

**AGENDA
PARK BOARD MEETING
Village Of Lincolnshire
Village Hall
One Olde Half Day Road
Lincolnshire, Illinois 60069
Public Meeting Room**

**Monday, September 21, 2015
7:00 p.m.**

*Reasonable accommodations or auxiliary aids will be provided to enable persons with disabilities to effectively participate in any public meeting of the Park Board.
Please contact the Village Administrative Offices (847)883-8600
48-hours in advance if you need special accommodations in order to attend*

*The Park Board will not proceed past 10:30 p.m. unless
There is a consensus of the majority of the Members to do so.*

*Citizens wishing to address the Park Board on agenda items may speak when the agenda item
Of interest is open, prior to Board discussion.*

1.0 CALL TO ORDER

2.0 ROLL CALL

3.0 APPROVAL OF MINUTES

3.1 Approval of the Minutes of the August 17, 2015 Park Board Meeting (Village of Lincolnshire)

4.0 RESIDENT COMMENTS AND REQUESTS

5.0 RECREATION

6.0 PARKS

6.1 Request for Revenue Sharing of Proceeds from Lincolnshire Sports Association Summer Baseball Tournament (Lincolnshire Sports Association)

6.2 Continuing Discussion of the Concept of Pesticide Free Parks (Village of Lincolnshire)

6.3 Consideration and Discussion of a Proposed Rule Banning Golfing at North Park (Village of Lincolnshire)

7.0 UNFINISHED BUSINESS

8.0 NEW BUSINESS

8.1 Email from Park Board Member Hartman Resigning from the Park Board

9.0 ADJOURNMENT



**MINUTES OF THE
PARK BOARD MEETING
Monday August 17, 2015**

Present: Ken Borgerding, Park Board Chairman
Lee Campbell
Kathy Alred Lin (arrived 7:02 p.m.)
Suzi Siegel (until 7:47p.m.)
Sandra Wright
Scott Pippen, Operations Superintendent

Absent: Lee Fell
Dan Hartman
Ted Heiser
Dr. Mara Grujanac, Trustee Liaison

Location: Village Hall, One Olde Half Day Road, Lincolnshire Illinois 60069

1.0 CALL TO ORDER

Chairman Borgerding called the meeting to order at 7:00 p.m.

2.0 ROLL CALL

Superintendent Pippen called roll and determined a quorum was present.

3.0 APPROVAL OF MINUTES

3.1 Approval of the Minutes of the June 15, 2015 Meeting of the Park Board (Village of Lincolnshire)

The Park Board reviewed the minutes of the June 15, 2015 meeting. A motion was made by Mr. Campbell, seconded by Ms. Wright, to approve the minutes as presented. The motion was approved by unanimous voice vote.

4.0 RESIDENT COMMENTS AND REQUESTS

4.1 Presentation from the Midwest Pesticide Action Center on Pesticide Free Parks (Midwest Pesticide Action Center)

Supt Pippen introduced Ruth Kerzee of the Midwest Pesticide Action Center. A Lincolnshire resident contacted the Village and asked that we look into pesticide free maintenance of the parks. This program would be a policy change so staff thought the program should be presented to the Park Board. Ms. Kerzee stated that the Midwest Pesticide Action Center (MPAC) is a 501c3 non-profit based in Chicago in existence for 20 years. Recently Evanston adopted a pilot program for pesticide free park maintenance. Spring Lake Park is considered as a starting place in part because of its swimming lake and proximity to the Des Plaines River. MPAC's plan suggested a vendor who provided a price quote for services. MPAC would promote the project, produce press releases, supply signage and provide information for residents. Ms Siegel asked how many seasons it would take to see if the program is effective. Ms. Kerzee said it would be 2-3 years before the full benefit would be seen.

Mr. Campbell noted that the informational packet provided shows in the second

paragraph that Lincolnshire staff explained the current program and it was “noted as very responsible by MPAC”. He asked Ms. Kerzee what if anything that the Village has done to this point has not been appropriate in her view. Ms. Kerzee responded that nothing that has been done is inappropriate. Mr. Campbell asked, in that case, why should we change? Ms. Kerzee responded that Spring Lake Park would be used as a showcase of what could be done using no pesticides. MPAC has not evaluated the Village’s current maintenance program; however 27 of the 30 most commonly used pesticides have been shown to have an impact on public health, including asthma.

Ms. Wright asked if there had been a comparison including North Park which is maintained in a more natural way. Supt. Pippen provided a summary of the Village’s current program. Broadleaf control and fertilization are contracted out with two applications done each year, one in the spring and one in the fall. The products used do not include 2-4-d or phosphorus. North Park is maintained by the Village and only treated with broadleaf control as needed and organic fertilizers. There are no blanket treatments in the Village. All treatments are done after evaluation and only when necessary. All staff doing in-house applications are licensed by the State of Illinois Dept. of Agriculture. Our current program is environmentally responsible. The program being considered would be more of a demonstration project for the community residents and also to promote tolerance in the community for some amount of weeds because of residential overuse of weed killing products.

If the Park Board were to decide to proceed with this type of program, the Village would have to follow State purchasing guidelines, not just use the vendor quote provided in the packet.

Ms. Wright asked if other communities in the area are participating in this program. Ms. Kerzee said that Glenview and Highland Park have had similar programs for a number of years. Evanston is in the second year of the program presented in the packet. Park Ridge has recently committed a park to pesticide free. Ms. Lin said she is in favor of the idea. The proposal is for one year, how would that show the result? Ms. Kerzee said that since the park is in pretty good shape it would be a good fit for education in just one year. The goal is to continue the maintenance beyond that first year. Ms. Kerzee stated that the term ‘pesticide’ is being used to include herbicides, fungicides, any “-cides” used to control an area.

Mr. Borgerding noted that the proposal includes line items for “weed management” in the spring and fall. What is that if not the application of herbicides? Ms. Kerzee said that the management is evaluation, and products such as liquid corn gluten, a natural weed control rather than a synthetic. The products used would be to strengthen the grass so that it can shade out the weeds. Ms. Siegel asked if there is any data from the participating communities that the program has reduced the use of chemicals in the home setting. Ms. Kerzee said she is not aware of any. Ms. Lin asked about outreach beyond the signage. Ms. Kerzee said MPAC could attend meetings, do social media, prepare press releases, and could design events in the park itself.

Ms. Seigel said she would like to see more data to see if it would be worthwhile. Will the program actually decrease the resident use of pesticides? Are the pesticides we are currently using already at a low level? Will the education program make a difference for the community? Ms. Kerzee said it would be difficult to measure the impact. Ms. Seigel

said it might be a better project for Rivershire Park. Ms. Lin said that the audience of Spring Lake is more new residents and preschoolers and it has more exposure in general so it would be a great place for this kind of program. Ms. Wright noted that pursuing the program would indicate that the issue matters to the Village. Signage could include the other measures the community takes to be environmentally sensitive.

Mr. Campbell said that more consideration is needed. He is hearing that the Village is doing a wonderful job and visits Spring Lake on a regular basis, several times a week for over 35 years. It is beautiful and not in need of improvement. Mr. Pippen noted that the lake is tested regularly by the Dept. of Public Health and has not had any reported issues. If the Park Board is interested, he could look into what other communities are doing. Is this something that Village staff could do without contractual assistance? He pointed out that the products to do this are not cheap. In our case it is really just tweaking our Best Management Practices, not a wholesale change in our program. Ms. Wright said it may just be a matter of educating the community and the public about what we do well already. We already have a network of ways to share that information. Ms. Seigel said Kudos to the Public Works staff for the good job they are doing now.

Mr. Pippen said he has done extensive training since the development of North Park. One concern he has with the proposed program is the possibility that our hands will be tied by an MPAC type of agreement if we need to treat, for example, a grub infestation. If there is Park Board interest in this type of a program he can do more research and come back with options for possible programs. Possibly the Village could do its own demonstration area without outside involvement. If funding is required we need to know during the budget process going on now.

Mr. Campbell asked what other for-profit agencies MPAC has a relationship with. Ms. Kerzee said they only want to connect interested communities with for-profit groups that can provide the services. Mr. Campbell pointed out that they appear to be recommending Greenwise based on the number of times they are listed in the program brochure. Ms. Kerzee said they were only asked to provide information since they have provided the service for Evanston. MPAC has no monetary connection with Greenwise.

Mr. Campbell asked about the approximate acreage of all park maintenance compared with the acreage at Spring Lake Park. Mr. Pippen said that the total maintained by the Village is approximately 350 acres and Spring Lake Park is slightly less than one acre. Mr. Campbell said that for \$10,000 we would be maintaining less than one acre. Mr. Pippen pointed out that the Greenview cost estimate is \$8,000 and the remainder is for signage. Signage expense is based on experience of other communities and the work could be done in-house. Staff time which is not included in the estimate would also be required. Some of the expenses are included in our current program but many are not.

Concerns were discussed about the possible take-over of weeds in one season and the possible reactions of residents. Mr. Pippen suggested that Rivershire Park might be a better starting area since the students are already talking about the impact of pesticides on water. If the natural maintenance plan didn't go as desired it would not be as noticeable. There isn't a lot of turf at Rivershire Park but the area at the corner of Lincolnshire Drive and Londonderry Lane could be a pilot area. Ms. Lin feels that if we want to raise awareness of the issue and make a difference, it should be a large enough area to notice, and where people will see it.

Ms. Wright said that the agreement should be non-binding so that if a situation arises where we need to take extra care of the area we should be able to do so.

Memorial Park may be a good option since it has irrigation which is essential in a drought season like we have been having; also it is exposed to view on a busy intersection with bike paths on two sides. If a failure happened there it would not be so visible that it would have a huge impact or draw a lot of complaints.

Mr. Borgerding requested Mr. Pippen review the information available and see what could be done in-house and the impact on budget and staff.

5.0 RECREATION

5.1 None

6.0 PARKS

6.1 Consideration and Discussion of the 10 Year Capital Budget Plan for Parks and Paths, Facilities, and Equipment (Village of Lincolnshire)

Superintendent Pippen reviewed the draft budget spreadsheet provided to the Park Board. The plan has been reviewed by the Mayor and Board of Trustees and they have approved the overall concepts presented. The Park Board is invited to comment on the plan. The plan is a guideline and things can be moved around based on what is needed.

Mr. Campbell noted that the additional water slide installed this year at Spring Lake Park seems to have been a great success. It is getting a lot of use. Playground upgrades have recently been completed and are scheduled to begin again in 2020. Ms. Wright said that the newly redone Whytegate Park tennis court area looks phenomenal and it was busy non-stop this weekend in spite of the heat. Mr. Borgerding asked about the North Park netting. Mr. Pippen said that it is done now, until the netting needs replacement in approximately 7 to 8 years. The feedback about the netting has been good. People were worried that they would appear too large but the nets seem to blend in nicely. Safety-wise we have achieved our goal.

A motion was made by Mr. Campbell, seconded by Ms. Wright, as follows:

“The Park Board recommends to the Village Board the approval of the 10 Year Capital Budget Plan for Parks and Paths, Facilities, and Equipment.”

The motion was passed by unanimous voice vote.

7.0 UNFINISHED BUSINESS

7.1 None

8.0 NEW BUSINESS

8.1 Updated Park Board Contact List Adding New Trustee Liaison Grujanac (Village of Lincolnshire)

Unfortunately the contact list provided in the packet was still wrong. Mr. Pippen distributed paper copies of the correct list and can email them to anyone who would prefer a copy that way.

9.0 ADJOURNMENT

9.1 A motion was made by Mr. Campbell, seconded by Ms. Wright, to adjourn the meeting. The motion was approved by unanimous voice vote. Chairman Borgerding declared the meeting adjourned at 8:32 p.m.

DRAFT

REQUEST FOR BOARD ACTION
September 21, 2015 PARK BOARD MEETING

Subject: Consideration and Discussion of the Sharing of Revenues from the Lincolnshire Sports Association (LSA) Summer Baseball Tournament (Lincolnshire Sports Association)

Action Requested: Recommend Approval to Village Board of Trustees

Originated By/Contact: D. Scott Pippen, Operations Superintendent

Referred To: Park Board

Summary / Background:

The LSA Summer Baseball Tournament's the last two years has generated in excess of \$10,000.00 in revenue. LSA has generously donated this money to the Village to be put back into improvements at North Park. Staff has met with LSA representatives to discuss the disbursement of these funds.

LSA is requesting to split the proceeds with the Village in future years to put funding into the expansion of their programs. A representative from LSA will be in attendance to further discuss this request at Monday night's meeting.

Budget Impact:

The Village does not budget for these funds. LSA will continue to work with the Village on requested improvements to North Park. This would lead to no impact on the Village's budget.

Service Delivery Impact:

This will increase LSA offerings to the Village residents, and will have no impact to Public Works service levels.

Recommendation:

Staff recommends the Park Board approve this request and forward their recommendation to the Village Board of Trustees for final approval.

