

# SAFETY DATA SHEET

## Gravity S34-0-12

@ Date  
1/ 9/201

### 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY UNDERTAKING

#### 1.1 Product identifier

Product name GRAVITY® S

#### 1.2 Relevant use of the product

Applications Soluble Fertilizer

#### 1.3 Distributed By:

Name Winfield Solutions, LLC  
Address P.O. Box 64589  
St. Paul, MN 55164-0589

Non-Emergency 1-855-494-6343  
Business Inquiries: Mon-Fri 8am - 5pm (Central Standard Time)

#### 1.4 Emergency phone number(s)

Medical Emergencies: 1-877-424-7452 (24 hrs)

For Chemical Emergency, Spill Leak Fire, Exposure or Accident, Call: CHEMTREC 1-800-424-9300 (24 hrs)

### 2. HAZARDS IDENTIFICATION

#### 2.1. The hazard classification of the chemical according to HCS 2012 (US-GHS)

##### Health hazards

Acute \ uox 4

Skin Irrit. 2

Eye Irrit. 2A

STOT SE 3

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#### 2.2. Hazard symbols



#### 2.3. Signal word

Warning

#### 2.4. Hazard statements

H302 Harmful if swallowed  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.

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#### 2.5. Precautionary statements

##### Prevention

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P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

##### Response

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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P305+P351+P338 IF IN EYES: Rinse cautiously with water for minutes. Remove contact lenses, if present and easy to do. Continue rinsing.





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### 7.2 Conditions for safe storage

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.  
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.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ACGIH-Threshold Limit Value (TLV)

Exposure limit values of the components: No specific limits have been established all ingredients in this product. As a guideline, ACGIH (United States) has established the following limits which are generally recognized for inert or nuisance dust. Particulates (insoluble) Not Otherwise Classified (PNOC): 10mg/cu.m. Inhalable Particulate 8-Hours TWA TLV, 3mg/cu.m. Respirable Particulate TWA\_TLV.

### 8.2 OSHA-Permissible Exposure Limit (PEL)

Exposure limit values of the components: No specific limits have been established for all ingredients in this product. As a guideline, OSHA (United States) has established the following limits which are generally recognized for inert or nuisance dust. Particulates Not Otherwise Regulated (PNOR): 5mg/cu.m. Respirable dust 8-Hour TWA PEL, 15mg/cu.m. Total dust 8-Hour TWA PEL.

### 8.3 Any other exposure limit used or recommended by chemical manufacturer

Non-applicable

### 8.4 Engineering Controls

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.

### 8.5 Personal Protective Equipment

Hand protection: Gloves

Gloves must be inspected prior to use. Replace when worn.

Eye protection: Do not wear contact lenses.

Wear as appropriate: Safety glasses with side-shields

Body protection: Long sleeved clothing

Respiratory protection: A NIOSH approved air purifying respirator with a type 95 (R or P) particulate filter may be used under conditions where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a positive pressure air supplied respirator if there is potential for uncontrolled release, exposure levels are not known or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed if workplace conditions warrant a respirator use.

Hygiene measures: Wash hands before breaks and at the end of workday. Remove and wash contaminated clothing before re-use. Keep working clothes separately.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information of basic physical and chemical properties

Appearance (physical state, colour, etc.)	Brown powder, solid
Odour	Odourless
Odour threshold	Not applicable
pH	No data available
Melting point/freezing point;	No data available
Boiling point	Not applicable
Boiling Range	Not applicable
Flash point	No data available
Evaporation rate	Not applicable
Flammability	Not flammable
Upper/lower flammability or explosive limits	No data available
Oxidising properties	No data available
Vapour pressure	Not applicable
Vapour density	No data available
Density	No data available
Solubility in water	Soluble
Other Solvents	No data available
Partition coefficient (n-octanol/water)	No data available
Auto ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Not applicable

### 10. STABILITY AND REACTIVITY

**10.1 Reactivity** Not reactive under normal storage and handling condition

**10.2 Chemical stability** Stable under recommended storage conditions.

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<b>10.3 Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>10.4 Conditions to avoid</b>	Keep at temperatures below 5374 °F (190 °C)
<b>10.5 Incompatible materials</b>	Strong oxidizing agents, Chlorates and Hypochlorites
<b>10.6 Hazardous decomposition products</b>	During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides. Hydrogen fluoride. Hydrogen chloride. Carbon monoxide. Carbon dioxide.

