



LINKAGE®

Water Conditioning Agent

WARNING

KEEP OUT OF REACH OF CHILDREN

May be harmful if swallowed. May be harmful in contact with skin. Causes serious eye irritation. May cause respiratory irritation.

SLIPPERY WHEN WET

Read label before use. Keep container tightly closed. Keep only in original container. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/ protective clothing/ eye protection/ face protection. Store in a well-ventilated place. Keep cool.

Principal Functioning Agents:

Urea, ammonium nitrate, alcohol ethoxylate, and propionic acid	64.6%
Constituents ineffective as a spray adjuvant	35.4%
TOTAL	100%

All ingredients are exempt from tolerance requirements under 40 CFR 180.

FIRST AID

Call a poison control center or doctor immediately for treatment advice. Have the product container with you when calling a poison control center or doctor, or going for treatment.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do then continue rinsing. Have the product container with you when calling a poison control center or doctor, or going for treatment. If eye irritation persists: Get medical advice or attention.

IF ON SKIN OR CLOTHING: Take off contaminated clothing and wash it before reuse. Wash with plenty of soap and water for several minutes. Call a poison center, doctor, chemical manufacturer, importer, or distributor to specify the appropriate source of emergency medical advice.

IF SWALLOWED: Unless advised otherwise by a poison control center or doctor, have person rinse mouth with water, if able. Do not give anything by mouth to an unconscious person. Immediately call a poison center, doctor, chemical manufacturer, importer, or distributor to specify the appropriate source of emergency medical advice.

IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth to mouth if possible.

GENERAL INFORMATION

LINKAGE® was designated specifically to enhance Accent®/Gold*, Basis®/Gold*, Beyond®, Everest®, GoldSky®, Maverick®, Olympus Flex™, Power Flex®, Pursuit™, Rimfire™ Max, sulfonfyl urea herbicides, as well as other herbicides, which suggest the addition of ammonium sulfate, or UAN solution and a nonionic surfactant. Do not use with Assert®***.

DIRECTIONS FOR USE

NOT FOR AQUATIC USE

The addition of nitrogen based fertilizers (such as 28% N, or 10-34-0), or ammonium sulfate, are generally not required with LINKAGE®. Follow herbicide label directions.

Use LINKAGE® at 0.5 - 1% v/v (2 - 4 quarts per 100 gal spray mixture).

For water volumes below 5 gpa, use 1 - 2% v/v (1 - 2 gal per 100 gal spray mixture).

Add LINKAGE® last to spray mixture and continue agitation, or follow specific tank filling and mixing information provided on the herbicide label. Refer to the herbicide label for additional recommendations or precautions.

Sugarbeet Micro Rates: Add LINKAGE® first to clean water in spray tank when using with sugarbeet micro rates, and follow specific tank filling and mixing information provided on the herbicide labels.

HANDLING AND STORAGE

DO NOT STORE BELOW 0° F.

IF FROZEN, WARM CONTAINER AND SHAKE WELL BEFORE USING.

Storage: Store in a cool well-ventilated place. Keep in original container tightly closed. Do not reuse empty container. Do not store with food, feed, or other material to be used or consumed by humans or animals. Do not contaminate water supplies. For optimal storage, store between 40° and 90° F.

Disposal: Do not contaminate water, food or feed by storage or disposal. Dispose of contents in container to an approved waste disposal facility in accordance with all federal, state and local regulations. Triple rinse (or equivalent) adding rinse water to application tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by local regulations. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at www.acrcycle.org. Decontaminated containers and materials must be disposed of in a manner allowed by local, state and federal laws and regulations.

Conditions of Sale and Warranty Limitation: The Directions for Use of this product reflect the opinion of experts based on field use and tests.

The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of West Central Distribution, LLC or the seller. All such risks shall be assumed by the buyer. West Central Distribution, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use, subject to the inherent risks referred to above. West Central Distribution, LLC makes no other express or implied warranty of fitness or merchantability or any other express or implied warranty. In no case shall West Central Distribution, LLC or the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. West Central Distribution, LLC and the seller offer this product, and the Buyer and the User accept it, subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of West Central Distribution, LLC.

*Accent® and Basis® are registered trademarks of DuPont Crop Protection. **Pursuit® and Beyond® are registered trademarks of BASF Ag Products. ***Assert® is a registered trademark of Nufarm Agricultural Products. Olympus Flex™ and Rimfire Max™ are trademarks of Bayer. Everest® is a registered trademark of Arysta. GoldSky® and PowerFlex® are registered trademarks of Dow Agrosiences. Maverick® is a registered trademark of Monsanto.