Reports and Documents Attached: None

Meeting History	
Initial Referral to Park Board:	September 21, 2015
Initial Referral to Village Board (COW):	September 28, 2015
Regular Village Board Meeting:	October 12, 2015

REQUEST FOR BOARD ACTION
September 21, 2015 PARK BOARD MEETING

Subject: Continuing Consideration, and Discussion of a Resident Request for a Pesticide Free Park (Village of Lincolnshire)

Action Requested: Consideration, Discussion and Staff Direction

**Originated
By/Contact:** D. Scott Pippen, Operations Superintendent

Referred To: Park Board

Summary / Background:

At the August 17 Park Board meeting, a presentation was given regarding Pesticide Free parks Initiatives by Ruth Kerzee from the Midwest Pesticide Action Center (MPAC). After some discussion, staff was directed by the Park Board to research the issue further and report back at the September meeting. Staff was asked to look at the following:

- **Proposed Products** – Staff was asked to look at the products listed on the proposed invoice submitted by MPAC. Attached are the labels and MSDS sheets for four of the proposed products, plus the label and MSDS sheet for the product the Village is currently using. There are minimal differences in the products other than the Village's fertilizer is encapsulated in a polymer to slow the release of nitrogen into the soil. Nature Safe, the Village's fertilizer, "Contains no Hazardous Components as described in the Hazard Communication Standard". Corn Gluten's effectiveness as a weed control product is questionable. Unless it is applied at the exact correct times and conditions, it is ineffective. Another item to consider is that there is a need to use much more volume of organic products than non-organic pesticides to achieve the same results. Little is no about the persistence and environmental impact of organics at the higher rates To sum up, Staff is already using organic fertilizers, and proper integrated pest management techniques. It is staff's opinion that the Village's current program has little to no environmental impact, and there is no need to change the program.
- **In-house Cost to Implement a Pesticide Free Park** – Staff estimates a cost of approximately \$5,000.00 in materials and 40 hours of labor to convert 40,000 square feet from the current program to an all organic program as outlined in the MPAC submitted proposed invoice. The 40 hours expended on this program would need to be pulled from another maintenance activity such as forestry or streets maintenance. One or two other projects may need to be put on hold should the Village wish the Public Works Department take this on.
- **Acquire Feedback From Other Communities** – Staff contacted the City of Evanston and the City of Highland Park to discuss their experiences with this issue. As of this writing, staff was unable to connect with the pertinent staff from those communities to get feedback Staff will report further on this at Monday Night's meeting.

Budget Impact:

The addition of this program as proposed by MPAC will add approximately \$10,000.00 annually to the operating budget for landscape maintenance. An in-house cost would approximate \$7,000.00 in materials, equipment, and labor.

Service Delivery Impact:

This project will not have any impact on the delivery of Public Works services if contractual. If performed in-house, staff would have to cut back on another parks related activity or combination of activities to complete this work.

Recommendation:

Staff is of the opinion that the Village's turf maintenance program already incorporates a lot of the principles of pesticide free parks. Our program exceeds basic compliance of all of the Illinois Department of Agriculture's rules and regulations for pesticides. Staff does not recommend pursuing this program at this time due to the expense and the quality of our existing practices.

Reports and Documents Attached:

- Various Fertilizer Labels and Material Safety Data Sheets

Meeting History	
Initial Referral to Park Board:	August 17, 2015
Park Board	September 21, 2015



*A Premium Formula of
Natural & Organic Ingredients
Blended with Methylene Urea
and Ammonium Sulfate*

18-0-4
Blended with MESA®

Fine Grade

Net Wt. 50 Lbs.

SGN: 130-145

GUARANTEED ANALYSIS

Total Nitrogen (N)	18.0%
2.04% Ammoniacal Nitrogen	
0.87% Urea Nitrogen	
10.02% Water Insoluble Nitrogen*	
5.07% Other Water Soluble Nitrogen**	
Soluble Potash (K ₂ O)	4.0%
Sulfur (S)	3.0%
3.00% Combined Sulfur (S)	

Source of Nutrients:

Hydrolyzed feather meal, methylene urea, ammonium sulfate, meat meal, sulfate of potash, urea and blood meal.

*This product contains 10.02% slow release water insoluble nitrogen from hydrolyzed feather meal, meat meal and methylene urea.

**This product contains 5.07% slowly available water soluble nitrogen from methylene urea.

General Information:

Two thirds (67%) of the product consists of Nature Safe Natural and Organic Fertilizer. Nature Safe, through its high quality proteins, will begin to release in 7 to 10 days and will slowly release nitrogen for the next 8 to 12 weeks. One third (33%) of Nature Safe 18-0-4 consists of MESA® 34-0-0, a patented controlled release nitrogen product containing methylene urea that is comprised of varying lengths of methylene urea polymers and ammonium sulfate. Through this combination, the methylene urea continuously releases nitrogen through the 16th week after application. This product combines the consistent and sustained feeding of methylene urea and the color response and quick release of ammonium sulfate, along with the organic nutrition of Nature Safe, providing optimum soil and plant nutrition. Response time is based on applications of 1 lb. of actual N.

Directions for Use:

Established Turfgrass: Use as a topdressing for tees, greens, roughs and fairways or any established turf. Apply 3.4 to 5.6 lbs. per 1,000 sq. ft. (0.6 to 1 lb. of actual N).

Three to four applications per year are recommended. Covers 8,900 to 15,000 sq. ft.

Fine grade: Suggested for use on turf mowed at heights 1/8" or greater.

Suggested Spreader Settings:

Lb. N	Scotts R8	Scotts 2000	Lesco	Prizelawn	Vicon	Lely	Spyker
6 Lb.	N	M	H	-	23-25'	4.75-25'	-
1 Lb.	O	Q/R	J/K	-	34-25'	6.5-25'	-

Note: All settings are approximations. Calibrate spreaders to ensure accuracy

Darling Ingredients Inc. dba Griffin Industries LLC

• 251 O'Connor Ridge Blvd. • Irving, TX 75038 • (800) 252-4727 • www.naturesafe.com •

Nature Safe® is a brand of Darling Ingredients Inc.
MESA® is a registered trademark of Lebanon Seaboard Corporation

SPEC-18

Nature Safe®

*A Premium Formula of
Natural & Organic Ingredients
Blended with Methylene Urea
and Ammonium Sulfate*

18-0-4

Blended with MESA®

Fine Grade

Guaranteed Analysis

Total Nitrogen (N)	18.0%
2.04% Ammoniacal Nitrogen	
0.87% Urea Nitrogen	
10.02% Water Insoluble Nitrogen*	
5.07% Other Water Soluble Nitrogen**	
Soluble Potash (K ₂ O)	4.0%
Sulfur (S)	3.0%
3.00% Combined Sulfur (S)	

Derived From

Hydrolyzed feather meal, methylene urea, ammonium sulfate, meat meal, sulfate of potash, urea and blood meal.

*This product contains 10.02% Slow Release Water Insoluble Nitrogen from hydrolyzed feather meal, meat meal and methylene urea.

**This product contains 5.07% Slowly Available Nitrogen from methylene urea.

Directions for Use

Apply 3.4 - 5.6 lbs. per 1,000 sq. ft. (1.6 kg to 2.7 kg per 100 m²) for 0.60 - 1.0 lb. actual N per 1,000 sq. ft. Three to four applications per year are recommended.

Amount	Scotts R8	Scotts 2000	Lesco	Prizelawn	Vicon	Lely
1/2 Lb.	N	M	H	-	23-25'	4.75-25'
1 Lb.	O	Q/R	J/K	-	34-25'	6.5-25'

The spreader settings are conservative and should only be used as a guide for calibrating your spreader. Ground speed for Vicon and Lely settings was 4.5 mph.

General Information

Nature Safe 18-0-4 is a blend of 67% Nature Safe Natural & Organic Fertilizer and 33% MESA® 34-0-0, a patented controlled release nitrogen product containing methylene urea and ammonium sulfate. This product will release nutrients up to 16 weeks.

Information regarding the contents and levels of metals in this product is available on the Internet at <http://www.aapco.org/metals.htm>

Sports Turf Directions for Use for Phosphate and Nitrogen:
See documents SL191, Recommendations for N, P, K & Mg for Golf Courses & Athletic Field Fertilization Base on Melchik I Extractant (<http://edis.ifas.ufl.edu/SS404>) or BMP's for Enhancement of Environmental Quality on Florida's Golf Courses (<http://www.dep.state.fl.us/water/nonpoint/docs/nonpoint/glbmp07.pdf>).

Lawn Maintenance Companies Directions for Use for Phosphate and Nitrogen:
See document Best Management Practices for Protection of Water Resources in Florida, June 2002, Florida Green Industries (http://www.dep.state.fl.us/central/Home/Meetings/Training/FLGreen/BMP_Book_final.pdf).

Lawn/Garden Directions for Use for Phosphate and Nitrogen:
Do not apply near water, storm drains or drainage ditches. Do not apply if heavy rain is expected. Apply this product only to your lawn/garden, and sweep any product that lands on the driveway, sidewalk, or street, back onto your lawn/garden.

Do Not Feed to Animals

Manufactured By: Darling Ingredients Inc.
dba Griffin Industries LLC
251 O'Connor Ridge Blvd.
Irving, TX 75038 U.S.A.
(800) 252-4727
www.naturesafe.com

50 LBS. (22.68 Kg)

Covers 8,900 - 15,000 Sq. Ft.

Based on 0.6 lb. of "N" per 1,000 Sq. Ft.



Nature Safe® is a registered trademark of Griffin Industries LLC
MESA® is a registered trademark of Lebanon Seaboard Corporation

F1024

Material Safety Data Sheet

Identity: Nature Safe 18-0-4 Fertilizer with Methylene Urea and Ammonium Sulfate

Section I - General Information

Manufacturer's Name: Darling Ingredients Inc. dba Griffin Industries LLC
251 O'Connor Ridge Blvd., Irving, TX 75038

Emergency Telephone Number:
(859) 472-7363

Telephone Number for Information:
(859) 472-7363

Date Prepared: 3/19/14

Signature of Preparer: Tom Dobbs

Section II - Hazardous Ingredients/Identity Information

Hazardous Components - Contains no Hazardous Components as described in the Hazard Communication Standard

Substance - Natural Organic Fertilizer fortified with Methylene Urea and Ammonium Sulfate CAS Number N/A

Trade Names - Nature Safe, Nature Safe 18:0:4 Fertilizer, Nature Safe Natural & Organic Fertilizers

Chemical Family: Proteinaceous Organic Animal Byproducts plus Mineral Additives

Molecular Formula: N/A

Molecular Weight: N/A

Components and Contaminants

Components:	Animal Byproducts	60-70%:	CAS# 68131-124
	Methylene Urea/Ammonium Sulfate	25-35%:	CAS # 598-50-5/7783-20-2
	Sulfate of Potash	5-12%:	CAS# 7778-80-5

Section III - Physical/Chemical Characteristics

Boiling Point: Decomposes

Vapor Pressure (mm Hg): N/A

Vapor Density (Air = 1): N/A

Specific Gravity (H2O = 1): 0.50 avg.

Melting Point: Decomposes

Evaporation Rate: 0

(Butyl Acetate = 1)

Solubility in Water: Partly Soluble to Insoluble

Appearance and Odor: Tan to dark brown solid with blue-green granules, Characteristic Odor.

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used): None, Decomposes

Flammable Limits: N/A LEL: N/A UEL: N/A

Extinguishing Media: Type ABC

Special Fire Fighting Procedures: Firefighters should follow standard firefighting procedures and wear self-contained breathing apparatus and protective clothing

Unusual Fire and Explosion Hazards: Toxic fumes may be emitted

Section V - Reactivity Data

Reactivity: Stable

Conditions to Avoid: Do not mix with other chemicals

Incompatibility (Materials to Avoid): Strong oxidizers

Hazardous Decomposition or Byproducts: Fire conditions may emit toxic fumes

Hazardous Polymerization: Will Not Occur

Section VI - Health Hazard Data

Inhalation: Dust may cause irritation to nose and throat

Skin Contact: May cause irritation. Wash skin with mild soap and water

Eye Contact: May cause irritation. Flush with clear water

Ingestion: May cause stomach distress. Call physician if ingested.

Emergency and First Aid Procedures: Wash well after handling.

Carcinogenicity: None IARC Monographs: N/A

OSHA Regulated: No

Section VII - Precautions for Safe Handling and Use

Steps to be taken in case material is released or spilled - Sweep up spilled fertilizer. If uncontaminated, collect and reuse as recommended by product label. Avoid contamination of any body of water

Waste Disposal Method - Dispose in accordance with Federal, State and Local regulations

Precautions to be Taken in Handling and Storing - Handle in accordance with good industrial hygiene and safety practices. Wash hands well after handling. Do not eat, drink or smoke while handling this product. Minimize dust generation and accumulation. Routine housekeeping should be instituted to minimize dust accumulation on surfaces. Store away from heat sources

Other Precautions - None

Section VIII - Control Measures

Respiratory Protection - Dust mask

Ventilation - Ventilate bins before entering.

