

RECEIVED OCT 30 2002

JAMES L. WEDEL

1230 CR 1028 · MULESHOE, TX 79347 · (806) 272-5901 · FAX: (806) 272-5002 · MOBILE: (806) 946-7011
E-MAIL: jimnsusn@fivearea.com

SECRETARY-TREASURER
TEXAS ORGANIC COTTON MARKETING COOPERATIVE
2514 82nd St., Suite D, Lubbock, TX 79423 806-748-8336 Fax 8302

October 30, 2002

National Organics Standards Board
C/o Robert Pooler
Agricultural Marketing Specialist
USDA/AMS/TM/NOP
Room 2510-So
Ag Stop 0268
PO Box 96456
Washington, DC 20090-6456

FAX 202-205-7808
e-mail: npetition@usda.gov.

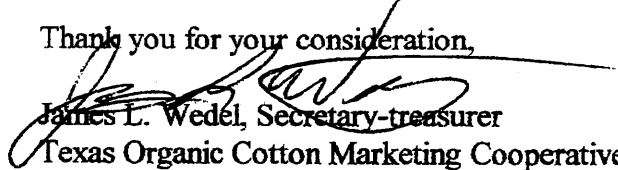
Dear Mr. Pooler,

I am an organic cotton producer in Texas, and I also represent the Texas Organic Cotton Marketing Cooperative.

We are deeply concerned about the future of the U.S. organic cotton industry, as it appears that the national rules will not allow for the use of hydrogen chloride delinted cotton planting seed, and we do not have other alternatives.

Therefore, on behalf of the Texas Organic Cotton Marketing Cooperative, I am submitting a petition to allow the use of hydrogen chloride in the processing of organic cottonseed.

Enclosed, you will find the petition and the MSDS for hydrogen chloride. As I understand that time is of the essence in this matter, I am submitting this information to you by fax, including an attachment containing the MSDS for hydrogen chloride. If any of the documents are not clear, please notify me and I will submit the documents by U.S. Postal Service. Please contact me at my personal address/phone # if you need any additional information.

Thank you for your consideration,

James L. Wedel, Secretary-treasurer
Texas Organic Cotton Marketing Cooperative

CC: Keith Jones---USDA keith.jones@usda.gov.
Leslie McKinnon---Texas Department of Agriculture
Terry Thrash---Associated Farmers Delinting
Ron Butler---Butler Seed & Delinting

**PETITION TO THE
NATIONAL ORGANIC STANDARDS BOARD**

Concerning
Hydrogen Chloride for Delinting Cotton Planting Seed

REQUEST: Allow the restricted use of Hydrogen Chloride in the process of delinting organic cotton seed for the following category: *(5) Nonagricultural (nonorganic) substances allowed in or on processed products labeled as "organic" or "made with organic (specified ingredients)."*

1. Common name

Hydrogen Chloride, Anhydrous Hydrochloric Acid, Muriatic Acid

2. Manufacturer's name

BOC Gases, 575 Mountain Ave, Murray Hill, NJ 07974 Phone 908-464-8100

3. Intended use

Hydrogen chloride is a processing aid and is of vital importance in the delinting of cotton seed. Hydrogen chloride is used to remove the lint from cotton seed in order that the seed may be planted by mechanical methods. It should be noted that hydrochloric acid is normally present in dilute form in gastric juice of the human stomach.

4. Mode of Action

The hydrogen chloride is a gas that dissolves the cellulose (lint) that is attached to the seedcoat. The acid solution is then neutralized by calcium carbonate.

5. Sources and detailed description of manufacturing procedures

COTTONSEED DELINTING METHODS

As cottonseed leaves the gin, it has a layer of lint that the gin saws were not able to remove. This seed is called fuzzy cottonseed. Cattle can eat the seed in the fuzzy condition, and oil mills can press the seed when fuzzy. Planters, however, need seed that can flow freely into the metering mechanism of the planter seed box.

The process that has been used for approximately fifty years now has been delinting with hydrochloric acid (HCl). Farmers keep seed from a portion of their crop and take that seed to a delinting plant that delints and bags the farmer's seed for a fee. There are also seed breeding companies who breed and propagate new varieties of cotton and sell this seed as *certified seed*. Many of them have their own delinting plants. A couple of the seed breeders in the United States have converted their plants to the use of 10 percent sulfuric acid. **However, organic producers only delint their seed at facilities using the hydrochloric acid.**

5. Sources and detailed description of manufacturing procedures (continued)

DELINTING WITH HYDROCHLORIC ACID

The process begins by vacuuming the fuzzy seed out of the trailer or truck by a person who maneuvers a stovepipe suction tube. The seed enters a revolving tank called a delinting machine. When the delinting machine is loaded, manually with about one ton of seed, a valve is opened to release pressurized liquid anhydrous HCl from a tank. Approximately 8-12 pounds of HCl are need to delint one ton of seed. The released HCl is plumbed into the batch of seed that is waiting in the delinting machine. By then the HCl has become a gas at atmospheric pressure.