WA Reg. No. 46661-14005



SAFETY DATA SHEET

LINKAGE

SDS DATE: 8/23/2016

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: LINKAGE

DISTRIBUTOR: West Central Distribution, LLC
ADDRESS: 2700 Trott Ave. SW, P.O. Box 897, Willmar, MN 56201
PHONE: (320) 235-8518

EMERGENCY CHEMTREC PHONE: US: 1-800-424-9300 International: 1-202-483-7616

CHEMICAL NAME: Proprietary mixture
CHEMICAL FAMILY: Surfactant/ Basic blend
CHEMICAL FORMULA: Mixture

PRODUCT USE: Adjuvant

SECTION 1 NOTES: None

SECTION 2: HAZARDS IDENTIFIED

GHS Ratings:

Toxicity Categories

Skin corrosion/ irritation Category 2
Eye damage/ irritation Category 2A



Signal Word: **WARNING**

GHS HAZARDS

H315 Causes skin irritation.
H319 Causes serious eye irritation.

GHS PRECAUTIONS

P102 Keep out of reach of children.
P103 Read label before use.
P233 Keep container tightly closed.
P234 Keep only in original container.
P261 Avoid breathing dust, fume, gas, mist, vapors or spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves, protective clothing, eye protection and face protection.
P301+312 IF SWALLOWED: Call a POISON CENTER, doctor or physician if you feel unwell.
P302+352 IF ON SKIN: Wash with plenty of soap and water.
P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do then continue rinsing cautiously.
P337+313 If eye irritation persists: Get medical advice or attention.
P332+313 If skin irritation occurs: Get medical advice or attention.
P362 Take off contaminated clothing and wash it before reuse.

SECTION 3: INFORMATION ON COMPOSITION

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>% WT</u>
Proprietary	Proprietary	5 – 10%
Trade secret	Trade secret	20 – 30%
Propionic Acid	79-09-4	5 – 10%
Ammonium hydroxide	1336-21-6	1 – 5%

NOTE: Product does NOT contain any pesticides or pest control agents.

SECTION 3 NOTES: These specific chemical identities and or exact percentage (concentration) of composition have been withheld as a trade secret.

CARCINOGENICITY

OSHA: No **ACGIH:** No **NTP:** No **IARC:** No **OTHER:** No

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SECTION 4: FIRST AID MEASURES

Have the product container with you when calling a poison control center or doctor, or going for treatment.

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

IF ON SKIN OR CLOTHING: Take off contaminated clothing and wash it before reuse. Wash with plenty of soap and water for several minutes. Call a poison center, doctor or physician to specify the appropriate source of emergency medical advice. If skin irritation occurs: Get medical advice or attention.

IF SWALLOWED: Unless advised otherwise by a poison control center or doctor, have person rinse mouth with water, if able. Do not give anything by mouth to an unconscious person.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth to mouth if possible.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SECTION 4 NOTES: None

SECTION 5: FIRE FIGHTING MEASURES

NFPA HAZARD CLASSIFICATION

HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 0 OTHER: -

IN CASE OF FIRE: Use water spray, dry chemical, or Carbon dioxide.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-container breathing apparatus and avoid breathing fumes or dust.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known

HAZARDOUS DECOMPOSITION PRODUCTS: Under fire conditions will form oxides of carbon.

SECTION 5 NOTES: None

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Surround and absorb all spills. Material should be collected and disposed in proper manner. Dike the area to prevent spill from spreading. Soak up spill with a suitable absorbent such as clay, sawdust or kitty litter. Sweep up absorbed material and place in a chemical waste container for disposal. Wear suitable protective equipment.

SECTION 6 NOTES: None

SECTION 7: HANDLING AND STORAGE

HANDLING Keep out of reach of children. Read label before use. Do not eat, drink or smoke when using this product. Avoid breathing dust, fume, gas, mist, vapors or spray. Wash hands thoroughly after handling. Wear protective gloves, protective clothing, eye protection and face protection.

STORAGE: Store in a cool well-ventilated place. Keep in original container tightly closed. Do not reuse empty container. Do not store with food, feed, or other material to be used or consumed by humans or animals. Do not contaminate water supplies. For optimal storage, store between 40° and 90° F.