Protective Gloves - Rubber gloves may be worn

Eye Protection - Safety glasses when handling bulk quantities

Other Protective Clothing or Equipment - Standard protection

Work/Hygienic Practices - Handle in accordance with good industrial hygienic and safety practices

The information provided is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

REJUVENATE SEED TREATMENT

Rejuvenate Seed Treatment is a plant growth regulator which reinforces apical dominance on potato seed.

FOR USE ON POTATO SEED ONLY

ACTIVE INGREDIENTS

1-Naphthaleneacetic Acid, Potassium Salt*	6.25%
Other Ingredients	93.75%
Total	<u>100.0%</u>

*Equivalent to 5.18% 1-Naphthaleneacetic Acid or 200 grams (0.44 Lbs.) per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID

If swallowed	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by the poison control center or doctor.• Do not give anything by mouth to an unconscious person.
If in eyes	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
If on skin or Clothing	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment advice.
If Inhaled:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible.• Call poison control center or doctor for further treatment advice.

EMERGENCY INFORMATION

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

FOR THE FOLLOWING EMERGENCIES, PHONE 24 HOURS A DAY:

For Medical Emergencies phone:..... 1-888-681-4261
For Transportation Emergencies, including spill, leak or fire, phone: CHEMTREC..... 1-800-424-9300
For Product Use Information phone : AMVAC..... 1-888-462-6822

EPA REG. No. 87320-2-5481

EPA Est. No. 5481-CA-1

Net Contents: As Marked on Container

Distributed by:


4100 E. Washington Blvd
Los Angeles, CA 90023 U.S.A
1-888-462-6822

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION

Caution: Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes and clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of waters. Do not contaminate irrigation ditches or water used for irrigation or domestic purposes. Do not apply when conditions favor drift from treated areas. Do not use in a greenhouse.

USER SAFETY RECOMMENDATIONS

Users should:

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes and socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal.

PESTICIDE STORAGE: Store product in original container in a cool (not in direct sunlight), dry, locked place out of the reach of children. Do not allow the product to freeze.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container, Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and expectations pertaining to the statements in this labeling about personal protective equipment (PPE), and restricted-entry interval (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: Coveralls, Chemical-resistant gloves made of any waterproof material, Shoes plus socks, Protective eyewear.

CONDITIONS OF USE

Rejuvenate Seed Treatment is a synthetic auxin plant hormone. The response of potatoes to an application of this growth regulator can vary among cultivars, as well as environmental conditions and cultural practices. It is the responsibility of the applicator to determine the best use of the product from practical experience gained through trial and error on a small scale under varying environmental conditions and seed lot profiles. Stehekin, LLC makes Rejuvenate Seed Treatment available for use in the manner described on the label on the basis that in the sole opinion of the user, the benefits or utility derived from the use of Rejuvenate Seed Treatment on potatoes outweigh the potential risk of crop injury or loss. If these Special Conditions of Use are not acceptable, the unopened product may be returned to the seller for a refund. These Special Conditions of Use are specified by Stehekin, LLC and not the EPA or any state.

SEED TREATMENT FOR STEM MANAGEMENT AND REDUCTION OF UNDERSIZED TUBERS

Rejuvenate Seed Treatment helps restore apical dominance on potato seed. Applications of Rejuvenate Seed Treatment at any rate can result in a range from no effect to the complete elimination of stems. Higher rates and treated seed planted in cool, wet soils tend to have a relatively greater impact on stem number and can lead to a potential delay in emergence and possible yield loss. Certain varieties of aged seed can be more prone to producing excessive stems. The proper treatment of such seed tubers can provide more optimal stem numbers and improve marketable size distribution. Pre-Harvest Interval (PHI) is 90 days.

Russet Potato Varieties

Apply up to 0.16 fl. oz. of Rejuvenate Seed Treatment per acre of seed (20 cwt. or 1 ton of seed/acre) in enough water to ensure adequate coating of the seed pieces, without damaging the

seed. Rejuvenate Seed Treatment rate per acre will vary depending on the age of seed, whether seed is cut or uncut, and soil temperature and moisture throughout the time of planting and plant emergence. Tank-mix Rejuvenate Seed Treatment only with physically compatible products.

Non-russet Potato Varieties

Apply up to 0.115 fl. Oz. of Rejuvenate Seed Treatment per acre of seed (20 cwt. or 1 ton of seed/acre) in enough water to ensure adequate coating of the seed pieces, without damaging the seed. Rejuvenate Seed Treatment rate per acre will vary depending on the variety, age of seed, whether seed is cut or uncut, and soil temperature and moisture throughout the time of planting and plant emergence. Tank-mix Rejuvenate Seed Treatment only with physically compatible products.

For example, 7.5 ounces of Rejuvenate Seed Treatment at 0.10 fl. ounces per acre rate treats 75 tons of seed or 1,500 cwt.

Excess treated seed may be used for ethanol production if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in ethanol by-products that are used in agronomic practice.

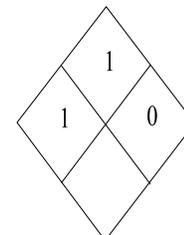
Distributed by:
AMVAC
4100 E. Washington Blvd.
Los Angeles, CA 90023 U.S.A
1-888-462-6822

WARRANTY STATEMENT

Stehekin, LLC warrants that this product conforms to the chemical description on its label and is reasonably fit for the purposes set forth on the label when used according to directions under normal use conditions. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. This warranty does not extend to the handling or use of this product contrary to label instructions or under abnormal conditions not reasonable foreseeable to seller and buyer assumes all risk of any such use.

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION



PRODUCT NAME: REJUVENATE™ SEED TREATMENT
GENERAL USE: Plant Growth Regulator
PRODUCT DESCRIPTION: Odorless, colorless to light amber liquid
EPA REGISTRATION NUMBER: 87320-2; 87320-2-5481
MSDS NUMBER: 442_3
CURRENT REVISION DATE: 7 February, 2013

MANUFACTURER:
AMVAC CHEMICAL CORPORATION
4100 E. Washington Blvd.
Los Angeles, CA 90023-4406
PHONE: 323-264-3910
FAX: 323-268-1028

EMERGENCY TELEPHONE NUMBERS:
MANUFACTURER: 323-264-3910
TRANSPORTATION (24 HOURS)
CHEMTREC: 800-424-9300
OTHER (24 HOURS)
AMVAC: 888-681-4261

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	WT %	CAS No.
Potassium salt of 1-Naphthaleneacetic acid	6.25	15165-79-4
Inert Ingredients	93.75	

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)

COMPONENT	HAZARD	OSHA PEL*	ACGIH TLV*
None of the ingredients are listed as hazardous			

* Exposure Limits 8 hrs. TWA (ppm)

REJUVENATE is a trademark of Stehekin LLC.

3. **HAZARDS IDENTIFICATION**

EMERGENCY OVERVIEW:

CAUTION! This product is not a significant, immediate concern for emergency response personnel. There is a chance of eye irritation upon contact. As with any chemical, ingestion, skin contact, and inhalation of mists should be monitored for overexposure symptoms.

This product should be kept out of bodies of water.

POTENTIAL HEALTH EFFECTS

ROUTE(S) OF ENTRY: This product may be contacted by inhalation, skin contact, eye contact, and ingestion.

SIGNS OF ACUTE OVEREXPOSURE: Acute overexposure to this product may irritate the skin, eyes, and mucous membranes. Ingestion may cause inebriation, headache, nausea, vomiting, and abdominal pains.

SIGNS OF CHRONIC OVEREXPOSURE: None known.

OTHER POTENTIAL EFFECTS: None known for the product. Laboratory studies carried out on technical 1-Naphthaleneacetic Acid Sodium Salt have shown no evidence of carcinogenicity or reproductive toxicity and the developmental studies have only shown effects in the rat and rabbit fetus at maternally toxic dose levels.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Preexisting skin or respiratory disorders may be aggravated by exposure to components of this product.

4. **FIRST AID MEASURES**

EYES: Immediately flush the eyes with copious amounts of clear, cool running water for a minimum of 15 minutes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eyes and lids with water. Contact a physician immediately. If there will be a delay in getting medical attention, rinse the eyes for at least another 15 minutes.

INHALATION: Remove victim to fresh air. If breathing has ceased, clear the victim's airway and start mouth-to-mouth artificial respiration. If breathing is difficult, give oxygen. Contact a physician immediately.

INGESTION: Immediately dilute the swallowed product by giving large quantities of water. Induce vomiting by using Syrup of Ipecac according to bottle directions, or, if necessary, by touching the back of the throat with a finger. Never give anything by mouth to an unconscious or convulsing person. Contact a physician immediately.

4. FIRST AID MEASURES, cont'd

SKIN: Immediately flush all affected areas with large amounts of clear water for at least 15 minutes. Remove contaminated clothing. Do not attempt to neutralize with chemical agents. Wash clothing before reuse. If skin irritation develops, contact a physician immediately.

NOTE TO PHYSICIANS: Treat symptomatically. Further information on this product can be obtained from AMVAC Chemical Corporation. (See Section 1).

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flash Point:	Not applicable
Autoignition Temperature:	Not applicable
Flammable Limits:	
Lower flammable limit:	Not applicable
Upper flammable limit:	Not applicable
Flammability:	This product is flammable only when evaporated and heated in a direct flame (NFPA rating = 1)

EXPLOSIVITY

Mechanical Impact:	Not explosive
Static Discharge:	Has not been tested, but should not occur.

HAZARDOUS COMBUSTION PRODUCTS: May emit hazardous fumes when heated excessively. Wear self-contained breathing apparatus.

EXTINGUISHING MEDIA: Nonflammable. Base decision on surrounding materials in fire.

FIRE FIGHTING INSTRUCTIONS: None

6. ACCIDENTAL RELEASE MEASURES

GENERAL: Use adequate ventilation and appropriate personal protective equipment (See Section 8). Keep bystanders upwind and away from the spill.

SMALL SPILL: Cover with absorbent (clay, sawdust, straw, kitty litter, etc.), to absorb the liquid. Sweep into an open drum. Close the drum and dispose of properly.

LARGE SPILL: Dike the spill to prevent contamination of local water sources. Siphon the majority of the liquid into drums for use or disposal, depending on the circumstances. Clean the area as described for a small spill.

7. HANDLING AND STORAGE

HANDLING: Avoid contact with the skin and eyes. Keep this product away from food and drink. Keep it away from children and pets. Do not cross-contaminate this product with pesticides.

STORAGE: Store the product in its original container in a cool (not in direct sunlight), dry, locked place out of reach of children. Do not allow product to freeze.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: None

RESPIRATORY PROTECTION: No special respiratory protection is required when product is used according to label instructions.

SKIN PROTECTION: The minimum protective clothing required is full-body covering clothing, such as slacks and long-sleeved shirt or coveralls, shoes or boots, and waterproof gloves. Certain states may require further protection. Your State Department of Agriculture should be consulted for the most current requirements.

EYE PROTECTION: Safety glasses are required whenever a person is working with chemicals. Safety goggles or a full faceshield should be worn if there is a chance of exposure to mists.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid
APPEARANCE:	Colorless to light amber
ODOR:	Odorless
BOILING POINT:	101 C/214 F
FREEZING/MELTING POINT:	-1 C/30 F
SPECIFIC GRAVITY:	1.016 g/cm ³ @ 20 C/4 C
DENSITY:	8.48 lb/gal
VAPOR PRESSURE :	17 mm/Hg @ 20 C (solvent)
VAPOR DENSITY:	Same as water
PERCENT VOLATILE BY VOLUME:	93.75%
SOLUBILITY IN WATER:	Miscible
SOLUBILITY (other):	Soluble in alcohols
PARTITION COEFFICIENT (O/W):	Not available
pH (as is):	9 - 10
EVAPORATION RATE:	1.0 as compared to water

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY (Conditions to avoid): Stable under normal use conditions.

10. STABILITY AND REACTIVITY, cont'd

INCOMPATIBILITY: Addition of acids to the product will cause Naphthaleneacetic acid to precipitate from the solution.

HAZARDOUS DECOMPOSITION PRODUCTS: When the product is heated to decomposition, acrid smoke and fumes may be given off.

HAZARDOUS POLYMERIZATION: This product will not polymerize.