The seed is exposed to the HCl gas for about 8-10 minutes, and is then sent through buffers for 10-15 minutes where the lint, which has been weakened by the acid, is mechanically buffed from the seed. As the buffer reels remove the lint, a regulated velocity of air carries away the lint but leaves the delinted seed behind.

Now that lint removal has been accomplished, any acid remaining on the seed must be neutralized to prevent seed damage and to prevent acid from ruining the seed bags. The neutralizing agent used is calcium carbonate (Ca CO₃), a naturally occurring mined substance.

The neutralized seed are next subjected to a culling process in which the seed ride downhill over shaking screens to clean out trash that is larger than cottonseed and smaller than cottonseed. Upward airflow is incorporated with the screening to blow out seed that are considered too light to be vigorous seed. Seed culled out in this manner become livestock feed.

Seed not culled are normally run through a treater where fungicide seed treatment is applied. **However, when organic seed is delinted, this step is bypassed, and the untreated seed (referred to as black seed) are then placed in 50 pound paper bags.**

Also see attached Flow chart: Cotton Physiology, Cotton Foundation, Memphis, TN

Other sources for the above information are:

Terry Thrash---Associated Farmers Delinting
PO Box 306
Littlefield, TX 79339 806-385-6010

Ron Butler---Butler Seed & Delinting
Lubbock Highway
Lamesa, TX 79331 806-872-8896

Jerry Vogler ---Organic Cotton Producer
2619 S Highway 349
Lamesa, TX 79331 806-462-7428

5. Sources and detailed description of manufacturing procedures (continued)

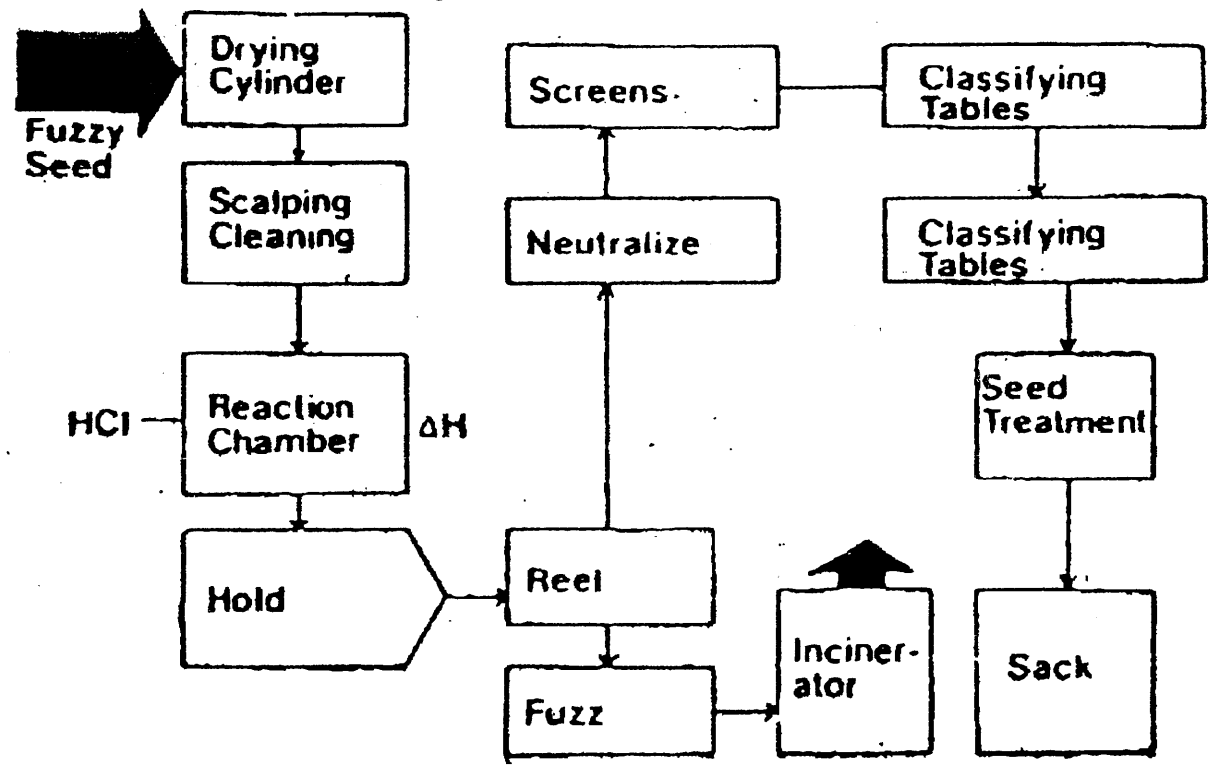


Figure 8. Generalized flow chart for commercial gas-acid delinting of cottonseed (from Jones, 1980).

Reproduced from Cotton Physiology, Cotton Foundation, Memphis, TN

6. Summary of any previous reviews

We are not aware of any previous review by certification agencies. The Texas Department of Agriculture has a specific exemption allowing the use of hydrochloric acid delinting for organic cotton planting seed.

7. Regulatory status with EPA, FDA or state authorities

Hazardous – See attached MSDS.

