

BREAK-THRU ROOT FORCE™

Spec Sheet #S00115
November 2005

Foaming Root Destroyer



Specifications

DESCRIPTION

Hercules **BREAK-THRU ROOT FORCE** is a blend of high foaming surfactants, fillers and the active ingredient dichlobenil, which kills roots and prevents the growth of new roots. Its foaming system acts as a vehicle, releasing a chemical herbicide, which clings to and is absorbed by infiltrating root tips. This kills the roots, which then decompose and are washed away without injury to the main tree or shrub. Because the product also clings to pipe surfaces, new root growth from outside the pipe is inhibited. **Hercules ROOT FORCE** can be used in lines leading to cesspools and septic tanks when used as directed.

SIZES AND PACKING

STOCK NO.	SIZE	PACKING	WEIGHT/CASE
20550	1 lb.	2 - 8 oz. bags	7.6 lbs.

**BREAK-THRU
ROOT FORCE™**

Root Destroyer



Specifications

R-D
Root Destroyer

DESCRIPTION

Concentrated chemical product specifically formulated for the elimination and prevention of root growth in sewer-type lines.

Large "root grade" crystals are blended with an active wetting agent enabling **R-D** crystals to adhere to the root mass longer, dissolve slower and effectively kill and eliminate root blockages.

R-D helps eliminate overflow damage, sewage flow restriction and back-up odors due to root penetration. Helps prevent sump and ejector pump root damage and motor overload from pumping into restricted line.

Safe to use in lines leading to septic tanks, cesspools and dry wells when used as instructed. Will not destroy trees, shrubs, or other vegetation.

Hercules Chemical Company, Inc. guarantees **R-D** to clear and prevent root blockages when used as directed. Guarantee terms are stated on package insert.

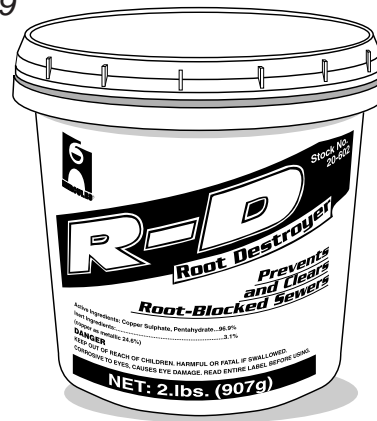
Not for sale in Connecticut or the San Francisco Bay area of California.

SIZES AND PACKING

STOCK NO.	SIZE	PACKING	WEIGHT/CASE
20-602	2 lb.	6	14.3 lbs.
20-610	50 lb.	1	53.6 lbs.

R-D Root Destroyer

SPEC SHEET #S00019



APPROVALS AND LISTINGS

E.P.A. Registration No. 7687-1 E.P.A. Est. No. 7687NJ01

SPECIFIC USES

Used to open, clear, and prevent root-clogged drains and sewer lines.

SPECIFIC APPLICATIONS*

Used to open root clogged lines, eliminate overflow damage and back-up odors due to root blockage.

PHYSICAL PROPERTIES

Specific Gravity: 2.284
Solubility in water: Dissolves in water (24.2 grams /100 grams water at 30°C)
Appearance/color/odor: Blue granular crystals. No odor.

WARNINGS OR CAUTIONS

- Read all cautions and directions carefully before using this product including enclosed insert. It is a violation of federal law to use this product in a manner inconsistent with its labeling.
- Corrosive to eyes. Can cause substantial, but temporary, eye injury.
- **Keep out of reach of children.**
- Avoid contact with skin, eyes, or clothing.
- Causes severe eye and skin irritation. May cause sensitizing reaction in certain individuals.
- Harmful if swallowed, inhaled, or absorbed through the skin.
- Store in original container and keep in locked storage area. DO NOT reuse the plastic bag or empty container. Rinse plastic bag thoroughly before discarding in trash.
- DO NOT contaminate water, food or feed by storage or disposal.
- DO NOT use **R-D** to relieve stoppages caused by grease, faulty pipe, damaged joints, or other mechanical causes.
- This product is toxic to fish and aquatic organisms. DO NOT apply directly to water except as specified on labeling.