11. TOXICOLOGICAL INFORMATION

INGESTION: Oral LD₅₀ (rat): 5647 mg/kg (Tox Cat IV)
INHALATION: Inhalation LC₅₀ (rat): 2.54 mg/L (aerosol) (Tox Cat IV)
DERMAL: Skin LD₅₀ (rat): > 2000 mg/kg (Tox Cat IV)
IRRITATION: Eye irritation: Mildly irritating. (Toxicity Category III)
Skin irritation: Minimally irritating (Toxicity Category IV)
SENSITIZATION: Sensitizer (1-NAA Acid): Not a skin sensitizer
TERATOGENICITY: No data are available on this product. Tests carried out on Technical 1-Naphthaleneacetic Acid Sodium Salt have shown developmental effects on the fetus at maternally toxic dose levels in the rat and rabbit..
MUTAGENICITY: No data available on this product. There is no evidence of genotoxic potential, *in vivo*, when Technical 1-Naphthaleneacetic Acid Sodium Salt was tested.
CARCINOGENICITY: No data are available on this product. There was no evidence of carcinogenicity from laboratory studies carried out on Technical 1-Naphthaleneacetic Acid, Sodium Salt and Technical 1-Naphthaleneacetamide in rodents.
REPRODUCTIVE TOXICITY: No data are available on this product. A study carried out on Technical 1-Naphthaleneacetic Acid, Sodium Salt, has shown no reproductive effects. At the highest dose level tested there was some evidence of parental toxicity with accompanying associated effects on offspring survival and growth.
TOXICOLOGICALLY SYNERGISTIC PRODUCTS: No data are available.

12. ECOLOGICAL INFORMATION

GENERAL: Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed on site by use according to the label or at an approved waste disposal facility. Be sure to check with the appropriate Federal, State and local authorities to determine the current regulations for your area.

13. DISPOSAL CONSIDERATIONS, cont'd

CONTAINER DISPOSAL: Do not reuse the empty container. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose in a sanitary landfill, or by incineration, or, if allowed by State and local authorities, by burning. If the container is burned stay out of the smoke. Be sure to check with the appropriate Federal, State and local authorities to determine the current regulations for your area.

14. TRANSPORTATION INFORMATION

DOT CLASS:	None assigned
UN NUMBER:	None assigned
IMDG CLASS (sea):	None assigned
MARINE POLLUTANT:	No
PACKING GROUP:	None assigned
HAZARD LABEL(s):	None
ADR CLASS (road):	None assigned
PROPER SHIPPING NAME(s):	None assigned
REPORTABLE QUANTITY:	None
TYPICAL PACKAGING:	Sample bottles

NOTE: The classification of this product is based on the fact that the mist criteria found in 49CFR§173.132(b)(3) will not be met and therefore the LC₅₀ is not applicable.

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: This material is for RESEARCH AND DEVELOPMENT USE ONLY. It is being supplied under the exemption for research and development under the Toxic Substances control Act (TSCA) and/or the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Commercial use of this material is a violation of Federal law.

SARA TITLE III DATA

Section 311 & 312 Hazard Categories:

Immediate Health Hazard:	Yes
Delayed Health Hazard:	No
Fire Hazard:	No
Reactive Hazard:	No
Sudden Pressure Release Hazard:	No

Section 302 Extremely Hazardous Substances: None

Section 313 Toxic Chemicals: None

CERCLA Reportable Quantity (RQ):None

STATE REGULATIONS:

CALIFORNIA (Proposition 65): None

16. OTHER INFORMATION

MSDS STATUS:

Date This Revision: 7 February, 2013
Date Previous Revision: 26 March, 2012
Person Responsible for Preparation: Gary A. Braden

REASONS FOR REVISION: Two registration numbers are required on the msds in section 1, requiring a further revision.

DISCLAIMER: This information is provided for the limited guidance to the user. While AMVAC believes that the information is, as of the date hereof, reliable, it is the user's responsibility to determine the suitability of the information for its purposes. The user is advised not to construe the information as absolutely complete since additional information may be necessary or desirable when particular, exceptional, or variable conditions or circumstances exist (like combinations with other materials), or because of applicable regulations. No express or implied warranty of merchantability or fitness for a particular purpose or otherwise is made hereunder with respect to the information or the product to which the information relates.

ABBREVIATIONS:

ACGIH	-	American Conference of Governmental Industrial Hygienists
ADR	-	European <u>A</u> greement Concerning the International Carriage of <u>D</u> angerous Goods by <u>R</u> oad
CERCLA	-	Comprehensive Environmental Response, Compensation, and Liability Act
EPA	-	Environmental Protection Agency
FIFRA	-	Federal Insecticide, Fungicide, and Rodenticide Act
IARC	-	International Agency for Research on Cancer
NTP	-	National Toxicology Program
OSHA	-	Occupational Safety and Health Agency
SARA	-	Superfund Amendments and Reauthorization Act
TSCA	-	Toxic Substances Control Act

This is the last page of this MSDS. There should be 7 pages.

AWAKEN[®]



(01) 0 06 23111 00298 7

16-0-2 with micronutrients/16-0-2 avec oligo-éléments

**Specialty Plant Nutrient Solution
Solution Nutritive Pour les Plantes Complémentaire**

GUARANTEED ANALYSIS

Nitrogen (N) (total)	16%
Soluble Potash (K ₂ O)	2%
Boron (B) actual	0.02%
Copper (Cu) actual	0.15%
Iron (Fe) actual	0.15%
Manganese (Mn) actual	0.15%
Molybdenum (Mo) actual	0.0006%
Zinc (Zn) actual	2.7%
Net Weight: 11.6 kg	Density: 1.23 kg/L
Chlorine (Cl), (maximum)	0.01%

GARANTIE D'ANALYSE

Azote (N) (total)	16%
Potasse (K ₂ O) soluble	2%
Bore (B)	0,02%
Cuivre (Cu)	0,15%
Fer (Fe)	0,15%
Manganèse (Mn)	0,15%
Molybdène (Mo)	0,0006%
Zinc (Zn)	2,7%
Poids net : 11,6 kg	Densité : 1,23 kg/L
Chlore (Cl) (maximum)	0,01%

**KEEP OUT OF REACH
OF CHILDREN
NET CONTENTS: 9.46 L**

**GARDER HORS DE LA
PORTÉE DES ENFANTS
CONTENU NET : 9,46 L**

PPJOB#

Product of U.S.A.

01/12

Manufactured for and Distributed by / Fabriqué pour et Distribué par :



Loveland Products Canada Inc.
789 Donnybrook Drive
Dorchester, Ontario N0L 1G5

Product inquiries / Renseignements sur les produits : 1-800-328-4678
24hr emergency contact / Contact en cas d'urgence, 24 heures sur 24 : 1-800-561-8273

Lot Number/Numéro de lot: see the container/voir le contenant

GENERAL INFORMATION

AWAKEN® 16-0-2 with Micronutrients is a plant nutrient solution. It will not, by itself provide all the nutrients normally required by crops. To be used as part of a complete fertilizer program.

AWAKEN is recommended especially for:

- 1) Mixing with liquid fertilizers for pre-emergent, or early postemergent application.
- 2) Mixing with liquid fertilizers for foliar application.
- 3) Application in irrigation water, either alone or in combination with fertilizers.
- 4) Mixing with water spray solutions for soil or foliar application.
- 5) Application to soil either in water alone or as a component in other liquid fertilizer mixtures where soil incorporation is otherwise impractical.
- 6) Application as impregnated with dry fertilizer.

The prevention of nutrient deficiencies in crop is preferable to correcting them after symptoms appear, although this can often be done by prompt soil and/or foliar application. Foliar applications are recommended when fast correction is necessary or soil application is expensive and impractical.

It is recommended that soil and/or plant tissue samples be analyzed to determine nutrient levels prior to using this product. This product is to be used where deficiencies, based on soil/tissue analysis, have been identified.

AWAKEN should be well mixed with water, water/fertilizer solutions, or pesticide solutions before application. Foliar application should be made in early morning or late evening. Some foliar burning could result if applied during hot, dry daytime conditions. While phytotoxic symptoms may occasionally occur on very sensitive crops, the recommended rates listed have been extremely successful in foliar usage. For additional information on rates, timing of application and hybrids or crops susceptible to phytotoxicity, consult your local farm advisor.

PRECAUTIONS

May be harmful if swallowed, inhaled or absorbed through skin. May cause eye and skin irritation. Avoid contact with eyes, skin and clothing. Avoid breathing vapors. Use with adequate ventilation. Eye protection and gloves are suggested when handling undiluted product. Wash thoroughly after handling. Contains ammonia. Contents may be under pressure. Use caution when opening.

CAUTION: This fertilizer contains Boron, Copper, Manganese, and Zinc, and should be used only as recommended. It may prove harmful when misused.

FIRST AID

If in eyes: Immediately flush eyes with plenty of water. Continue flushing for at least 15 minutes and call a physician if irritation persists.

If on skin: Flush affected skin with water. Remove contaminated clothing. Launder clothing before reuse.

If inhaled: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician if indicated.

If swallowed: Drink plenty of water if conscious. Call a physician or poison control center immediately for advice on inducing vomiting. Do not induce vomiting or give anything by mouth to an unconscious person.

STORAGE AND DISPOSAL

STORAGE: Keep container tightly closed when not in use. A poorly sealed container may adversely affect product quality. Store in original container only, preferable in a locked area. Store in a cool, dry place, Avoid freezing. If product freezes, allow it to warm and then mix thoroughly before use. Do not use food or drink containers for mixing or storage.

PRODUCT DISPOSAL: If product cannot be used as intended, disposal should comply with provincial regulations. Avoid contaminating water by disposal of equipment washwaters or other product wastes.

CONTAINER DISPOSAL: Do no reuse empty container. Rinse thoroughly, adding rinsate to mixing tank. Then offer container for recycling or dispose of in a sanitary landfill.

EQUIPMENT

Brass, copper and galvanized metals may be subject to mild corrosion from prolonged or repeated contact with this product.

COMPATIBILITY

AWAKEN can be applied alone or with other compatible spray materials. Ammonium polyphosphate fertilizers tend to be more compatible than orthophosphate types. Including some polyphosphate in the mixture often improves compatibility of orthophosphates. Proposed mixtures should be evaluated in a jar test before full scale use. Fertilizer based mixtures that also contain pesticides should be sprayed as soon as possible.

MIXING INSTRUCTIONS

For certain uses, such as in-furrow injection, **AWAKEN** is often used undiluted. Depending on desired row spacing, flow rate and other factors, dilution with water may be desirable. Mix only enough material for use on the day of application. For mixture with water in other types of applications, mix as follows: Fill mixing tank about 1/2 full with water. Start agitation and add required amount of **AWAKEN**. Finish filling tank with water. Continue agitation until tank is emptied. Apply the spray mixture as soon as possible. Avoid storing for prolonged periods. For applications such as side dress, **AWAKEN** can be mixed with many starter fertilizers.

TANK MIXES: Do not mix with pesticides or other fertilizers without compatibility test. An adequate test for physical compatibility involves mixing in a small container, the proper proportions of product with water and the other ingredients. Agitate and let stand for one hour. If a precipitate forms, apply the products separately. Do not reuse container.

LIQUID FERTILIZER TANK MIXES: Mix the product with liquid fertilizer, agitating to thoroughly disperse the elements. This can be achieved by adding product to the mixing batch tank or inducting through a pump. When mixing in batch tank, add product to water or nitrogen solution before adding phosphate material. This product can be mixed with liquid starter fertilizers.

APPLICATION RECOMMENDATIONS

BROADCAST, BAND OR SIDE DRESS APPLICATIONS TO SOIL: Apply at the rate of 5 to 10 L/ha. Best results may be obtained when **AWAKEN** is incorporated or injected below the soil surface. Rainfall or irrigation soon after application may also aid in achieving proper placement. For certain vegetables and gardens, a band application over the planted row followed by watering-in is a useful method of application.

DRIP IRRIGATION SYSTEMS: Apply several times from preplant through seeding and early vegetative crop stages. Regular growing season use may be desired for established orchards, although spring is probably the best time for a single application. For new plantings, apply in spring. Use a backflow prevention device to avoid contamination of the water supply.

PIVOT, SPRINKLER, OVERHEAD AND SOLID SET IRRIGATION: Apply 4.7 to 5.5 L/ha with irrigation water. For best results, apply within 2 weeks of planting and before flowering. The chelate may be mixed with fertilizer and/or pesticides before injection. Use backflow check valve to prevent material from running.

FOLIAR APPLICATIONS: Apply at the rate of 5 L/ha. Use a minimum spray volume of 50 L of water/ha by air and in at least 75 L of water/ha by ground. If applied through a sprinkler system, use a backflow prevention device to avoid contamination of the water supply.

TRANSPLANT SOLUTIONS: Apply at the rate of 2.5 to 5 L/ha in sufficient water to thoroughly drench soil around transplants and move **AWAKEN** into the root zone. Approximately 500 to 2000 L of water/ha may be needed, depending on equipment. A compatible high phosphate fertilizer, such as 10-34-0 or 8-31-4, may be added if desired. (Ammonium polyphosphate fertilizers are preferred.) Many transplant programs use about 5 L/ha of such fertilizer. Add this product to water first and then add fertilizer. Seedbeds can be treated similarly soon before or after seeding.