8. Chemical Abstract Service (CAS) number

HYDROCHLORIC ACID, HCL 7647-01-0

9. Physical properties of the substance

Gas

Vapor psi @ 70 degree F: 627.7

Vapor density 70 degree F: 1.27

Boiling point: -120.9 F

Freezing point: -173 F

Odor and appearance: Colorless gas with sharp pungent odor

10. Safety Information

Hazardous – See attached MSDS.

Note: a substance report from the National Institute of Environmental Health Studies for hydrogen chloride was not found.

11. Research Information

None

12. Petition justification statement

After cotton is processed through a cotton gin and the seed is separated, a small amount of lint will remain attached to the seed. We term the seed at this point “fuzzy” seed. The lint must be removed before the seed can be used. If the cotton seed is crushed for oil, knives can be used to remove the lint from the seed. The use of the knives results in damage to the seed. If the seed will be crushed, the damage is not a concern. But if the cotton seed will be used for planting, you cannot use the knives because of the damage to the seed. The cotton industry has developed a system to remove the lint from the seed. This involves the usage of hydrogen chloride to remove the lint. After removal of the lint, calcium carbonate is used to neutralize the hydrochloric acid. This process has been allowed for organic cotton seed in the past due to the lack of other alternatives. There are no other proven methods that have been developed which are in commercial use today.

Hand planting of the seed is not an alternative. A typical cotton farmer will plant over 60,000 seeds per acre. Most organic cotton farmers will plant over three hundred acres of organic cotton. The short time frame that the cotton is planted within makes this alternative unworkable.

12. Petition justification statement (continued)

The beneficial effects to the environment of growing organic cotton are tremendous. In Texas alone, there are over 5,000 acres of organic cotton produced annually. Conventional cotton typically uses more pounds of pesticides per acre than any other commercial crop. If hydrogen chloride delinted cottonseed is not allowed to be used, organic cotton production in the U. S. will be virtually eliminated. Thus without the use of this minute amount of hydrogen chloride for delinting purposes, organic cotton producers will have little choice but to return their land to conventional cotton production methods and add thousands of pounds of chemicals to the environment.

We urge you to allow hydrogen chloride as a processing aid for organic cottonseed.



BOC GASES

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: HYDROGEN CHLORIDE

1. Chemical Product and Company Identification

BOC Gases
 Division of
 The BOC Group, Inc.
 575 Mountain Avenue
 Murray Hill, NJ 07974

BOC Gases
 Division of
 BOC Canada Limited
 5975 Falbourne Street, Unit 2
 Mississauga, Ontario L5R 3W6

TELEPHONE NUMBER: (908) 464-8100
24-HOUR EMERGENCY TELEPHONE NUMBER:
 CHEMTRIC (800) 424-9300

TELEPHONE NUMBER: (905) 501-1700
24-HOUR EMERGENCY TELEPHONE NUMBER:
 (905) 501-0802
EMERGENCY RESPONSE PLAN NO: 20101

PRODUCT NAME: HYDROGEN CHLORIDE
CHEMICAL NAME: Hydrochloric Acid
COMMON NAMES/SYNONYMS: Anhydrous Hydrochloric Acid, Muriatic Acid
TDG (Canada) CLASSIFICATION: 2.3 (8)
WHMIS CLASSIFICATION: A, D1A, D2B, E

PREPARED BY: Loss Control (908)464-8100/(905)501-1700
PREPARATION DATE: 6/1/95
REVIEW DATES: 6/7/96

2. Composition, Information on Ingredients

INGREDIENT	% VOLUME	PEL-OSHA ¹	TLV-ACGIH ²	LD ₅₀ or LC ₅₀ Route/Species
Hydrogen Chloride FORMULA: HCl CAS: 7647-01-0 HTECS #: MW4025000	>99.0	5 ppm Ceiling	5 ppm Ceiling	LC ₅₀ 3124 ppm/1H (rat)

¹ As stated in 29 CFR 1910, Subpart Z, (revised July 1, 1993)

² As stated in the ACGIH 1994-95 Threshold Limit Values for Chemical Substances and Physical Agents

3. Hazards Identification

EMERGENCY OVERVIEW

Corrosive and irritating to the eyes, skin and mucous membranes. Inhalation may result in chemical pneumonitis and pulmonary edema.

PRODUCT NAME: HYDROGEN CHLORIDE

ROUTE OF ENTRY:

Skin Contact Yes	Skin Absorption No	Eye Contact Yes	Inhalation Yes	Ingestion No
---------------------	-----------------------	--------------------	-------------------	-----------------

HEALTH EFFECTS:

Exposure Limits Yes	Irritant Yes	Sensitization No
Teratogen Yes	Reproductive Hazard Yes	Mutagen Yes
Synergistic Effects Other agents that irritate the respiratory system		

Carcinogenicity: -- NTP: No IARC: No OSHA: No

EYE EFFECTS:

Corrosive and irritating to the eyes. Contact with the liquid or vapor causes painful burns and ulcerations. Burns to the eyes result in lesions and possible loss of vision.

