

SULF-N® Ammonium Sulfate**000000011568**

Version 2.2

Revision Date 10/17/2014

Print Date 05/30/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : SULF-N® Ammonium Sulfate

MSDS Number : 000000011568

Product Use Description : Fertilizer

Manufacturer or supplier's details : Honeywell International Inc.
101 Columbia Road
Morristown, NJ 07962-1057

For more information call : 1-877-370-7007
+1-804-541-5000
(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 : granules

Color : colourless to brown

Odor : odourless

Classification of the substance or mixture

Not a hazardous substance or mixture.

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

SULF-N® Ammonium Sulfate**000000011568**

Version 2.2

Revision Date 10/17/2014

Print Date 05/30/2015

Hazards not otherwise classified : Product dust may be irritating to eyes, skin and 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

Chemical nature : Mixture

Chemical Name	CAS-No.	Concentration
Ammonium sulfate	7783-20-2	>98.50 %

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. Get medical attention if irritation develops and persists.
- 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. Get medical attention if irritation develops and persists.
- Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation develops and persists.
- Ingestion : Induce vomiting, but only if victim is fully conscious. Never give anything by mouth to an unconscious person. Drink 1 or 2 glasses of water. Call a physician.

Notes to physician

SULF-N® Ammonium Sulfate**00000011568**

Version 2.2

Revision Date 10/17/2014

Print Date 05/30/2015

Treatment : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards during firefighting : Container may rupture on heating.
Cool closed containers exposed to fire with water spray.
Do not allow run-off from fire fighting to enter drains or water courses.
Explosive reactions with oxidising agents such as potassium chlorate and/or peroxides.
In case of fire hazardous decomposition products may be produced such as:
Sulphur oxides
Ammonia
Carbon monoxide
Carbon dioxide (CO₂)

Special protective equipment for firefighters : In the event of fire and/or explosion do not breathe fumes.
In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit.**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions : Wear personal protective equipment. Unprotected persons must be kept away.
Evacuate personnel to safe areas.
Keep people away from and upwind of spill/leak.
Remove all sources of ignition.
Provide adequate ventilation.
Avoid dust formation.
Avoid breathing dust.
Avoid contact with skin, eyes and clothing.

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

SULF-N® Ammonium Sulfate**000000011568**

Version 2.2

Revision Date 10/17/2014

Print Date 05/30/2015

Methods for cleaning up : Use mechanical handling equipment.
Clean contaminated surface thoroughly.
Pick up and arrange disposal without creating dust.
Use a suitable vacuum cleaner.

SECTION 7. HANDLING AND STORAGE**Handling**

Handling : Handle with care.
Wear personal protective equipment.
Use only in well-ventilated areas.
Avoid dust formation.
Provide exhaust ventilation if dust is formed.
Dust must be extracted directly at the point of origin.
Avoid breathing dust.
Avoid contact with skin, eyes and clothing.

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

Storage

Requirements for storage areas and containers : Keep containers tightly closed in a dry, cool and well-ventilated place.
Containers should be protected against falling down.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Store away from incompatible substances.

Further information on storage conditions : Ensure adequate ventilation.

Advice on common storage : Do not store together with:
Oxidizing agents

Storage temperature : < 280 °C (< 536 °F)

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective measures : Ensure that eyewash stations and safety showers are close to

SULF-N® Ammonium Sulfate**00000011568**

Version 2.2

Revision Date 10/17/2014

Print Date 05/30/2015

- the workstation location.
Avoid dust formation.
Avoid breathing dust.
Avoid contact with skin, eyes and clothing.
Wash thoroughly after handling.
- Engineering measures : Provide exhaust ventilation if dust is formed.
Dust must be extracted directly at the point of origin.
Apply technical measures to comply with the occupational exposure limits.
- Eye protection : Do not wear contact lenses.
Wear as appropriate:
Safety glasses with side-shields
- Hand protection : Gloves
Gloves must be inspected prior to use.
Replace when worn.
- Skin and body protection : Long sleeved clothing
- Respiratory protection : Use NIOSH approved respiratory protection.
- Hygiene measures : Wash hands before breaks and at the end of workday.
Remove and wash contaminated clothing before re-use.
Keep working clothes separately.