DRY FERTILIZER IMPREGNATION: Many dry fertilizer may be impregnated with **AWAKEN**. Treat such that the 5 L/ha application rate will be achieved when the dry fertilizer is spread. Blends containing at least 50% of a mixture of urea, ammonium phosphate and/or nitrate type fertilizers are generally suitable for impregnation. Apply **AWAKEN** uniformly to the dry blend using a spray bar in the blender, a nozzle mounted on an auger, a nozzle mounted over a conveyor, or other similar setup. Use 28-0-0 to dilute **AWAKEN** if additional spray volume is needed for coverage. For best results, dry blends must be applied to soil uniformly and should be incorporated into the root zone of the crop. Use the blend as soon as possible after blending.

ORNAMENTALS, CONTAINER-GROWN TREES AND SHRUBS: *Soil:* Apply 5 - 10 L/ha. Repeat application if symptoms persist. *FOLIAGE:* Apply 5 L/ha as a thorough cover spray in a minimum of 400 L of water.

GREENHOUSE-GROWN CHRYSANTHEMUMS, ROSES, CARNATIONS, AND POTTED FLORAL PLANTS: *Soil only:* Apply 5 - 10 L/ha at regular intervals with fertilizer or drip irrigation.

TURF GRASSES: Apply 5 - 10 L/ha in a minimum of 200 L of water or 50 mL/100 m² in a minimum of 2 L of water. Mix well with water, liquid fertilizer solution or pesticide solution and apply in early spring. Repeat as needed.

WARRANTY DISCLAIMER AND NOTICE

THE DIRECTIONS FOR USE OF THIS PRODUCT ARE BELIEVED TO BE ADEQUATE AND SHOULD BE FOLLOWED CAREFULLY. IT IS IMPOSSIBLE TO ELIMINATE ALL RISKS INHERENTLY ASSOCIATED WITH THE USE OF THIS PRODUCT. CROP INJURY, INEFFECTIVENESS, OR OTHER UNINTENDED CONSEQUENCES MAY RESULT DUE TO SUCH FACTORS AS WEATHER CONDITIONS, PRESENCE OR ABSENCE OF OTHER MATERIALS, OR THE MANNER OF USE OR APPLICATION, ALL OF WHICH ARE BEYOND THE CONTROL OF LOVELAND PRODUCTS CANADA INC., THE MANUFACTURER OR SELLER.

THE PRODUCTS SOLD TO YOU ARE FURNISHED "AS IS" BY LOVELAND PRODUCTS CANADA INC., THE MANUFACTURER OR SELLER, AND ARE SUBJECT ONLY TO THE MANUFACTURER'S WARRANTIES, IF ANY, WHICH APPEAR ON THE LABELS TO THE PRODUCTS SOLD TO YOU. EXCEPT AS EXPRESSLY PROVIDED HEREIN, LOVELAND PRODUCTS CANADA INC., THE MANUFACTURER OR SELLER MAKES NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD OR USE OF THE PRODUCT, INCLUDING, BUT NOT LIMITED TO, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. EXCEPT AS EXPRESSLY STATED HEREIN, LOVELAND PRODUCTS CANADA INC., THE MANUFACTURER OR SELLER MAKES NO WARRANTY OF RESULTS TO BE OBTAINED BY USE OF THE PRODUCT. BUYER'S OR USER'S EXCLUSIVE REMEDY, AND LOVELAND PRODUCTS CANADA INC.'S, THE MANUFACTURER'S OR SELLER'S TOTAL LIABILITY, SHALL BE LIMITED TO DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT. NO AGENT OR EMPLOYEE OF LOVELAND PRODUCTS CANADA INC. OR SELLER IS AUTHORIZED TO AMEND THE TERMS OF THIS WARRANTY DISCLAIMER OR THE PRODUCT'S LABEL OR TO MAKE A REPRESENTATION OR RECOMMENDATION DIFFERENT FROM OR INCONSISTENT WITH THE LABEL OF THIS PRODUCT.

IN NO EVENT SHALL LOVELAND PRODUCTS CANADA INC., THE MANUFACTURER OR SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES AND THE BUYER AND USER WAIVE ANY RIGHT THEY MAY HAVE TO SUCH DAMAGES.

RENSEIGNEMENTS GÉNÉRAUX

AWAKEN® 16-0-2 avec oligo-éléments est une solution nutritive pour les plantes. À lui seul, cependant, il ne fournit pas tous les éléments nutritifs dont les cultures ont normalement besoin. À utiliser dans le cadre d'un programme complet de fertilisation.

L'**AWAKEN** est conseillé surtout :

- 1) en mélange avec des engrais liquides, lors des applications en pré-levée ou en post-levée hâtive;
- 2) en mélange avec des engrais liquides, en pulvérisation foliaire;
- 3) dans l'eau d'irrigation, seul ou en association avec des engrais;
- 4) en mélange avec des bouillies aqueuses, en pulvérisation sur le sol ou le feuillage;
- 5) en application sur le sol, dans l'eau seulement ou en mélange avec d'autres engrais liquides là où l'incorporation au sol est impraticable;
- 6) en application par imprégnation d'engrais solides.

Dans les cultures, il vaut mieux prévenir les carences en éléments nutritifs que les corriger après l'apparition des symptômes, mais, bien souvent, il est possible de les corriger en faisant sans tarder une application sur le sol et/ou le feuillage. Lorsque la correction doit se faire rapidement ou que l'application sur le sol est coûteuse ou impraticable, il est conseillé de faire l'application sur le feuillage.

Avant d'employer ce produit, il est conseillé de faire analyser le sol et/ou les tissus végétaux pour en déterminer la teneur en éléments nutritifs. Ce produit est destiné à être utilisé lorsque l'analyse du sol et/ou des tissus végétaux révèle une carence.

Avant d'appliquer l'**AWAKEN**, on doit bien le mélanger avec l'eau, la solution d'eau et d'engrais ou la solution de pesticides. L'application foliaire doit se faire en début de matinée ou en fin de soirée. Si elle se fait le jour, par temps chaud et sec, le feuillage risque de brûler quelque peu. Bien que les plantes très sensibles puissent parfois présenter des symptômes de phytotoxicité lorsque l'application se fait sur le feuillage, le taux de réussite avec les doses conseillées est très élevé. Pour plus de renseignements sur les doses, le calendrier des traitements et les plantes, hybrides ou non, pouvant subir des effets phytotoxiques, consulter le vulgarisateur agricole local.

PRÉCAUTIONS

Peut être nocif en cas d'ingestion, d'inhalation ou d'absorption par la peau. Peut causer une irritation des yeux et de la peau. Éviter le contact avec les yeux, la peau et les vêtements. Éviter d'inhaler les vapeurs. Utiliser avec une ventilation adéquate. Il est conseillé de se protéger les yeux et les mains quand on manipule ce produit à l'état pur. Bien se laver après la manipulation. Contient de l'ammoniaque. Le contenu peut être sous pression. Ouvrir avec précaution.

ATTENTION : Cet engrais contient du bore, cuivre, manganèse, molybdène, et zinc. Il faut en suivre le mode d'emploi, sinon il peut s'avérer nocif.

PREMIERS SOINS

En cas de contact avec les yeux : Rincer immédiatement les yeux avec beaucoup d'eau. Continuer à rincer pendant au moins 15 minutes, et appeler un médecin si l'irritation persiste.

En cas de contact avec la peau : Rincer la peau affectée avec de l'eau. Enlever les vêtements souillés, et les laver avant de les porter de nouveau.

En cas d'inhalation : Faire prendre l'air à la personne. Si elle ne respire plus, lui faire la respiration artificielle. Si elle a du mal à respirer, lui donner de l'oxygène. Appeler un médecin si indiqué.

En cas d'ingestion : Si la personne n'est pas sans connaissance, lui faire boire beaucoup d'eau. Appeler immédiatement un médecin ou un centre antipoison pour obtenir des conseils sur la provocation du vomissement. Si la personne est sans connaissance, ne rien lui faire boire et ne pas la faire vomir.

ENTREPOSAGE ET ÉLIMINATION

ENTREPOSAGE : Garder le contenant bien fermé quand on ne l'utilise pas, sinon la qualité du produit risque d'en souffrir. N'entreposer que dans le contenant d'origine, préférablement sous clef. Entreposer au frais et au sec. Éviter le gel. Si le produit gèle, le laisser se réchauffer et puis bien le mélanger avant de l'utiliser. Ne pas mélanger ni entreposer dans des contenants alimentaires.

ÉLIMINATION DU PRODUIT : Si on ne peut pas utiliser le produit comme prévu, l'éliminer conformément aux règlements provinciaux. Éviter de contaminer les eaux lors de l'élimination de l'eau de lavage d'équipement ou des autres déchets de produit.

ÉLIMINATION DU CONTENANT : Ne pas réutiliser le contenant vide. Bien le rincer, et verser la rinçure dans la cuve de mélange. Ensuite, le faire recycler ou l'éliminer en le jetant dans une décharge contrôlée.

ÉQUIPEMENT

Le lait, le cuivre et les métaux galvanisés peuvent se corroder légèrement s'ils sont exposés de façon prolongée ou répétée à ce produit.

COMPATIBILITÉ

On peut appliquer l'**AWAKEN** seul ou en association avec d'autres produits compatibles. Les engrais ammoniacopolyphosphatés ont tendance à être plus compatibles que les engrais orthophosphatés. L'ajout de polyphosphates au mélange améliore souvent la compatibilité des orthophosphates. Avant d'utiliser un mélange proposé à grande échelle, le soumettre à un essai de floculation. Si une bouillie à base d'engrais contient aussi des pesticides, la pulvériser dès que possible.

MÉLANGE

Pour certains usages, comme l'injection dans la raie de semis, l'**AWAKEN** est souvent utilisé à l'état non dilué. Selon l'interligne voulu, le débit et d'autres facteurs, sa dilution avec de l'eau peut être souhaitable. Ne mélanger que ce qu'il faut le jour de

l'application. Pour les autres types d'applications, le mélange avec de l'eau doit se faire comme suit. Remplir d'eau la moitié de la cuve de mélange. Mettre l'agitateur en marche, et ajouter la quantité voulue d'**AWAKEN**. Remplir d'eau le reste de la cuve. Laisser l'agitateur en marche jusqu'à ce que la cuve soit vidée. Pulvériser la bouillie dès que possible. Éviter de l'entreposer pendant longtemps. Quand l'application se fait entre les rangs, par exemple, on peut mélanger l'**AWAKEN** avec de nombreux engrais de démarrage.

MÉLANGE EN CUVE : Avant de mélanger ce produit avec des pesticides ou d'autres engrais, vérifier la compatibilité des ingrédients. Pour ce faire, mélanger proportionnellement le produit, l'eau et les autres ingrédients dans un petit récipient. Agiter et laisser reposer pendant une heure. En cas de précipitation, appliquer séparément les produits. Ne pas réutiliser le récipient.

MÉLANGE EN CUVE AVEC DES ENGRAIS LIQUIDES : Mélanger le produit avec l'engrais liquide, et agiter pour bien disperser les éléments. Pour ce faire, on peut verser le produit dans une cuve de mélange en discontinu ou le faire passer dans une pompe. Dans le premier cas, ajouter le produit à l'eau ou à la solution azotée avant d'ajouter l'engrais phosphaté. On peut mélanger ce produit avec des engrais liquides de démarrage.

RECOMMANDATIONS SUR L'APPLICATION

APPLICATION SUR LE SOL EN PLEIN, EN BANDES OU ENTRE LES RANGS : Appliquer 5 à 10 L/ha. Pour les meilleurs résultats possibles, incorporer l'**AWAKEN** au sol ou l'injecter dans le sol. Une pluie ou une irrigation peu après l'application peut aussi en faciliter la localisation. Pour certaines cultures légumières et certains potagers, une application en bandes sur les lignes plantées suivie d'un arrosage est utile.

IRRIGATION GOUTTE À GOUTTE : Appliquer plusieurs fois entre le présemis et le semis et aux premiers stades végétatifs de la culture. Dans les vergers établis, on peut en utiliser régulièrement pendant la saison de croissance, mais le printemps est probablement le meilleur moment si on ne fait qu'une seule application. Dans les nouvelles plantations, appliquer au printemps. Pour éviter de contaminer la source d'approvisionnement en eau, utiliser un dispositif anti-refoulement.

IRRIGATION PAR PIVOT CENTRAL, PAR ASPERSION, SUR FRONDAISON ET FIXE EN COUVERTURE INTÉGRALE : Appliquer 5 L/ha avec l'eau d'irrigation. Pour les meilleurs résultats possibles, appliquer moins de 2 semaines avant le semis et avant la floraison. On peut mélanger le chélate avec de l'engrais et/ou des pesticides avant l'injection. Utiliser une clapet anti-refoulement pour empêcher le produit de couler.