SKIN EFFECTS:

Corrosive and irritating to the skin and all living tissue. It hydrolyzes very rapidly yielding hydrochloric acid. Skin burns and mucosal irritation are like that from exposure to volatile inorganic acids. Hydrogen chloride burns exhibit severe pain, redness, possible swelling and early necrosis.

INGESTION EFFECTS:

None known. Ingestion is unlikely.

INHALATION EFFECTS:

Corrosive and irritating to the upper and lower respiratory tract and all mucosal tissue. Symptoms include lacrimation, cough, labored breathing, and excessive salivary and sputum formation. Excessive irritation of the lungs causes acute pneumonitis and pulmonary edema, which could be fatal. Residual pulmonary malfunction may also occur. Chemical pneumonitis and pulmonary edema may result from exposure to the lower respiratory tract and deep lung.

Some experimental evidence indicates hydrogen chloride may cause mutagenic, teratogenic, and reproductive effects.

NFPA HAZARD CODES

Health: 3
Flammability: 0
Reactivity: 2

HMS HAZARD CODES

Health: 3
Flammability: 0
Reactivity: 2

RATINGS SYSTEM

0 = No Hazard
1 = Slight Hazard
2 = Moderate Hazard
3 = Serious Hazard
4 = Severe Hazard

4. First Aid Measures

EYES:

PERSONS WITH POTENTIAL EXPOSURE SHOULD NOT WEAR CONTACT LENSES. Flush contaminated eye(s) with copious quantities of water. Part eyelids to assure complete flushing. Continue for a minimum of 15 minutes. Seek immediate medical attention.

PRODUCT NAME: HYDROGEN CHLORIDE

SKIN:

Remove contaminated clothing as rapidly as possible. Flush affected area with copious quantities of water. Seek immediate medical attention.

INGESTION:

None required.

INHALATION:

PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF OVEREXPOSURE. RESCUE PERSONNEL SHOULD BE EQUIPPED WITH SELF-CONTAINED BREATHING APPARATUS.
Conscious persons should be assisted to an uncontaminated area and inhale fresh air. Unconscious persons should be moved to an uncontaminated area and given artificial resuscitation and supplemental oxygen. Assure that mucus or vomited material does not obstruct the airway by use of positional drainage. Delayed pulmonary edema may occur. Keep the patient under medical observation for at least 24 hours.

5. Fire Fighting Measures

Conditions of Flammability: Not flammable		
Flash point: None	Method: Not Applicable	Autoignition Temperature: None
LEL(%): None		UEL(%): None
Hazardous combustion products: None		
Sensitivity to mechanical shock: None		
Sensitivity to static discharge: None		

FIRE AND EXPLOSION HAZARDS:

Nonflammable. Reacts with most metals in a corrosive manner liberating flammable hydrogen gas. It reacts with many organic materials with liberation of heat.

EXTINGUISHING MEDIA:

Nonflammable. Use media suitable for surrounding materials. Reacts with water yielding dense, acid HCl fumes.

6. Accidental Release Measures

Evacuate all personnel from affected area. Use appropriate protective equipment. If leak is in user's equipment, be certain to purge piping with inert gas prior to attempting repairs. If leak is in container or container valve, contact the appropriate emergency telephone number listed in Section 1 or call your closest BOC location.

7. Handling and Storage

Electrical classification:

Nonhazardous.

Most metals corrode rapidly with wet hydrogen chloride.

Use only in well-ventilated areas. Valve protection caps must remain in place unless container is secured with valve outlet piped to use point. Do not drag, slide or roll cylinders. Use a suitable hand truck for cylinder movement. Use a pressure reducing regulator when connecting cylinder to lower pressure (<1500 psig) piping.

PRODUCT NAME: HYDROGEN CHLORIDE

or systems. Do not heat cylinder by any means to increase rate of product from the cylinder. Use a check valve or trap in the discharge line to prevent hazardous back flow into cylinder.

Protect cylinders from physical damage. Store in cool, dry, well-ventilated areas of non-combustible construction away from heavily trafficked areas and emergency exits. Do not allow the temperature where cylinders are stored to exceed 130°F (54°C). Cylinders should be stored upright and firmly secured to prevent falling or being knocked over. Full & empty cylinders should be segregated. Use a "first in-first out" inventory system to prevent full cylinders from being stored for excessive periods of time.

For additional storage recommendations, consult Compressed Gas Association's Pamphlet P-1.

Never carry a compressed gas cylinder or a container of a gas in cryogenic liquid form in an enclosed space such as a car trunk, van or station wagon. A leak can result in a fire, explosion, asphyxiation or a toxic exposure.

8. Exposure Controls, Personal Protection

EXPOSURE LIMITS¹:

INGREDIENT	% VOLUME	PEL-OSHA ²	TLV-ACGIH ³	LD ₅₀ or LC ₅₀ Route/Species
Hydrogen Chloride FORMULA: HCl CAS: 7647-01-0 RTECS #: MW4025000	>99.0	5 ppm Ceiling	5 ppm Ceiling	LC ₅₀ 3124 ppm/1H (rat)

¹ Refer to individual state or provincial regulations, as applicable, for limits which may be more stringent than those listed here.

