitization** Not classified.

**Germ cell mutagenicity** Not classified.

**Carcinogenicity** Not classified.

## IARC Monographs. Overall Evaluation of Carcinogenicity

Amorphous silica (CAS 112926-00-8) 3 Not classifiable as to carcinogenicity to humans.

## NTP Report on Carcinogens

Not listed.

## OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

**Reproductive toxicity** Not classified.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Causes damage to organs (Lungs) through prolonged or repeated exposure.

**Aspiration hazard** Not classified.

**Chronic effects** Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Persistence and degradability** No data is available on the degradability of this product.

## Bioaccumulative potential

### Partition coefficient n-octanol / water (log Kow)

BENZOIC ACID (CAS 65-85-0) 1.87

FUMARIC ACID (CAS 110-17-8) 0.46

**Mobility in soil** The product is slightly soluble in water.

**Other adverse effects** None known.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** 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 applicable.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

BENZOIC ACID (CAS 65-85-0) LISTED

FUMARIC ACID (CAS 110-17-8) LISTED

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

### US state regulations

#### US. Massachusetts RTK - Substance List

Amorphous silica (CAS 112926-00-8)

BENZOIC ACID (CAS 65-85-0)

FUMARIC ACID (CAS 110-17-8)

#### US. New Jersey Worker and Community Right-to-Know Act

Amorphous silica (CAS 112926-00-8)

BENZOIC ACID (CAS 65-85-0)

FUMARIC ACID (CAS 110-17-8)

#### US. Pennsylvania Worker and Community Right-to-Know Law

BENZOIC ACID (CAS 65-85-0)

FUMARIC ACID (CAS 110-17-8)

#### US. Rhode Island RTK

BENZOIC ACID (CAS 65-85-0)

FUMARIC ACID (CAS 110-17-8)

#### US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

### International Inventories

| Country(s) or region | Inventory name                                     | On inventory (yes/no)* |
|----------------------|--|------------------------|
| Australia            | Australian Inventory of Chemical Substances (AICS) | No                     |
| Canada               | Domestic Substances List (DSL)                     | Yes                    |

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | No                     |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes                    |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)  | No                     |
| New Zealand                 | New Zealand Inventory  | No                     |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | Yes                    |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | No                     |

\*A "Yes" indicates this product complies 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

**Issue date** 02-December-2015

**Revision date** -

**Version #** 01

**NFPA ratings**



### Disclaimer

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