APPLICATION FOLIAIRE : Appliquer 5 L/ha. Utiliser au moins 50 L d'eau par hectare par voie aérienne et au moins 75 L d'eau par hectare par voie terrestre. Si l'application se fait au moyen d'un système d'irrigation par aspersion, utiliser un dispositif anti-refoulement pour éviter de contaminer la source d'approvisionnement en eau.

SOLUTION DE REPIQUAGE : Appliquer 2,5 à 5 L/ha dans assez d'eau pour tremper le sol autour des plants repiqués et faire pénétrer l'**AWAKEN** dans la zone racinaire. Selon le genre de matériel, il faudra peut-être environ 500 à 2 000 L d'eau par hectare. Si on veut, on peut ajouter un engrais compatible à haute teneur en phosphates, comme du 10-34-0 ou du 8-31-4 (à base de polyphosphate d'ammonium, de préférence). Dans de nombreux programmes de repiquage, on utilise environ 5 L de cet engrais par hectare. Ajouter à l'eau l'**AWAKEN** d'abord et l'engrais ensuite. On peut traquer les lits de semence de façon similaire peu avant ou après le semis.

IMPRÉGNATION D'ENGRAIS SOLIDES : On peut imprégner de nombreux engrais solides d'**AWAKEN**. L'imprégnation doit se faire de façon à obtenir la dose de 5 L/ha lors de l'épandage de l'engrais solide. En général, les mélanges contenant au moins 50 % d'engrais à base d'urée, de phosphate d'ammonium et/ou de nitrates se prêtent bien à l'imprégnation. Appliquer uniformément l'**AWAKEN** sur le mélange solide au moyen d'une rampe de pulvérisation montée dans le mélangeur, d'une buse montée sur une vis sans fin, d'une buse montée au-dessus d'un convoyeur ou d'un autre montage similaire. Diluer l'**AWAKEN** avec du 28-0-0 s'il faut plus de bouillie pour couvrir le sol. Pour les meilleurs résultats possibles, appliquer uniformément le mélange solide sur le sol et l'incorporer dans la zone racinaire de la culture. Utiliser le mélange aussitôt que possible après l'avoir fait.

PLANTES ORNEMENTALES, ARBRES ET ARBUSTES EN POT : *Sol*: Appliquer 5 à 10 L/ha. Réappliquer si les symptômes persistent. *Feuillage*: Appliquer 5 L/ha, dans au moins 400 L d'eau; en pulvériser sur tout le feuillage.

CHRYSANTHÈMES, ROSIERS ET CÉILLETS EN SERRE, PLANTES À FLEURS EN POT : *Sol seulement*: Appliquer 5 à 10 L/ha, à intervalles réguliers, avec de l'engrais ou par irrigation goutte à goutte.

HERBE À GAZON : Appliquer soit 5 à 10 L/ha, dans au moins 200 L d'eau, soit 50 mL pour 100 m², dans au moins 2 L d'eau. Bien mélanger avec l'eau ou la solution d'engrais ou de pesticides, et appliquer au début du printemps. Réappliquer au besoin.

EXONÉRATION DE GARANTIE ET AVIS

LE MODE D'EMPLOI POUR CE PRODUIT EST CONSIDÉRÉ COMME APPROPRIÉ ET IL FAUT S'Y CONFORMER ATTENTIVEMENT. IL EST IMPOSSIBLE D'ÉLIMINER TOUS LES RISQUES INHÉRENTS ASSOCIÉS À L'UTILISATION DE CE PRODUIT. L'ENDOMMAGEMENT DE CULTURES, L'INEFFICACITÉ DU TRAITEMENT OU D'AUTRES CONSÉQUENCES NON INTENTIONNELLES PEUVENT EN RÉSULTER À CAUSE DE FACTEURS TELS QUE LES CONDITIONS ATMOSPHÉRIQUES, LA PRÉSENCE OU L'ABSENCE D'AUTRES MATIÈRES OU BIEN LA MÉTHODE D'UTILISATION OU D'APPLICATION, QUI SONT TOUS INDÉPENDANTS DE LA VOLONTÉ DE LOVELAND PRODUCTS CANADA INC., DU FABRICANT ET DU VENDEUR.

LES PRODUITS QUI VOUS SONT VENDUS SONT FOURNIS "TELS QUELS" PAR LOVELAND PRODUCTS CANADA INC., LE FABRICANT OU LE VENDEUR, ET ILS NE SONT COUVERTS QUE PAR LES GARANTIES DU FABRICANT QUI, LE CAS ÉCHÉANT, APPARAISSENT SUR LES ÉTIQUETTES DES PRODUITS QUI VOUS ONT ÉTÉ VENDUS. SAUF CE QUI EST EXPRESSÉMENT PRÉVU DANS LES PRÉSENTES, LOVELAND PRODUCTS CANADA INC., LE FABRICANT ET LE VENDEUR N'OFFRENT AUCUNE GARANTIE ET NE FONT AUCUNE REPRÉSENTATION DE QUELQUE NATURE QUE CE SOIT À L'ACHÉTEUR OU À L'UTILISATEUR, DE FAÇON EXPLICITE OU IMPLICITE, OU PAR USAGE DU COMMERCE, STATUTAIRE OU AUTREMENT, CONCERNANT LE PRODUIT VENDU OU SON UTILISATION, Y COMPRIS, MAIS SANS S'Y LIMITER, SA QUALITÉ MARCHANDE, SON ADAPTATION À UN USAGE PARTICULIER ET SON ACCEPTABILITÉ POUR UN USAGE COMMERCIAL PARTICULIER. SAUF CE QUI EST EXPRESSÉMENT STIPULÉ DANS LES PRÉSENTES, LOVELAND PRODUCTS CANADA INC., LE FABRICANT ET LE VENDEUR N'OFFRENT AUCUNE GARANTIE QUANT AUX RÉSULTATS QU'ON POURRAIT OBTENIR EN SE SERVANT DU PRODUIT. LE SEUL RECOURS DE L'ACHÉTEUR OU DE L'UTILISATEUR, AINSI QUE LA SEULE RESPONSABILITÉ POSSIBLE DE LOVELAND PRODUCTS CANADA INC., DU FABRICANT ET DU VENDEUR, SE LIMITERA À DES DOMMAGES-INTÉRÊTS NE DÉPASSANT PAS LE COÛT DU PRODUIT. AUCUN AGENT DE LOVELAND PRODUCTS CANADA INC. OU DU VENDEUR N'EST AUTORISÉ À MODIFIER LES MODALITÉS DE CETTE EXONÉRATION DE GARANTIE OU LE TEXTE DE L'ÉTIQUETTE DU PRODUIT, NI À FAIRE UNE REPRÉSENTATION OU UNE RECOMMANDATION QUI DIFFÈRE DE L'ÉTIQUETTE DU PRODUIT OU QUI N'EST PAS CONFORME À CETTE ÉTIQUETTE.

LOVELAND PRODUCTS CANADA INC., LE FABRICANT ET LE VENDEUR NE SERONT EN AUCUN CAS RESPONSABLES DE DOMMAGES CONSÉCUTIFS, INDIRECTS OU SPÉCIAUX RÉSULTANT DE L'EMPLOI, DE LA MANUTENTION, DE L'APPLICATION, DE L'ENTREPOSAGE OU DE L'ÉLIMINATION DE CE PRODUIT, NI DE DOMMAGES SE TRADUISANT PAR DES PÉNALITÉS, ET L'ACHÉTEUR ET L'UTILISATEUR DU PRODUIT RENONCENT À TOUS LES DROITS QU'ILS POURRAIENT AVOIR À CET ÉGARD.

AWAKEN® **16-0-2 with micronutrients**

Respiratory problems could be aggravated by inhalation.

Contact with eyes, and/or skin may cause irritation.

MSDS is AVAILABLE.

- In case of insufficient ventilation, wear suitable respiratory equipment.
- Wear suitable gloves.
- Wear suitable protective clothing.
- Wear eye/face protection.
- Do not breathe mist.
- Avoid contact with eyes.
- Avoid prolonged and repeated contact with skin.

FIRST AID MEASURES: Immediately flush skin or eyes with running water for at least 15 minutes, in case of contact with material.

Remove contaminated clothing and shoes.

In case of accident or if you feel ill, seek medical advice immediately.



AWAKEN® **16-0-2 avec oligo-éléments**

L'inhalation peut aggraver les problèmes respiratoires.

Le contact avec les yeux et/ou la peau peut causer une irritation.

Une FS est DISPONIBLE.

- En cas de ventilation insuffisante, se protéger au moyen d'un appareil respiratoire approprié.
- Porter des gants appropriés.
- Porter un appareil de protection pour les yeux et le visage.
- Porter un vêtement de protection approprié.
- Éviter de respirer les brumes.
- Éviter le contact avec les yeux.
- Éviter tout contact prolongé ou répété avec la peau.

PREMIERS SOINS : En cas de contact avec la peau ou les yeux, laver immédiatement à l'eau courante pendant au moins 15 minutes.

Oter les vêtements et les souliers souillés.

En cas d'accident ou de sensation de malaise, consulter immédiatement un médecin.

AWAKEN[®]



(01) 0 06 23111 00298 7

16-0-2 with micronutrients / 16-0-2 avec oligo-éléments

**Specialty Plant Nutrient Solution
Solution Nutritive Pour les Plantes Complémentaire**

GUARANTEED ANALYSIS

Nitrogen (N) (total)	16%
Soluble Potash (K ₂ O)	2%
Boron (B) actual	0.02%
Copper (Cu) actual	0.15%
Iron (Fe) actual	0.15%
Manganese (Mn) actual	0.15%
Molybdenum (Mo) actual	0.0006%
Zinc (Zn) actual	2.7%
Net Weight: 11.6 kg	Density: 1.23 kg/L
Chlorine (Cl), (maximum)	0.01%

GARANTIE D'ANALYSE

Azote (N) (total)	16%
Potasse (K ₂ O) soluble	2%
Bore (B)	0,02%
Cuivre (Cu)	0,15%
Fer (Fe)	0,15%
Manganèse (Mn)	0,15%
Molybdène (Mo)	0,0006%
Zinc (Zn)	2,7%
Poids net : 11,6 kg	Densité : 1,23 kg/L
Chlore (Cl) (maximum)	0,01%

**KEEP OUT OF REACH
OF CHILDREN
NET CONTENTS: 9.46 L**

**GARDER HORS DE LA
PORTÉE DES ENFANTS
CONTENU NET : 9,46 L**

PPJOB#

Product of U.S.A.

01/12

Manufactured for and Distributed by / Fabriqué pour et Distribué par :



Loveland Products Canada Inc.
789 Donnybrook Drive
Dorchester, Ontario N0L 1G5

Product inquiries / Renseignements sur les produits : 1-800-328-4678
24hr emergency contact / Contact en cas d'urgence, 24 heures sur 24 : 1-800-561-8273

Lot Number/Numéro de lot: see the container/voir le contenant

TO OPEN CUT HERE POUR OUVRIIR, COUPER ICI

AWAKEN®

16-0-2 with micronutrients / 16-0-2 avec oligo-éléments Specialty Plant Nutrient Solution Solution Nutritive Pour les Plantes Complémentaire

GUARANTEED ANALYSIS

Nitrogen (N) (total)	16%
Soluble Potash (K ₂ O)	2%
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Zinc (Zn)	2,7%
Poids net : 11,6 kg	Densité : 1,23 kg/L
Chlore (Cl) (maximum)	0,01%

KEEP OUT OF REACH OF CHILDREN

GARDER HORS DE LA PORTÉE DES ENFANTS

NET CONTENTS: 2 x 9.46 L / CONTENU NET : 2 x 9,46 L

PPJOB#

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01/12

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Lot Number/Numéro de lot: see the container/voir le contenant

AWAKEN® 16-0-2 with micronutrients

Respiratory problems could be aggravated by inhalation.
Contact with eyes, and/or skin may cause irritation.

MSDS is AVAILABLE.

- In case of insufficient ventilation, wear suitable respiratory equipment.
- Wear suitable gloves.
- Wear suitable protective clothing.
- Wear eye/face protection.
- Do not breathe mist.
- Avoid contact with eyes.
- Avoid prolonged and repeated contact with skin.

FIRST AID MEASURES: Immediately flush skin or eyes with running water for at least 15 minutes, in case of contact with material.

Remove contaminated clothing and shoes.

In case of accident or if you feel ill, seek medical advice immediately.



AWAKEN® 16-0-2 avec oligo-éléments

L'inhalation peut aggraver les problèmes respiratoires.
Le contact avec les yeux et/ou la peau peut causer une irritation.
Une FS est DISPONIBLE.

- En cas de ventilation insuffisante, se protéger au moyen d'un appareil respiratoire approprié.
- Porter des gants appropriés.
- Porter un appareil de protection pour les yeux et le visage.
- Porter un vêtement de protection approprié.
- Éviter de respirer les brumes.
- Éviter le contact avec les yeux.
- Éviter tout contact prolongé ou répété avec la peau.

