1) PRODUCT AND COMPANY IDENTIFICATION

Product Name:	**Gateway™ Plus**
Manufactured for:	Hefty Seed Company 47504 252nd Street Baltic, SD 57003
Product Use:	Drift Reduction Technology
Emergency telephone number:	(Chemtrec Information 24 hours) (800) 424-9300
Customer Service, call:	(847) 596-3001

2) HAZARDS IDENTIFICATION

GHS Classification:
Eye Irritation, Category 2B, H320
Signal Word: Warning
Hazard Statements:
H320: Causes eye irritation.
Precautionary Statements:
Prevention
P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P103: Read label before use.
P264: Wash protective equipment and work clothes thoroughly after handling.
Response
P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.

3) COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS Number	Weight %
Ammonium sulfate	7783-20-2	25-35
Surfactants	Proprietary	3-10
Methyl alcohol	67-56-1	<3

4) FIRST AID MEASURES

IF SWALLOWED: Call a POISON CENTER/doctor or Chemtrec if person feels unwell. Rinse mouth. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give any fluids to an unconscious person. Treat symptomatically.

IF ON SKIN: Wash affected area with plenty of soap and water. Cold water may be used. If skin irritation occurs: Get medical advice or attention. Call a POISON CENTER/doctor or Chemtrec if person feels unwell.

IF INHALED: Move person to fresh air and keep comfortable for breathing. If person is having difficulty breathing, give oxygen. If not breathing, give artificial respiration. Call a POISON CENTER/doctor or Chemtrec if person feels unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

IF EXPOSED OR CONCERNED: Call a POISON CENTER/doctor or Chemtrec.

Medical Conditions Aggravated by Overexposure: Repeated or prolonged exposure is not known to aggravate medical condition.

Other Effects: This product is not a carcinogen by NTP, OSHA and ACGIH.

5) FIREFIGHTING MEASURES

Suitable Extinguishing media: Water spray, foam, CO_2 or dry chemicals may be used in areas where product is stored.
Specific Hazards: Burning may produce oxides of nitrogen and carbon and other hazardous substances.
PPE and Precautions: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

6) ACCIDENTAL RELEASE MEASURES

In Case of Spill: Stop the flow of material, if this is without risk. Wear protective equipment as referenced in Section 8. Recover free liquid. Control spill with adsorbent pads or booms. For recovery or disposal, add inert absorbent (sand, earth, sawdust, etc.) to spill area and shovel into containers for disposal. Product is slippery under foot; flush smooth surfaces thoroughly.
Disposal: Product is slippery under foot; flush smooth surfaces thoroughly. Dispose of collected waste in accordance with federal, state and local regulations. See Section 13 for disposal considerations.

7) HANDLING AND STORAGE

Precautions to be Taken in Handling: Keep container sealed when not in use. Safety goggles and eyewash recommended. USDA-accepted nitrile (CFR-20) or neoprene rubber (CFR-21) recommended. Wear appropriate clothing to prevent repeated or prolonged skin contact.
Precautions to be Taken in Storage: Product should be stored in a dry place. Do not store together with food, beverage and animal feed.

8) EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits: Methyl alcohol (67-56-1)

ACGIH: 200 ppm TWA
250 ppm STEL
Skin - potential significant contribution to overall exposure by the cutaneous route

OSHA: 200 ppm TWA; 260 mg/m3 TWA
250 ppm STEL; 325 mg/m3 STEL
Prevent or reduce skin absorption

NIOSH: 200 ppm TWA; 260 mg/m3 TWA
250 ppm STEL; 325 mg/m3 STEL
Potential for dermal absorption

Note: When selecting personal protective equipment and clothing, follow all of the manufacturer specifications and recommendations that apply to your specific operation and processing conditions. Take into consideration all working conditions and all chemicals to be handled or processed.

Eye/Face Protections: Wear splash-proof chemical safety goggles. Contact lenses should not be worn when working with chemicals.
Skin Protection: Wear chemical-resistant gloves, long-sleeved shirt, pants, socks and shoes to minimize skin contact. As precautions, wash hands and face with mild soap and water before eating, drinking, smoking or using restroom. After each shift, clean all protective equipment, wash work clothes, and shower.
Respiratory Protection: Not required under normal use conditions with good ventilation. Protect against spray mists.
General Protection: Eye wash fountains and drench showers should be located within a 10 second walk from the work area per ANSI Z358.1-2009.

9) PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Blue, viscous liquid	UEL:	N/D
Odor:	Characteristic odor	LEL:	N/D
Odor Threshold:	N/D	Vapor Pressure:	N/D
pH:	6.7 ± 0.5	Vapor Density:	N/D
Melting Point:	N/D	Relative Density (lbs/gl):	9.99 ± 0.09
Freezing Point:	N/D	Solubility:	Dispersible in water
Boiling Point:	>212°F	Partition Coefficient:	N/D
Flash Point:	None	Autoignition Temperature:	N/D
Evaporation Rate:	N/D	Decomposition Temperature:	N/D
Flammability:	Noncombustible	Viscosity	2,068 cps

10) STABILITY AND REACTIVITY

Stability:	Stable
Possibility of Hazardous Reactions:	Hazardous polymerization will not occur.
Condition to Avoid:	Store within recommended temperature range (see Section 7 above).
Incompatible Materials:	Strong bases, oxidizers, chlorates, nitrates.
Hazardous Decomposition Products:	Burning may produce ammonia, oxides of nitrogen and carbon and other hazardous substances.

11) TOXICOLOGICAL INFORMATION

Acute Oral Toxicity:	LD50 > 5,000 mg/kg (albino rats)
Acute Eye Irritation:	Minimally irritating (albino rabbits)
Acute Dermal Irritation:	Non-irritating (albino rabbits)
Acute Dermal Toxicity:	LD50 > 5,050 mg/kg (albino rats)
Acute Inhalation:	It is considered that Border Xtra 8L, due to its physical nature, cannot be aerosolized at an exposure concentration high enough to provide meaningful acute inhalation toxicity data (Acute Inhalation Toxicity in Rats, Study ID 16366-12, performed by Stillmeadow Laboratory, Sugar Land, TX).
Component Analysis—LD50/LC50:	Ammonium sulfate (7783-20-2): Oral LD50 Rat 2,000 mg/kg Methyl alcohol (67-56-1): Inhalation LC50 Rat 83.2 mg/L 4 h; Inhalation LC50 Rat 64,000 ppm 4 h; Oral LD50 Rat 5,628 mg/kg; Dermal LD50 Rabbit 15,800 mg/kg
Component Carcinogenicity:	None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP

12) ECOLOGICAL INFORMATION

Component Analysis - Ecotoxicity - Aquatic Toxicity

Ammonium sulfate (7783-20-2)

Test & Species	
96 Hr LC50 Leuciscus idus	460 - 1000 mg/L [static]
96 Hr LC50 Brachydanio rerio	250 mg/L
96 Hr LC50 Brachydanio rerio	480 mg/L [flow-through]
96 Hr LC50 Brachydanio rerio	420 mg/L [semi-static]
96 Hr LC50 Cyprinus carpio	18 mg/L
96 Hr LC50 Pimephales promelas	>100 mg/L
96 Hr LC50 Oncorhynchus mykiss	32.2-41.9 mg/L [flow-through]
96 Hr LC50 Oncorhynchus mykiss	5.2-8.2 mg/L [static]
96 Hr LC50 Poecilia reticulata	123-128 mg/L [semi-static]
96 Hr LC50 Poecilia reticulata	126 mg/L

24 Hr EC50 Daphnia magna	423 mg/L
48 Hr LC50 Daphnia magna	14 mg/L

Methyl alcohol (67-56-1)

Test & Species	
96 Hr LC50 Pimephales promelas	28200 mg/L [flow-through]
96 Hr LC50 Pimephales promelas	>100 mg/L [static]
96 Hr LC50 Oncorhynchus mykiss	19500 - 20700 mg/L [flow-through]
96 Hr LC50 Oncorhynchus mykiss	18 - 20 mL/L [static]
96 Hr LC50 Lepomis macrochirus	13500 - 17600 mg/L [flow-through]

13) DISPOSAL CONSIDERATIONS

Component Waste Numbers: Methyl alcohol (67-56-1)

Disposal Instructions: Recycle or rework material if at all possible. Treat at an acceptable waste treatment facility or municipal waste treatment plant after proper testing and approval of waste samples in compliance with applicable federal, state and local environmental regulations.

Container Reuse: Do not reuse empty container as it may contain product residue. Rinse container thoroughly prior to disposal. Dispose of rinsate and container in accordance with local, state and federal regulations.

14) TRANSPORT INFORMATION

DOT Status (Highway and rail): Not Regulated

IATA Status (Air): N/D

Marine Pollutant: No

15) REGULATORY INFORMATION

SARA HAZARD: This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).
Methyl alcohol (67-56-1)
SARA 313: 1.0 % de minimis concentration
CERCLA: 5,000-lb final RQ; 2,270-kg final RQ

California Prop 65: WARNING: This product contains a chemical known in the State of California to cause cancer.
Ethylene oxide
1,4-Dioxane
WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.
Ethylene oxide
Methanol

State: The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Ammonium sulfate	7783-20-2	No	Yes	No	No	Yes	No
Methyl alcohol	67-56-1	Yes	Yes	Yes	Yes	Yes	No

WHMIS: The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Ammonium sulfate	7783-20-2	1 %
Methyl alcohol	67-56-1	1 %

16) OTHER INFORMATION

Date Prepared: October 16, 2013

Last Updated: May 15, 2020

WHILE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREON, HEFTY SEED COMPANY MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

N/R—Not Rated
N/D—Not Determined
N/A—Not Applicable
N/E—Not Established
EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.