### 11. TOXICOLOGICAL INFORMATION

#### 11.1 Measures of Toxicity

Acute toxicity:	Ingredients:  Potassium Nitrate: Acute toxicity: LC50 Oral (Rat):> 2000 mg/kg
Skin corrosion/irritation:	May irritate skin through mechanical abrasion
Serious eye damage/irritation:	May cause eye irritation
Respiratory or skin sensitisation:	No data available

**11.2 Listed in IARC or considered carcinogen by NTP or OSHA** None listed

**11.3 Further information** Not applicable

### 12. ECOLOGICAL INFORMATION

<b>12.1 Toxicity</b>	May be toxic to aquatic life. In sufficient quantity may deplete oxygen required by aquatic life. May cause eutrophication of ponds and lakes.
<b>12.2 Persistence and degradability</b>	No data available
<b>12.3 Bioaccumulative potential</b>	No data available
<b>12.4 Mobility in soil</b>	No data available
<b>12.5 Other adverse effects</b>	May release ammonium ions that are toxic to fish. Un-ionized ammonia concentrations above 0.02 mg/l are considered toxic in fresh water. May release phosphates which will result in algae growth, increased turbidity, and depleted oxygen. At extremely high concentrations, this may be hazardous to fish or other marine organisms. Release to watercourses may cause effects downstream. Fish 96 hour LC50, OECD Guidelines 203 (rainbow trout): >86mg/L.

### 13. DISPOSAL CONSIDERATIONS

<b>13.1 Disposal methods to employ</b>	Recover or recycle if possible. Properly characterize all waste materials. Consult federal, state/provincial and local regulations regarding the proper disposal of this material. Prevent material from entering sewers, storm drains, other unauthorized treatment drainage systems, and natural
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waterways. Empty containers should be taken to an approved waste handling site for recycling or disposal.

**13.2 Description of appropriate disposal containers to use** No data available

**13.3 Description of the physical and chemical properties that may affect disposal activities** No data available

**13.4 Language discouraging sewage disposal.** No data available

**13.5 Any special precautions for landfills or incineration activities** No data available

### 14. TRANSPORT INFORMATION

**UN Number** Not applicable

**UN proper shipping name** Not applicable

**Transport hazard classes** Not regulated

**Packing group** Not applicable

**Environmental hazards** .....

**Guidance On transport in bulk** .....

**Special precautions for user** .....

### 15. REGULATORY INFORMATION

**National and/or regional regulatory information of the chemical or mixtures**

Inventories:

US. Toxic Substances Control Act: No data available

OSHA Hazards: Carcinogen

Clean Air Act: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B). This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

### 16. OTHER INFORMATION

**Indications on the revision**

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### Abbreviations and acronyms used

ACGIH: American conference of governmental and industrial hygienist  
CAS N°.: Chemical Abstract Service Number  
CFR: Code of Federal Regulations  
EC50: Half maximal effective concentration  
HCS: Hazard communication standard  
LC50: Half maximal lethal concentration  
LD50: Half maximal lethal dose  
OSHA: Occupational safety and health administration  
STOT SE: Specific target organ toxicity Single exposure  
STOT RE: Specific target organ toxicity Repeated exposure  
UN N°.: United Nations Number

### Methods of evaluation for the classification of mixtures

The classification of the mixture was set based on the regulation (US) HCS 1910.1200 [HCS 2012].

### Other information

This information is based on our present knowledge and is provided according to the relevant national regulations. This information is intended as a characterization of the product in order to provide guidance for the relevant safety issues. However, this document does not provide any warranty, expressed or implied, regarding the properties of the product.