PREMIERS SOINS : En cas de contact avec la peau ou les yeux, laver immédiatement à l'eau courante pendant au moins 15 minutes.

Oter les vêtements et les souliers souillés.

En cas d'accident ou de sensation de malaise, consulter immédiatement un médecin.

IN CASE OF EMERGENCY DUE TO A MAJOR SPILL, FIRE OR POISONING INVOLVING THIS PRODUCT CALL DAY OR NIGHT, 1-800-561-8273 or CHEMTREC 1-800-424-9300

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

DISTRIBUTED BY:

LOVELAND PRODUCTS CANADA, INC.
789 Donnybrook Drive • Dorchester, Ontario N0L 1G5

24-Hour Emergency Phone: 1-800-561-8273
Additional Emergency Phone (Canutec): 1-613-996-6666 (Collect)

CHEMICAL IDENTITY: Urea Ammonium Nitrate, Ammonia, Potassium Nitrate, Sodium Borate, Copper Sulfate, Ferrous Sulfate, Manganese Sulfate, Sodium Molybdate, Zinc Oxide, and Zinc Sulfate

PRODUCT USE: Liquid Plant Nutrient with Micronutrients

PCP REG. NO.: Not applicable

MSDS Number: AW-14-LPI

MSDS Revisions: Section 1

Date of Issue: 02/03/14

Supersedes: 09/17/12

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – CAUTION - May be harmful if swallowed, inhaled or absorbed through skin. May cause eye and skin irritation. Avoid contact with eyes, skin and clothing. Avoid contact with open cuts or sores. Avoid breathing vapours. Use with adequate ventilation. Eye protection and gloves are suggested when handling undiluted product. Wash thoroughly after handling and using this product. In case of contact, flush with water. Get medical attention for eyes. This blended liquid fertilizer additive is derived from Urea Ammonium Nitrate, Anhydrous Ammonia, Potassium Nitrate, Sodium Borate, Zinc Oxide, Zinc Sulfate, Copper Sulfate, Ferrous Sulfate, Manganese Sulfate, and Sodium Molybdate. Nausea and vomiting could be expected upon large dose ingestion. The acute ingestive effects are described as nausea, chills, and diarrhea. Eye or skin contact with these products could cause irritation (particularly in sensitive persons), and respiratory irritation could be expected from the unprotected inhalation of fertilizer mists. Product users should avoid prolonged or repeated skin contact by wearing impervious gloves, long sleeve shirt, long pants, socks and rubber boots. Goggles for eye protection are recommended.

This product is a clear dark green-coloured solution with slightly sweet non-offensive odour. Primary routes of entry are eye contact and skin contact.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Total Nitrogen (N)	16.00	Mixture	none established
Soluble Potash (K ₂ O)	2.00	7757-79-1	not listed
Boron (B)	0.02	1330-43-4	not listed
Copper (Cu)	0.15	Mixture	not listed
Iron (Fe)	0.15	Mixture	not listed
Manganese (Mn)	0.05	Mixture	not listed
Molybdenum (Mo)	0.0006	7631-95-0	not listed
Zinc (Zn)	2.70	Mixture	not listed

4. FIRST AID MEASURES

If swallowed:	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.
If in eyes:	Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.
If inhaled:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.
If on skin or clothing:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for further treatment advice.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-561-8273. Have the product label or container with you when calling a poison control centre or doctor, or going for treatment.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method):	Does not flash.
FLAMMABLE LIMITS (LFL & UFL):	Not established
EXTINGUISHING MEDIA:	Considered non-combustible, use medium appropriate to surrounding fire. Dry chemical, carbon dioxide (CO ₂), foam, water spray or fog.
HAZARDOUS COMBUSTION PRODUCTS:	May include but are not limited to oxides of carbon and oxides of sulfur, ammonia, and oxides of nitrogen.
SPECIAL FIRE FIGHTING PROCEDURES:	Use water spray to cool containers exposed to fire. Remain upwind. Avoid breathing smoke. Wear self-contained breathing apparatus and full protective gear.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Containers may burst due to pressure build-up of ammonia.

6. ACCIDENTAL RELEASE MEASURES**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:**

Ventilate area. Contain spill, absorb liquid with clay or other absorbent material. Sweep up material and place in container for possible land application according to label use or for proper disposal. Check local, state and federal regulations for proper disposal.

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

HANDLING: Open the container carefully. Contents may be under pressure. Eye protection and gloves are suggested when handling undiluted product. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE: Store in original containers only. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. LOSS OF AMMONIA WILL CAUSE PRODUCT TO SOLIDIFY. Store in a cool, dry, well-ventilated place, preferably in a locked storage area. Store out of direct sunlight. Do not contaminate water, food, or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Not normally required. If ammonia odour is too strong use local or mechanical ventilation.
RESPIRATORY PROTECTION: Not normally required, if ammonia vapours are too strong wear a NIOSH approved respirator for anhydrous ammonia.
EYE PROTECTION: Chemical goggles or shielded safety glasses.
SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, shoes with socks. Wear rubber or chemical-resistant gloves.

OSHA PEL 8 hr TWA
Not listed

ACGIH TLV-TWA
Not listed

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOUR: Clear dark green-coloured solution with slightly sweet non-offensive odour.

SOLUBILITY: Complete

SPECIFIC GRAVITY (Water = 1): 1.24 g/ml

BULK DENSITY: 1.24 kg/L

pH: 6.4

VAPOUR PRESSURE: Not established

BOILING POINT: 212°F/100°C

PERCENT VOLATILE (by volume): Not applicable

EVAPORATION RATE: (Butyl Acetate = 1): Not established

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.

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Excessive heat. Keep containers tightly closed.

INCOMPATIBILITY: Strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: May include but are not limited to oxides of carbon and oxides of sulfur, ammonia, and oxides of nitrogen.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (male rat): Not established

Acute Dermal LD₅₀ (rabbit): Not established

Eye Irritation (rabbit): Causes mild irritation

Skin Irritation (rabbit): Causes mild irritation

Inhalation LC₅₀ (female rat): 2000 ppm (4 hr).

Skin Sensitization (Guinea Pig): Not established

Carcinogenic Potential: Not listed in OSHA, NTP, IARC, or ACGIH.

12. ECOLOGICAL INFORMATION

Material may be toxic to fish and other aquatic organisms. Do not apply directly to water, or to areas where surface water is present or to inter-tidal areas below the mean high water mark. Do not apply where runoff is likely to occur. Do not contaminate water by cleaning of equipment or disposal of wastes. Apply this product only as specified on the product labeling.

13. DISPOSAL CONSIDERATIONS

Do not reuse containers for any purpose. Container is recyclable, and is to be disposed of at a container collection site. Contact your local dealer/distributor for the location of the nearest collection site. Before taking container to the collection site: Triple or pressure-rinse the empty container, adding the rinsate to the spray tank. Make the empty container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Do not contaminate water, food, or feed by storage or disposal.

14. TRANSPORT INFORMATION

DOT/TDG Shipping Description: NOT REGULATED

U.S. Surface Freight Classification: FERTILIZING COMPOUNDS (MANUFACTURED FERTILIZERS), NOI, LIQUID (NMFC 68140, SUB 6; CLASS 70)

IMDG Shipping Description: NOT REGULATED

Consult appropriate ICAO/IATA regulations for shipment requirements in the Air shipping mode.

15. REGULATORY INFORMATION**NFPA & HMIS Hazard Ratings:**

NFPA

1 Health	0 Least
0 Flammability	1 Slight
0 Instability	2 Moderate
	3 High
	4 Severe

HMIS

1 Health
0 Flammability
0 Reactivity
B PPE

SARA Hazard Notification/Reporting**SARA Title III Hazard Category:**

Immediate	<u>Y</u>	Fire	<u>N</u>	Sudden Release of Pressure	<u>N</u>
Delayed	<u>N</u>	Reactive	<u>N</u>		

Reportable Quantity (RQ) under U.S. CERCLA: Not listed

SARA, Title III, Section 313: Not listed

RCRA Waste Code: Not listed

CA Proposition 65: Not listed

16. OTHER INFORMATION

MSDS STATUS: Section 1 revised

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

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SUSTANE® 8 · 2 · 4



ALL NATURAL

GRANULATED SLOW RELEASE NITROGEN FERTILIZER

Guaranteed Analysis

Total Nitrogen (N)	8%
0.4% Ammoniacal Nitrogen	
0.4% Other Water Soluble Organic Nitrogen	
7.2% Water Insoluble Organic Nitrogen*	
Available Phosphate (P ₂ O ₅)	2%
Soluble Potash (K ₂ O)	4%
Calcium (Ca)	2%

Derived from aerobically composted turkey litter, feather meal and sulfate of potash.

*7.2% slowly available nitrogen from aerobically composted turkey litter and feather meal

110414

F689

Coverage & Application Rates

-Coverage

50 lb. covers 4000 ft²
 @ 1 lb. N per 1000 ft²
 provides 44 lb. N per acre

22.67 kg covers 372 m²
 @ 0.5 kg N per 100 m²
 provides 50 kg N per ha

-Application Rates

12.5 lb. per 1000 ft²
 6.2 kg per 100 m²

Medium Grade: Mesh Size -7+14
 (2.8 mm to 1.4 mm) SGN 200

Store in a cool dry place.
 Keep out of reach of pets and children.

Information regarding the contents and levels of metals in this product is available on the internet at <http://www.aapfco.org/metals.htm>

Net Wt. 50 lb. (22.67 kg)



Sustane Natural Fertilizer, Inc.
 310 Holiday Avenue
 Cannon Falls, MN 55009 USA
 +1 507-263-3003 • www.sustane.com



GHS SAFETY DATA SHEET

I. IDENTIFICATION

Identity: Sustâne 4-6-4 All Natural *Date Revised:* 08/14
Product Use: Granulated Slow Release Fertilizer
Manufactured by: Sustâne Natural Fertilizer, Inc.
310 Holiday Avenue
Cannon Falls, MN 55009 USA
Phone #: 507/263-3003
Emergency Phone #: 800-352-9245

II. HAZARDS IDENTIFICATION

<u>Health</u>	<u>Environmental</u>	<u>Physical</u>
N/A	N/A	N/A

Hazards Statements:
Dust may be irritating.
May cause irritation to eyes or skin.

Precautionary Statements:
Use NIOSH approved respiratory protection if conditions warrant.
Wear gloves and eye protection as needed to prevent skin and eye contact.
Store under dry conditions.

III. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS-No.</u>
Aerobically composted turkey litter	N/A
Feather meal	N/A
Sulfate of potash	7778-80-5

IV. FIRST-AID MEASURES

Route(s) of Entry:
Inhalation: See Below *Skin:* See Below *Ingestion:* No Information
Health Hazards (Acute and Chronic): Inhalation: Dust may be irritating
Carcinogenicity: N/A *NTP:* N/A *IARC Monographs:* N/A *OSHA Regulated:* N/A
Signs and Symptoms of Exposure: N/A
Medical Conditions Generally Aggravated by Exposure: None Known
Emergency and First Aid Procedures: Eye contact - flush with water. Skin contact - wash with soap and water. Inhalation - remove to fresh air.

V. FIRE-FIGHTING MEASURES

Flash Point: No Information *Flammable Limits:* N/A
Extinguishing Media: Water fog, Foam, CO₂ or Dry Chemical
Special Fire Fighting Procedures: None Known
Unusual Fire and Explosion Hazards: Decomposes at extremely high temperatures.

VI. ACCIDENTAL RELEASE MEASURES

Method: Can be swept, shoveled, or vacuumed into containers if material is released or spilled.

VII. HANDLING AND STORAGE

Handling: Use NIOSH approved respiratory protection if conditions warrant.
Wear gloves and eye protection as needed to prevent skin and eye contact.
Storage: Store under dry conditions.
Keep out of reach of pets and children.

VIII. CONTROL MEASURES

Respiratory Protection: Use NIOSH approved respiratory protection if conditions warrant.
Ventilation: N/A *Protective Gloves:* Recommended *Eye Protection:* Recommended
Other Protective Clothing or Equipment: N/A *Work/Hygienic Practices:* N/A

IX. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: N/A *Specific Gravity:* N/A
Vapor Pressure: N/A *Melting Point:* N/A
Vapor Density: N/A *Evaporation Rate:* N/A
Solubility in Water: Slight
Appearance and Odor: Light brown granule with slight earthy odor

X. STABILITY AND REACTIVITY

Stability: Stable in normal usage and storage
Incompatibility (Materials to Avoid): None Known
Hazardous Decomposition or Byproducts: None Known
Hazardous Polymerization: Will Not Occur

XI. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Inhalation, eye and skin contact
Acute symptoms and effects: Dust may be irritating

XII. ECOLOGICAL INFORMATION

Do not apply near water, storm drains, and drainage ditches, or if heavy rain is expected.

XIII. DISPOSAL CONSIDERATIONS

Dispose of in accordance with applicable local, state and federal regulations.