² As stated in 29 CFR 1910, Subpart Z (revised July 1, 1993)

³ As stated in the ACGIH 1994-1995 Threshold Limit Values for Chemical Substances and Physical Agents.

IDLH: 100 ppm

ENGINEERING CONTROLS:

Hood with forced ventilation.

Use local ventilation to prevent accumulation above the exposure limit.

EYE/FACE PROTECTION:

Safety goggles or glasses.

SKIN PROTECTION:

Kel-F® or Teflon®.

RESPIRATORY PROTECTION:

Positive pressure air line with full-face mask and escape bottle or self-contained breathing apparatus should be available for emergency use.

OTHER/GENERAL PROTECTION:

Safety shoes, safety shower, eyewash "fountain", face shield.

PRODUCT NAME: HYDROGEN CHLORIDE

9. Physical and Chemical Properties

PARAMETER	VALUE	UNITS
Physical state (gas, liquid, solid)	: Gas	
Vapor pressure at 70 °F	: 627.7	psia
Vapor density at 70 °F (Air = 1)	: 1.27	
Evaporation point	: Not Available	
Boiling point	: -120.9	°F
	: -84.9	°C
Freezing point	: -173	°F
	: -114	°C
pH	: Not Available	
Specific gravity	: Not Available	
Oil/water partition coefficient	: Not Available	
Solubility (H2O)	: Very Soluble	
Odor threshold	: Not Available	
Odor and appearance	: Colorless gas with sharp pungent odor	

10. Stability and Reactivity

STABILITY:

Stable

INCOMPATIBLE MATERIALS:

Reacts with water or moisture in the air yielding dense, acid HCl fumes. Reacts with fluorine, calcium carbide, cesium carbide, rubidium carbide and lithium silicide. Reacts with many organic materials with liberation of heat.

HAZARDOUS DECOMPOSITION PRODUCTS:

Hydrochloric acid on hydrolysis.

HAZARDOUS POLYMERIZATION:

Will not occur.

11. Toxicological Information

REPRODUCTIVE:

Embryo and fetotoxicity observed in female rats exposed at 450 mg/m³ for 1 hour.

MUTAGENIC:

Mutagenic effects seen in bacterial, mammalian and insect assay systems.

OTHER:

Toxic effects reported in renal system from inhalation exposure of rats at 0.685 mg/m³.

12. Ecological Information

No data given.

MSDS: G-40

Revised: 6/7/96

PRODUCT NAME: HYDROGEN CHLORIDE

13. Disposal Considerations

Do not attempt to dispose of residual waste or unused quantities. Return in the shipping container PROPERLY LABELED, WITH ANY VALVE OUTLET PLUGS OR CAPS SECURED AND VALVE PROTECTION CAP IN PLACE to BOC Gases or authorized distributor for proper disposal.

14. Transport Information

PARAMETER	United States DOT	Canada TDG
PROPER SHIPPING NAME:	Hydrogen Chloride, Anhydrous	Hydrogen Chloride, Anhydrous
HAZARD CLASS:	2.3	2.3 (8)
IDENTIFICATION NUMBER:	UN 1050	UN 1050
SHIPPING LABEL:	POISON GAS, CORROSIVE	POISON GAS, CORROSIVE

Additional Marking Requirement: "Inhalation Hazard"

If net weight of product > 5000 pounds, the container must be also marked with the letters "RQ".

Additional Shipping Paper Description Requirement: "Poison-Inhalation Hazard, Zone C"

If net weight of product ≥ 5000 pounds, the shipping papers must be also marked with the letters "RQ".

15. Regulatory Information

SARA TITLE III NOTIFICATIONS AND INFORMATION

Releases of hydrogen chloride in quantities equal to or greater than the reportable quantity (RQ) of 5,000 pounds are subject to reporting to the National Response Center under CERCLA, Section 304 SARA Title III.

SARA TITLE III - HAZARD CLASSES:

- Acute Health Hazard
- Sudden Release of Pressure Hazard
- Reactivity Hazard

SARA TITLE III - SECTION 313 SUPPLIER NOTIFICATION:

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372:

CAS NUMBER	INGREDIENT NAME	PERCENT BY VOLUME
7647-01-0	Hydrogen chloride	> 99.00

This information must be included on all MSDSs that are copied and distributed for this material.

16. Other Information

Compressed gas cylinders shall not be refilled without the express written permission of the owner. Shipment of a compressed gas cylinder which has not been filled by the owner or with his/her (written) consent is a violation of transportation regulations.

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES:

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no

PRODUCT NAME: HYDROGEN CHLORIDE

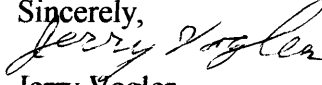
responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).

RECEIVED NOV 08 2002

10/31/02
2619 S. Hwy. 349
Lamesa, TX 79331
806-462-7428

Bob Pooler, USDA, NOP
Dear Mr. Pooler:

I know that you already have a delinting flow chart scheme like the one I am enclosing, but on this enclosed flow chart I have added a written description of the process. I am also enclosing some fuzzy and some untreated delinted seed for you and your colleagues.