SECTION 7 NOTES: None

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

	OSHA		ACGIH		NIOSH	
	PEL	STEL	PEL	STEL	PEL	STEL
Propionic Acid 79-09-4			10 ppm TWA		10 ppm TWA; 30 mg/m ³ TWA 15 ppm STEL; 45 mg/m ³ STEL	

- VENTILATION:** Normal room ventilation (mechanical) or outdoor use should be satisfactory.
- RESPIRATORY PROTECTION:** Not necessary unless ventilation is inadequate. Then use OSHA or NIOSH approved respirator, as appropriate.
- EYE PROTECTION:** Chemical goggles and face shield.
- SKIN PROTECTION:** Chemical gloves, long-sleeved shirts and pants.
- OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Eye wash and safety shower should be easily accessible.
- WORK HYGIENIC PRACTICES:** Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse.
- EXPOSURE GUIDELINES:** If exposed, see section 4 for acute exposure first aid.
- SECTION 8 NOTES:** None

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- APPEARANCE:** Clear, light blue
- ODOR:** Slight ammonia
- ORDER THRESHOLD:** Not known
- PHYSICAL STATE:** Liquid
- pH AS SUPPLIED:** Not applicable
- pH (Other):**
- INITIAL BOILING POINT:** F: Unknown
C: Unknown
- BOILING POINT RANGE:** F: Unknown
C: Unknown
- MELTING POINT:** F: Unknown
C: Unknown
- FREEZING POINT:** F: Unknown
C: Unknown
- FLASH POINT:** F: >200
C: >93
- METHOD USED:** PMCC
- FLAMMABILITY (solid, gas):** Can burn
- FLAMMABLE LIMITS IN AIR, UPPER (% BY VOLUME):** Unknown
- LOWER:** Unknown
- VAPOR PRESSURE (mmHg):** @
F: Unknown
C: Unknown
- VAPOR DENSITY (AIR = 1):** @
F: Unknown
C: Unknown
- RELATIVE DENSITY:** 1.131 to 1.158
- EVAPORATION RATE: BASIS (butyl acetate=1):** Unknown
- SOLUBILITY IN WATER:** Soluble
- PARTITION COEFFICIENT: (n-octanol/water):** Unknown
- AUTO-IGNITION TEMPERATURE:** Unknown
- DECOMPOSITION TEMPERATURE:** Unknown
- VISCOSITY:** @ Not determined
F: Unknown
C: Unknown

SECTION 9 NOTES: Values are not product specifications.

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

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SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable Unstable

CONDITIONS TO AVOID (STABILITY): None known.

INCOMPATIBILITY (MATERIAL TO AVOID): None known.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Stable except when exposed to the above materials or fire conditions.

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID (POLYMERIZATION): None known

SECTION 10 NOTES: None

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: None

MIXTURE TOXICITY Not available

COMPONENT TOXICITY Not available

SECTION 11 NOTES: None

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: None

ECOTOXICITY: Not available

BIOACCUMULATIVE POTENTIAL: Not available

MOBILITY IN SOIL: Not available

OTHER ADVERSE EFFECTS: Not available

SECTION 12 NOTES: None

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Do not contaminate water, food or feed by storage or disposal. Dispose of contents in container to an approved waste disposal facility in accordance with all local, regional, national and international regulations.

CONTAINER DISPOSAL: Triple rinse (or equivalent) adding rinse water to application tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by local regulations.

RCRA HAZARD CLASS: None

SECTION 13 NOTES: None

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SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

DOT Shipping Description:

NOT REGULATED AS CORROSIVE WHEN TRANSPORTED BY MOTOR VEHICLE OR RAILCAR IN PACKAGING THAT WILL NOT REACT WITH OR BE DEGRADED BY THIS MATERIAL SUCH AS HDPE OR STAINLESS STEEL - 49 CFR 173.154 (d).

Average rate of corrosion for STEEL Coupon test 0.4316 mm/yr
Average rate of corrosion for ALUMINUM ALLOY Coupon test .0231 mm/yr

U.S. Surface Freight Classification: ADHESIVES, ADJUVANTS, SPREADERS OR STICKERS (NMFC 4610; CLASS: 60) Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes.

OTHER AGENCIES: None

SECTION 14 NOTES: None

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): Mixture not listed

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): Not Regulated

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): Not Regulated

311/312 HAZARD CATEGORIES: None

313 REPORTABLE INGREDIENTS: None

INTERNATIONAL REGULATIONS: None

SECTION 15 NOTES: None

SECTION 16: OTHER INFORMATION

OTHER INFORMATION: None

DISCLAIMER:

The recommendation for safe handling and protection procedures is believed to be generally suitable for the standard uses of this compound. However, each user should identify his intended uses of this material and determine whether they are appropriate. All data included in this document is released as typical values and should not be utilized to determine the suitability of this material for a particular use or purpose. No warranty, either expressed or implied, is hereby made, nor do we give permission, inducement, or recommendations to practice any patented invention without a license. All data is offered for consideration, investigation and verification purposes only.