XIV. TRANSPORT INFORMATION

General: Non-hazardous material according to transport regulations. No special precautions are necessary.

XV. REGULATORY INFORMATION

Fertilizer law is enforced by each separate State government.

XVI. OTHER INFORMATION AND COMMENTS

The information in this Safety Data Sheet is believed to accurately reflect the scientific evidence used in making the hazard determination. It is considered only as a guide, and not a warranty or representation for which we assume legal responsibility. Independent decisions must be made on the suitability and use of this product dependent on variable storage conditions or locally applicable laws or government regulations. The buyer and user assumes all risk and liability of storage conditions or locally applicable laws or government relations. The buyer and user assumes all risk and liability of storage, handling, and use of this product not in accordance with the terms of the product label.

46-00-00

Urea Nitrogen
(Granular)

GUARANTEED ANALYSIS

Total Nitrogen (N) 46.00%
46.000% Urea Nitrogen

Primary Plant Foods Derived From: Urea.

Net Wt. 50 Lbs. (22.68 Kgs.)

BF460050

Sample Label

DIRECTIONS FOR TURF GRASS

The best results with this product are obtained when it is applied to actively growing grass, and watered into the turf soon after application. Avoid mowing immediately following application to prevent product pick-up. Sweep, brush or blow off any non-target areas to alleviate any staining or unwanted effects.

RATE OF PRODUCT

Desired Nitrogen	Lbs. To Apply Per Acre	Lbs. To Apply Per 1000 Sq. Ft.	1 Ton of Product Covers	1 Bag of Product Covers
1.50 Lb(s).	142.01	3.26	14.08 Acre(s)	15,337 Sq. Ft.
1.00 Lb(s).	94.53	2.17	21.16 Acre(s)	23,041 Sq. Ft.
0.75 Lb(s).	71.00	1.63	28.17 Acre(s)	30,675 Sq. Ft.
0.50 Lb(s).	47.48	1.09	42.12 Acre(s)	45,872 Sq. Ft.
Product Weight: 50 Lbs./Cu.Ft.			SGN Size: 200 To 230	

Recommended applications are at the rate of one pound of nitrogen per 1,000 Sq. Ft. Actual rates and timing of applications will vary with weather, soil and turf conditions.

COVERAGE: 1 - 50 pound bag of 46-00-00 covers approximately 23,041 Sq. Ft. at the application rate of one pound of nitrogen (2.17 lbs. of actual product) per 1,000 sq. ft.

SPREADER SETTINGS

LBS OF PRODUCT PER 1000 Sq. Ft.	LBS OF PRODUCT PER ACRE	EARTHWAY 2400	SCOTTS R8/R8-A	ACCPRO SR2000	LESCO ROTARY	LESCO
3 LBS	130 LBS	15.5	K	K-L	H-J	13
4 LBS	174 LBS	17	L	M	J-K	15
5 LBS	218 LBS	17.5	M	N	K	16
6 LBS	261 LBS	18	N	O	L	17
8 LBS	348 LBS	20	P	Q	N	19

LBS OF PRODUCT PER 1000 Sq. Ft.	LBS OF PRODUCT PER ACRE	PRIZELAWN CB	SPYKER 24	LELY: WTR, WFR,HR	VICON	SPREADER SETTINGS ARE FOR FERTILIZER WITH AN SGN 220-230.
3 LBS	130 LBS	4.5	4	3.75	30	
4 LBS	174 LBS	5	4.5	6.25	36	
5 LBS	218 LBS	5	4.5	6.5	37	
6 LBS	261 LBS	5.25	4.75	7	39	
8 LBS	348 LBS	6	5.5	8	44	

The spreader settings provided as a recommendation. Each user should calibrate their own spreaders for proper application. Your application may vary with ground speed and wear on your spreading equipment. Bulk density, particle size and a change in fertilizer analysis will also effect your spreader setting. To calibrate your spreader, place the proper amount of product for 500 square feet into the spreader and apply to your pre-measured 500 square feet (100 feet long by 5 feet wide) and adjust the spreader setting as necessary.

NOTE: For fertilizer application rates suitable for your geographical area or the maximum allowable non-nutrient application rates per acre, consult a trained soil specialist (local horticulturist) or contact the manufacturer or distributor.

For Golf Courses follow the BMP at:

<http://www.dep.state.fl.us/water/nonpoint/qfbbmp07.pdf>

Please follow the Best Management Practice for Florida Green Industries at:

<http://www.dep.state.fl.us/central/HomeMeetingsTraining/FLGreen/BMP Book final.pdf>



FIRST AID

May cause eye or skin irritation (particularly in sensitive persons). May be harmful if swallowed. Product users should wash thoroughly after using or handling this product. In case of eye contact, flush eyes with running water for at least 15 minutes. In case of skin contact, wash from skin with soap and water. In case of ingestion, dilute with water or milk. If necessary, induce vomiting only when victim is conscious. Call a physician.

STORAGE AND CONTAINER DISPOSAL

- Do not contaminate potable water, ponds, food or feed by storage or disposal. Store in a dry place. Protect bags or other containers from damage. Keep bags or other containers closed when not in use. Do not store where children or animals may gain access.

- Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

CAUTION: Keep out of reach of children.

LIMITS OF WARRANTY: MEARS FERTILIZER, INC. and seller warrant that this product conforms to the chemical description on the label and is reasonably fit for the purpose stated on such label only when used in accordance with the directions under normal use conditions. Except as specifically stated below, NO WARRANTIES, WHETHER EXPRESSED OR IMPLIED, ARE MADE WITH RESPECT TO THE PRODUCT OR ITS USE, AND NO AGENT OF THE MANUFACTURER OR OF THE SELLER IS AUTHORIZED TO DO SO.

Buyer and user of this product assume all responsibility for handling, storage and use not in accordance with directions. It is impossible to eliminate all risks inherently associated with the use of the product. Plant injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond manufacturer's and seller's control. In no case shall the manufacturer or seller be liable for consequential, special or indirect damages resulting from the use or handling of this product.

Manufactured and Guaranteed By:

Mears Fertilizer, Inc. - P.O. Box 1271

El Dorado, KS 67042 - Phone: (800) 345-9143

THRIVE is a trademark of Mears Fertilizer, Inc.

MATERIAL SAFETY DATA SHEET

THRIVE 8-24-6

1. **CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**
INNICTIS CROP CARE, LLC
1220 W ASH, SUITE B
Windsor, CO 80550

PRODUCT NAME: THRIVE 8-24-6

EPA REG. NO.: Not Applicable

CHEMICAL NAME: Urea, Urea Triazone & Potassium Thiosulfate

CHEMICAL FAMILY: Fertilizer

Hotline Numbers: For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – CAUTION: Causes temporary eye irritation. Harmful if swallowed. Inhalation or ingestion may cause mucous membrane irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly after handling. In case of contact, wash skin with soap and water; for eyes, flush with water for 15 minutes and get medical attention.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Urea, Potassium Nitrate, Ammonium Polyphosphate, Potassium Phosphate, and Zinc EDTA solution	100	Mixture	Not listed

4. FIRST AID MEASURES

If in Eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

If Swallowed: Immediately call a poison control center or doctor. Ingest large amounts of water and induce vomiting. Do not give anything by mouth to an unconscious person.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT have the product container or label with you when calling a poison control center or doctor.

5. FIRE FIGHTING MEASURES

FLASH POINT (^oF/Test Method): >200°F

FLAMMABLE LIMITS (LFL & UFL): Not established

EXTINGUISHING MEDIA: Use foam, dry chemical, carbon dioxide, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS: Toxic fumes may be emitted in a fire situation.

SPECIAL FIRE FIGHTING PROCEDURES: Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Explosive vapor could form from ruptured containers. Dike and collect water used to fight fire to prevent environmental damage due to run off. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion.

FIRE FIGHTING EQUIPMENT: Self-contained breathing apparatus with full facepiece. Full fire fighting turn-out gear (Bunker gear).

HAZARDOUS COMBUSTION PRODUCTS: Normal combustion forms carbon dioxide, water vapor and may produce oxides of carbon, and nitrogen.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: In case of leak or spill, contain material and dispose as waste. Do not contaminate any body of water. Pick up spilled liquid with absorbent material and sweep up for disposal. Place it and damaged unusable containers in a landfill appropriate for non hazardous chemical waste. Check local, state and federal regulations for proper disposal. **NOTE:** Prevent spilled material from flowing onto adjacent land, or into municipal sewers and open bodies of water. Always wear proper protective equipment when working with the product.

7. HANDLING AND STORAGE

HANDLING: Wash hands after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE: Store in a cool, dry place away from children and animals. Keep away from heat, sparks and open flame. Mix well before using. Keep tightly closed. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Store above 0°F and below 120°F.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY PROTECTION: Work in a well ventilated area. If needed, use MSHA-NIOSH approved respirator for organic vapors.

EYE PROTECTION: Wear chemical goggles or shielded safety glasses when handling and mixing product.

SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, shoes plus socks and chemical-resistant gloves. Always refer to the label of the pesticide(s) in the tank mix and follow the most restrictive requirements.

Personal Protective Equipment (PPE): Eye protection, long sleeved shirt and long pants, shoes plus socks and chemical resistant gloves. Follow manufacturer’s instructions for cleaning/maintaining PPE. If not such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Brown liquid, Musty

SOLUBILITY: Soluble **pH:** 6 to 7

SPECIFIC GRAVITY (Water=1): 1.26 g/ml

BULK DENSITY: 10.5 lbs/gal.

VAPOR PRESSURE: Not established

BOILING POINT: Not established

PERCENT VOLATILE (by volume): Not Applicable

EVAPORATION RATE: Not established

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.

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Extreme heat or open flame.

IMCOMPATIBILITY: Strong oxidizers such as nitrates, nitrites or chlorates can cause explosive mixtures if heated to dryness. Avoid contact with Acids or acid materials. This product may not be compatible with copper, zinc or their alloys (i.e. bronze, brass, galvanized metals, etc.). These materials of construction should not be used in piping, handling systems or storage containers for this product.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: May emit toxic fumes if excessively heated. Heating to dryness will cause the production of ammonia, and oxides of carbon.

11. TOXICOLOGICAL INFORMATION – Based on similar formulation

Acute Oral LD₅₀: Not Determined

Acute Dermal LD₅₀: Not Determined

Eye Irritation: Category 3

Skin Irritation: Category 3

Inhalation LC₅₀: Not Determined

Skin sensitization: Not Determined

Carcinogenic Potential: None listed in OSHA, NTP, IARC, or ACGIH

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: This product not labeled for use in aquatic sites.

13. DISPOSAL CONSIDERATIONS

Do not reuse product containers. Triple rinse (or equivalent), then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT SHIPPING DESCRIPTION: Not regulated by DOT

DOT HAZARD CLASS: None

UN NUMBER: None

DOT PACKING GROUP: None

DOT PRIMARY/SECONDARY LABEL: None

DOT PRIMARY/SECONDARY PLACARD: None

MATERIAL SAFETY DATA SHEET

THRIVE 8-24-6

15. REGULATORY INFORMATION

NFPA RATINGS: Least = 0 Slight = 1 Moderate = 2 High = 3 Severe = 4
Ratings for this product: Health – 2 Flammability – 1 Instability – 1 Special Hazards – None Specified

SARA Title III Hazard Category: Immediate Y Fire N Sudden Release of Pressure N
Delayed N Reactive N

Reportable Quantity (RQ) under U.S. CERCLA: Not listed

SARA, Title III, Section 313: Not listed

CA Proposition 65: Not Listed

16. OTHER

Date of Issue: 10/12/13 Supersedes: New

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**REQUEST FOR BOARD ACTION
September 21, 2015 PARK BOARD MEETING**

Subject: Consideration and Discussion of the a change in Park Rules at North Park Banning Golf (Village of Lincolnshire)

Action Requested: Initiation of a Park Rule Banning the Hitting of Golf Balls with Golf Clubs at North Park

Originated By/Contact: Troy Taylor, Facilities Supervisor

Referred To: Park Board

Summary / Background:

Staff has observed individuals hitting golf balls at North Park. Staff's concern is that this activity can be hazardous to other park patrons, and are causing significant damage to the turf.

Budget Impact:

This activity requires minimal expenses to repair the turf damage.

Service Delivery Impact:

None

Recommendation:

Staff is requesting the Park Board reach a consensus on whether this activity should be allowed or not. If the consensus is to investigate banning this activity, Staff will present a change to the Village Code at a future meeting for Park Board approval.

Reports and Documents Attached:

- Pictures of the Turf Damage

Meeting History	
Initial Referral to Park Board:	September 21, 2015





Kimberly Jurco

From: Dan Hartman <hartmand98@gmail.com>
Sent: Monday, August 31, 2015 12:15 PM
To: Scott Pippen

Scott

Please consider this my resignation from the Park Board. I sold my house last month, so I am no longer a Lincolnshire resident.

Thanks
Dan