Sincerely,

Jerry Vogler

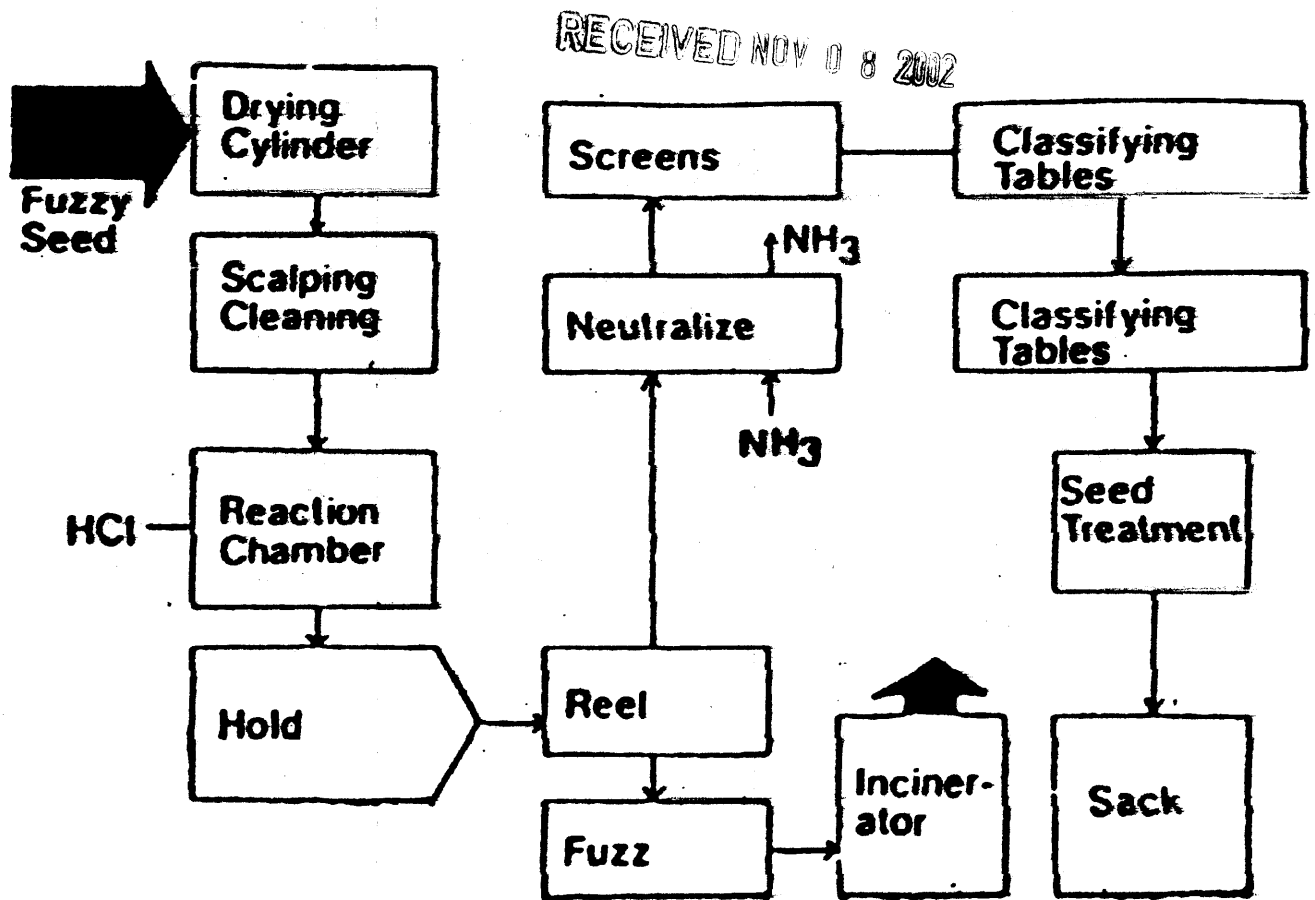


Figure 8. Generalized flow chart for commercial gas-acid delinting of cottonseed (from Jones, 1980).

Reproduced from *Cotton Physiology*, Cotton Foundation, Memphis, TN

NH₃ Note that most delinting plants now use CaCO₃.

The seed are first dried if necessary to reduce moisture to 5-7%, then rough cleaned to reduce gross contaminants. A charge of seed is then placed in a rotating reaction chamber where the temperature is raised to 90°-110°F before injection of the gaseous acid. After exit from the reaction chamber, the seed pass through a reel where frictional forces complete removal of the degraded linters. Neutralization may be accomplished with ammonia (NH₃), but most delinting facilities now use calcium carbonate (CaCO₃). After neutralization the only residue left from the ammonia and HCl is ammonium chloride (found in cough drops). After neutralization with CaCO₃ the residue left is calcium chloride, which is found in pickles.

