

**Ammonium sulfate****09979-100G**

Version 1.1

Revision Date 01/24/2022

Print Date 05/11/2023

**SECTION 1. IDENTIFICATION**

Product name : Ammonium sulfate

Number : 000000020416

Product Use Description : Laboratory chemicals

Manufacturer or supplier's details : Honeywell International Inc.  
1953 South Harvey Street  
Muskegon, MI 49442

For more information call : 1-800-368-0050  
+1-231-726-3171(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**  
: **Transportation (CHEMTREC): 1-800-424-9300 or**  
: **+1-703-527-3887**  
:  
: (24 hours/day, 7 days/week)

**SECTION 2. HAZARDS IDENTIFICATION****Emergency Overview**

Form : solid

Color : colourless

Odor : odourless

**Classification of the substance or mixture**

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS).

Precautionary statements : **Prevention:**  
Use personal protective equipment as required.

Hazards not otherwise : Repeated or prolonged exposure may irritate eyes, skin and

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classified

respiratory system.

**Carcinogenicity**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**Formula :  $(\text{NH}_4)_2\text{SO}_4$ 

Chemical nature : Substance

| Chemical name    | CAS-No.   | Concentration |
|------------------|-----------|---------------|
| Ammonium sulfate | 7783-20-2 | 100.00 %      |

**SECTION 4. FIRST AID MEASURES**

Inhalation : Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Use oxygen as required, provided a qualified operator is present. Call a physician.

Skin contact : Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Call a physician if irritation develops or persists.

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician if irritation develops or persists.

Ingestion : Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician.

**Notes to physician**

Most important : No information available.

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symptoms/effects, acute and  
delayed

Indication of immediate : Treat symptomatically.  
medical attention and  
special treatment needed, if  
necessary

**SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media : Water spray  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry powder

Specific hazards during : In case of fire hazardous decomposition products may be  
firefighting produced such as:  
Ammonia  
Sulphur oxides  
Nitrogen oxides (NO<sub>x</sub>)

Special protective equipment : Wear self-contained breathing apparatus and protective suit.  
for firefighters

Further information : Use extinguishing measures that are appropriate to local  
circumstances and the surrounding environment.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, : Evacuate personnel to safe areas.  
protective equipment and : Wear personal protective equipment. Unprotected persons  
emergency procedures must be kept away.  
Ensure adequate ventilation.  
Avoid breathing dust.

Environmental precautions : Prevent further leakage or spillage if safe to do so.  
Do not let product enter drains.  
Discharge into the environment must be avoided.  
Do not flush into surface water or sanitary sewer system.

Methods and materials for : Use mechanical handling equipment.  
containment and cleaning : Avoid dust formation.  
up : Sweep up and shovel into suitable containers for disposal.

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**SECTION 7. HANDLING AND STORAGE****Handling**

Precautions for safe handling : Wear personal protective equipment.  
Use only in well-ventilated areas.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

**Storage**

Conditions for safe storage, including any incompatibilities : Store in original container.  
Keep containers tightly closed in a dry, cool and well-ventilated place.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.  
Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.  
Avoid breathing dust.

Engineering measures : Use with local exhaust ventilation.

Eye protection : Safety glasses with side-shields

Hand protection : Latex gloves  
Gloves must be inspected prior to use.  
Replace when worn.

Skin and body protection : Protective suit

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Hygiene measures : When using, do not eat, drink or smoke.  
Wash hands before breaks and at the end of workday.  
Keep working clothes separately.  
Remove and wash contaminated clothing before re-use.

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Do not swallow.  
Avoid breathing dust.  
Avoid contact with skin, eyes and clothing.

**Exposure Guidelines**

Contains no substances with occupational exposure limit values.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

|                               |                                 |
|-------------------------------|---------------------------------|
| Physical state                | : solid                         |
| Color                         | : colourless                    |
| Odor                          | : odourless                     |
| Odor threshold                | : Note: No data available       |
| pH                            | : 5.0 - 6.0 at , 20 °C          |
| Melting point (decomposition) | : 350 °C                        |
| Boiling point/boiling range   | : Note: No data available       |
| Flash point                   | : Note: Not applicable          |
| Evaporation rate              | : Note: No data available       |
| Flammability                  | : The product is not flammable. |
| Lower explosion limit         | : Note: Not applicable          |
| Upper explosion limit         | : Note: Not applicable          |
| Vapor pressure                | : Note: No data available       |

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|                                           |                                             |
|-------------------------------------------|---------------------------------------------|
| Vapor density                             | : Note: No data available                   |
| Density                                   | : ca. 1.760 g/cm <sup>3</sup> at 20 °C      |
| Water solubility                          | : 754.0 g/l at 20 °C                        |
| Partition coefficient:<br>n-octanol/water | : log Pow: -5.1                             |
| Ignition temperature                      | : Note: Not applicable                      |
| Decomposition temperature                 | : 350 °C<br>Note: Decomposition temperature |
| Viscosity, dynamic                        | : Note: No data available                   |
| Viscosity, kinematic                      | : Note: No data available                   |
| Oxidizing properties                      | : Note: Not applicable                      |
| Molecular weight                          | : 132.14 g/mol                              |
| Bulk density                              | : ca. 1,200 kg/m <sup>3</sup>               |