Exposure Guidelines

Contains no substances with occupational exposure limit values.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state : granules
- Color : colourless to brown
- Odor : odourless
- pH : 5.5
- Melting point/freezing point : Note: no data available
- Boiling point/boiling range : Note: Not applicable

SULF-N® Ammonium Sulfate**00000011568**

Version 2.2

Revision Date 10/17/2014

Print Date 05/30/2015

Flash point : Note: Not applicable

Lower explosion limit : Note: Not applicable

Upper explosion limit : Note: Not applicable

Vapor pressure : Note: Not applicable

Density : 1.77 g/cm³

Water solubility : 410 - 750 g/l at 20 - 25 °C

Ignition temperature : Note: Not applicable

Molecular weight : 132.14 g/mol

SECTION 10. STABILITY AND REACTIVITY

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Hazardous polymerisation does not occur.

Incompatible materials to avoid : oxidising substances
Zinc
Copper
Copper-bearing materials

SULF-N® Ammonium Sulfate**000000011568**

Version 2.2

Revision Date 10/17/2014

Print Date 05/30/2015

Hazardous decomposition products : Sulphur oxides
Ammonia
Carbon dioxide (CO₂)
Carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50: 3,000 mg/kg
Species: Rat

Acute dermal toxicity : LD50: > 2,000 mg/kg
Species: Rat

Skin irritation : Species: Rabbit
Result: slight irritation

Eye irritation : Species: Rabbit
Result: slight irritation

Genotoxicity in vitro : Note: In vitro tests did not show mutagenic effects

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity effects**

Toxicity to fish : LC50: > 460 mg/l
Exposure time: 96 h
Species: Leuciscus idus (Golden orfe)

Toxicity to daphnia and other aquatic invertebrates : LC50: 423 mg/l
Exposure time: 25 h
Species: Daphnia magna (Water flea)

SULF-N® Ammonium Sulfate**000000011568**

Version 2.2

Revision Date 10/17/2014

Print Date 05/30/2015

: LC50: 433 mg/l
Exposure time: 50 h
Species: Daphnia magna (Water flea)

: LC50: 292 mg/l
Exposure time: 100 h
Species: Daphnia magna (Water flea)

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

IMDG Not dangerous goods

SECTION 15. REGULATORY INFORMATION**Inventories**

US. Toxic Substances Control Act : On TSCA Inventory

Australia. Industrial Chemical (Notification and Assessment) Act : On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection : All components of this product are on the Canadian DSL.

SULF-N® Ammonium Sulfate**00000011568**

Version 2.2

Revision Date 10/17/2014

Print Date 05/30/2015

Act (CEPA). Domestic
Substances List (DSL)

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

Korea. Toxic Chemical : On the inventory, or in compliance with the inventory
Control Law (TCCL) List

Philippines. The Toxic : On the inventory, or in compliance with the inventory
Substances and Hazardous
and Nuclear Waste Control
Act

China. Inventory of Existing : On the inventory, or in compliance with the inventory
Chemical Substances

National regulatory information

SARA 302 Components : No chemicals in this material are subject to the reporting
requirements of SARA Title III, Section 302.

SARA 313 Components :
: Ammonium sulfate 7783-20-2

SARA 311/312 Hazards : Acute Health Hazard

California Prop. 65 : This product does not contain any chemicals known to State of
California to cause cancer, birth defects, or any other
reproductive harm.

Massachusetts RTK : Ammonium sulfate 7783-20-2

Pennsylvania RTK : Ammonium sulfate 7783-20-2

WHMIS Classification : Not Rated

SULF-N® Ammonium Sulfate**00000011568**

Version 2.2

Revision Date 10/17/2014

Print Date 05/30/2015

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

SECTION 16. OTHER INFORMATION

	HMIS III	NFPA
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.

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

Previous Issue Date: 08/18/2011

Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group