The lint-free, readily flowable seed is then screened to eliminate trash larger than cottonseed and trash smaller than cottonseed. Removal of low density seed (which tend to be weak) is done by passing the seed across gravity tables, sometimes referred to as classifying tables.

Pooler, Bob

From: Pooler, Bob
Sent: Tuesday, November 05, 2002 2:47 PM
To: 'KBurton@jmsmucker.com'
Subject: FW: NOSB Petition to allow Hydrogen Chloride for delinting of organic cottonseed

Did I send you this petition previously?

-----Original Message-----

From: Jones, Keith
Sent: Wednesday, October 30, 2002 12:59 PM
To: 'Jimmy (038) Susan Wedel'
Cc: Pooler, Bob; Strother, Toni; Mathews, Richard
Subject: RE: NOSB Petition to allow Hydrogen Chloride for delinting of organic cottonseed

Jimmy:

We have just received the petition. My cursory reading shows it to be thorough and complete. Bob will review it in detail and can advise you further should there be missing information.

NOP is designed to regulate organic product sold domestically. While Japan has recognized NOP as equivalent to their program, the importer may feel another "mark" or "seal" is necessary to make the product saleable. Therefore, you're really at the mercy of the importer's requirements. At the end of the day, it boils down to how bad you want to make the sale. If the hassle exceeds the return, find a new market. But I'm assuming you're not there yet.

Best Regards
Keith Jones

-----Original Message-----

From: Jimmy (038) Susan Wedel [mailto:jimnsusn@fivearea.com]
Sent: Wednesday, October 30, 2002 12:36 PM
To: Jones, Keith
Subject: NOSB Petition to allow Hydrogen Chloride for delinting of organic cottonseed

Keith,

As per your visit Monday with Leslie McKinnon, I have put together the information for the petition. I have submitted (by fax) the petition in duplicate to Bob Pooler as per the instructions, but I wanted you to have a copy for review. Please let me know if you have any other suggestions.

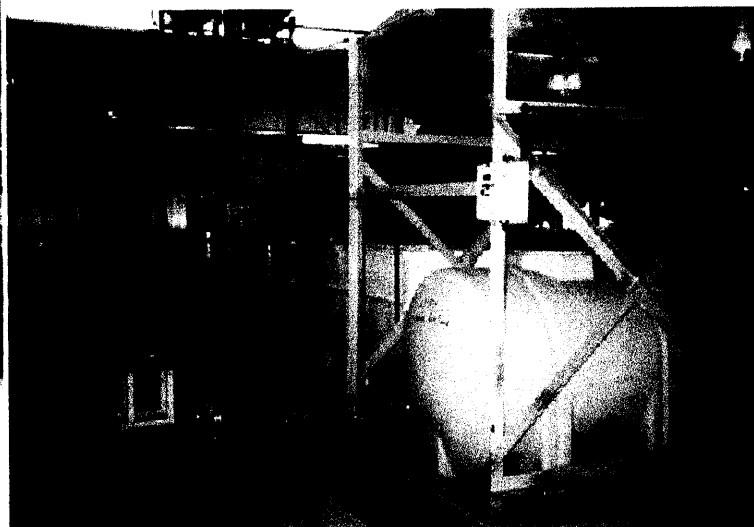
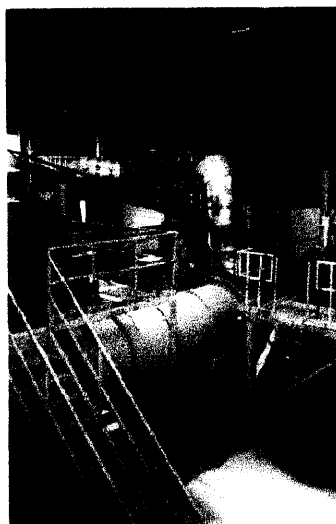
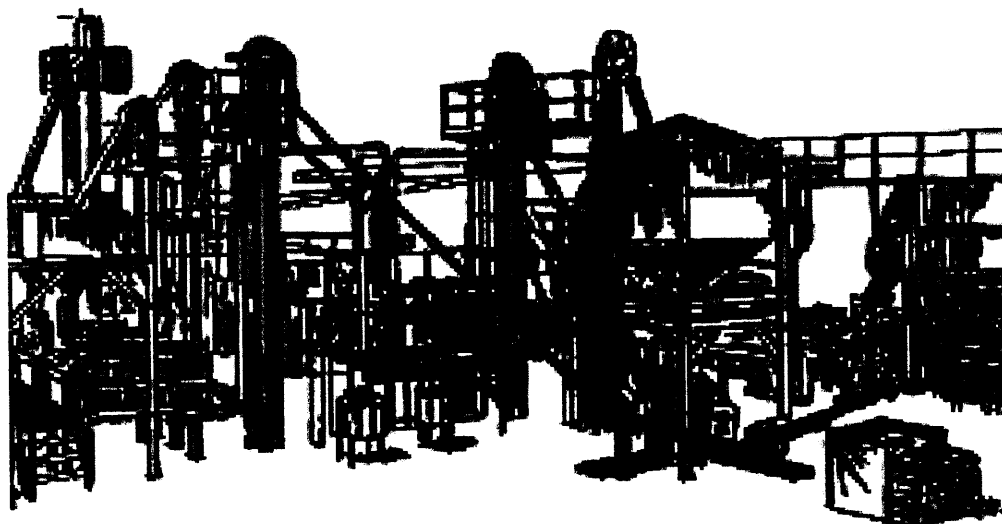
We are also struggling with several other issues----IFOAM apparently still will not except USDA accreditation which is causing me to have to be dual certified----TDA for most of my crops, and FVO (now called International Certification Services) for my Peanuts----because the buyers of our peanuts are in Europe and Japan and want the IFOAM certification. However, FVO is trying to regulate everything on my farm including my conventional acreage. They are demanding that I not plant gmo crops on any of my conventional acreage, and they want to force their philosophy (specific rotations, etc.) which are more restrictive than what TDA and the national rules require)----I have agreed to this in practice, but in principle I do not believe that they should be allowed to regulate what I do on my conventional acreage.