**SECTION 10. STABILITY AND REACTIVITY**

|                                       |                                            |
|---------------------------------------|--------------------------------------------|
| Reactivity                            | : Not classified as a reactivity hazard.   |
| Chemical stability                    | : Stable under normal conditions.          |
| Possibility of hazardous<br>reactions | : Hazardous polymerisation does not occur. |
| Conditions to avoid                   | : Avoid dust formation.                    |

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- |                                  |                                                                                                                             |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Incompatible materials           | : Reactions with strong alkalis.<br>Strong oxidizing agents                                                                 |
| Hazardous decomposition products | : In case of fire hazardous decomposition products may be produced such as:<br>Ammonia<br>Sulphur oxides<br>nitrogen oxides |

**SECTION 11. TOXICOLOGICAL INFORMATION**

- |                           |                                                                                                |
|---------------------------|------------------------------------------------------------------------------------------------|
| Acute oral toxicity       | : LD50: 4,250 mg/kg<br>Species: Rat<br>Method: OECD Test Guideline 401                         |
| Acute inhalation toxicity | : Note: Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data) |
| Acute dermal toxicity     | : LD50: > 2,000 mg/kg<br>Species: Rat<br>Method: OECD Test Guideline 434                       |
| Skin irritation           | : Species: Rabbit<br>Classification: non-irritant                                              |
| Eye irritation            | : Species: Rabbit<br>Classification: non-irritant                                              |
| Sensitisation             | : Result: Not a skin sensitizer.                                                               |
| Ammonium sulfate          | : Note: In vitro tests did not show mutagenic effects                                          |

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**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity effects**

Toxicity to fish : LC50: 53 mg/l  
Exposure time: 96 h  
Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other : LC50: 169 mg/l  
aquatic invertebrates Exposure time: 48 h  
Species: Daphnia (water flea)

Toxicity to algae : Note: Conclusive and supporting classification (Ref: REACH  
Dossier - ECHA disseminated data)

**Elimination information (persistence and degradability)**

Bioaccumulation : Note: Not applicable

Biodegradability : Note: Not applicable

**Further information on ecology****SECTION 13. DISPOSAL CONSIDERATIONS**

Disposal methods : Observe all Federal, State, and Local Environmental  
regulations.

**SECTION 14. TRANSPORT INFORMATION**

**DOT** Not dangerous goods

**TDG** Not dangerous goods

**IATA** Not dangerous goods

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**IMDG** Not dangerous goods**SECTION 15. REGULATORY INFORMATION****Inventories**US. Toxic Substances : On TSCA Inventory  
Control ActAustralia. Industrial : On the inventory, or in compliance with the inventory  
Chemicals Act (AICC), as  
amendedCanada. Canadian : All components of this product are on the Canadian DSL  
Environmental Protection  
Act (CEPA). Domestic  
Substances List (DSL)

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Existing Chemicals : On the inventory, or in compliance with the inventory  
Inventory (KECI)Philippines. Inventory of : On the inventory, or in compliance with the inventory  
Chemicals and Chemical  
Substances (PICCS)China. Inventory of Existing : On the inventory, or in compliance with the inventory  
Chemical Substances  
(IECSC)New Zealand. Inventory of : On the inventory, or in compliance with the inventory  
Chemicals (NZIoC), as  
published by ERMA New  
Zealand**National regulatory information****SARA 302 Components** : No chemicals in this material are subject to the reporting  
requirements of SARA Title III, Section 302.

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|                             |   |                                                                                                                                          |
|-----------------------------|---|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SARA 313 Components</b>  | : | The following components are subject to reporting levels established by SARA Title III, Section 313:                                     |
|                             | : | Ammonium sulfate 7783-20-2                                                                                                               |
| <b>SARA 311/312 Hazards</b> | : | Acute Health Hazard                                                                                                                      |
| <b>California Prop. 65</b>  | : | This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm. |
| <b>Massachusetts RTK</b>    | : | Ammonium sulfate 7783-20-2                                                                                                               |
| <b>New Jersey RTK</b>       | : | Ammonium sulfate 7783-20-2                                                                                                               |
| <b>Pennsylvania RTK</b>     | : | Ammonium sulfate 7783-20-2                                                                                                               |

**SECTION 16. OTHER INFORMATION**

|                 |                 |             |
|-----------------|-----------------|-------------|
|                 | <b>HMIS III</b> | <b>NFPA</b> |
| Health hazard   | : 1             | 1           |
| Flammability    | : 0             | 0           |
| Physical Hazard | : 0             |             |
| Instability     | :               | 0           |

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

**Further information**

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 a 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. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

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Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group