How should we proceed on the non-acceptance of the USDA seal by foreign buyers----or is this a trade violation issue that is out of our league?

Thanks,

Jimmy

Continental Eagle Dilute Sulfuric Acid Cottonseed Delinting System



The seed is the beginning of all crops - indeed, all agriculture. Its importance can not be over-emphasized. Biologically the individual seed can never be better than at the moment when it reaches physiological maturity, but the overall physical characteristics of the seed lot can be modified to enhance the quality.

For cotton seed this seed lot enhancement consists of removing excess fibers, removing weak, immature, and dead seed, removing weed seed and any other extraneous materials, applying chemical protectants, and then packaging in a manner which can maintain quality during storage and be conveniently handled by the farmer.

In the machine flow for a basic dilute acid delinting plant, bulk fuzzy cotton seed is loaded into a metering feed hopper. Seed is fed from this hopper, at a precisely controlled rate, by a variable speed auger which assures uniform flow and allows precise adjustments throughout the system. A scalper removes rough trash and sand and

helps separate seed for more efficient delinting. The flame delinter removes long tags of excess lint from the seed. This reduces the amount of aqueous acid solution needed to thoroughly wet the fibers on the seed, which further results in less drying being required. The acid reactor mixes the fuzzy seed with the aqueous acid solution from the mixing tank. Quantities of sulfuric acid, water and surfactant are electronically proportioned into the mixing tank according to demand from a conductivity meter. The centrifuge removes the excess aqueous acid solution from the cotton seed and returns the solution to the mixing tank.

Acidified seed are conveyed to the rotary drum dryer by means of a stainless steel auger. In the dryer, water is evaporated concentrating the acid, and hydrolyzation of the lint begins. The buffer, through its rotating action and specially designed internal flights, scrubs off the hydrolyzed lint leaving a smooth seed ready to be neutralized and efficiently cleaned. Dust, acidified lint, and hot air are removed from the dryer and buffer by centrifugal fans and blown into cyclones. Hot air escapes to the atmosphere and the linters can be neutralized at this point if desired and then conveyed into storage. The delinted seed is neutralized and fed into an air screen cleaner.

After the air screen cleaner, the seed is separated on a gravity table into three fractions; good seed, rejected materials, and middlings. The middlings are fed onto another gravity table which separates good seed from rejects. The good seed from both gravity tables go through a treater where chemical disinfectants, fungicides, insecticides, and other materials can be applied. The seed is then packaged according to the customer's needs.

Rejected seed and extraneous materials are collected from the scalper, cleaner, and gravity tables and put into a storage bin. A separate air system collects dust contaminated with chemicals from the treater and packaging area.

At Continental Eagle Corporation every effort is made to provide modern and efficient equipment especially selected to fill the needs of the discriminating seed producer. Each system is custom designed to fulfill the customer's particular needs. Let Continental Eagle's staff of experienced seedsmen and engineers consult with you on your conditioning plant requirements.

The chemical delinting system most often recommended by Continental Eagle was conceived by Cotton Incorporated in the early 1970's in response to increasing environmental protection pressures and rising chemical costs. This distinguished research group investigated the problems thoroughly and decided that, in most cases, the dilute sulfuric acid delinting system with a centrifuge was the best solution. The first commercial plant began operations in the spring of 1975 and is still operating. Today this is still the best method of chemical delinting for many applications.

Note that there is ample flexibility in the Continental Eagle Design to allow for the addition of machinery for conditioning seed crops other than cotton. An arrangement can be made to by-pass the acid delinting portion of the plant while efficiently utilizing the cleaning, treating, and packaging equipment for other crop seeds. If certain specialized machines are needed, such as length or thickness graders, they can be incorporated in such a way that they also can be by-passed when not needed. Many have found that this kind of arrangement utilizing the seed conditioning facility and personnel throughout most of the year results in a more efficient and profitable venture.

Please contact Continental Eagle Corporation, Prattville, Alabama, with all your seed conditioning opportunities. We will be pleased to offer a "state of the art" system custom designed to fit your needs.