DIRECTIONS FOR USE

To clear partial stoppage:

Use two to four pounds in a single application. Pour **R-D** into toilet bowl nearest sewer line (1/2 lb.) at a time and flush for each 1/2 lb. to be sure all crystals will be carried to the sewer line - OR - remove clean out plug and pour entire package directly into sewer line. Flush into sewer with water. NEVER POUR **R-D** INTO SINK OR TUB DRAINS.

To clear complete stoppage:

Some flow must be restored using a snake or sewer rod to enable dissolved **R-D** to travel to the root clogged portion of the sewer. Use four to six pounds at one time, or four

pounds for two consecutive weeks. In most cases, several days must be allowed for the infiltrating roots to die, decay, and wash away after absorbing dissolved **R-D**. Patience will be rewarded by the results of this proven method of root control.

To prevent root stoppages

House and building sewer connections:

Use two pounds of **R-D** twice each year. Use same method as described above for partial stoppages. To avoid wasting **R-D** by flushing it through a largely unobstructed sewer, apply it in the evening before retiring or during other low flow periods for best results. Even small hair roots will absorb the chemical, preventing later blockage problems.

Sewer mains:

Sprinkle two pounds once a year into each junction and terminal manhole. Be careful not to obstruct free flow of sewage.

Storm drains:

Do not apply **R-D** during periods of heavy storm flow. When dry, introduce controlled flow with a hose. Use same dose as in sewer mains above. Serious conditions may require larger, more frequent dosage.

Clean-up:

Wash with soap and water after handling. Launder clothing after contact with **R-D** before wearing again.

MATERIAL SAFETY INFORMATION

FOR MORE INFORMATION ON THIS PRODUCT, REQUEST MATERIAL SAFETY DATA SHEET (MSDS) #19

For Delivery by Fax	Call 1-800-942-4636
Internet	See MSDS section of www.herchem.com
Mail	Contact Hercules at address below or any Hercules representative

HMIS Hazard Warning 2-0-0-E.

INGREDIENTS

CAS#

Active Ingredients:		
Copper Sulfate Pentahydrate	7758-99-8	96.9%
Inert ingredients:		3.1%
Copper as metallic		24.6%

* For special applications which may not be covered on this or other Hercules literature, please contact Hercules Technical Services Department by phone at 1-800-221-9330 or send a fax to 1-800-333-3456.



Hercules Chemical Company, Inc.

111 South Street, Passaic, NJ 07055-9100
Phone: 800-221-9330 • Fax: 800-333-3456
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<http://www.herchem.com>



BREAK-THRU ROOT FORCE™ Root Destroyer

APPROVALS AND LISTINGS

E.P.A. Registration No. 7687-3.

E.P.A. Est. No. 7687-065387AR-001.

This product may legally be sold and used in places where other root control products may not.

Approval in State of California pending.

SPECIFIC USES

Prevents and clears root-blocked sewer lines.

SPECIFIC APPLICATIONS*

Used for partial or complete stoppage.

PHYSICAL PROPERTIES

Specific Gravity:	0.6
Solubility in water:	Partially soluble
Boiling Point:	n/a
Appearance/color/odor:	Light tan powder

WARNINGS OR CAUTIONS

• Read all cautions and directions carefully before using this product. It is a violation of federal law to use this product in a manner inconsistent with its labeling. Before using, read directions and all precautionary statements on package label.

• **DO NOT OPEN BAGS.**

• **HAZARDOUS TO HUMANS AND DOMESTIC ANIMALS.**

• **KEEP OUT OF REACH OF CHILDREN.**

• Wear protection over face and eyes.

WARNING (IF BAG IS BROKEN): Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

FIRST AID:

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, and then continue rinsing. Call a poison control center or doctor for treatment advice.

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 by a poison control center or doctor. Do not give anything to an unconscious person.

IF ON SKIN: 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: 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 a poison control center or doctor for further treatment advice. **Have the product container or label with you when calling a poison control center or doctor or going for treatment.**

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and aquatic organisms. Do not apply directly to water except as specified on label. Do not apply to areas where surface water is present or to intertidal areas below the mean high water mark. **Do not use near well or drinking water. Do not contaminate water when disposing of container or materials.**

Other BREAK-THRU Products:

- Septic Tank and Cesspool Maintainer
- Septic Tank and Cesspool Restorer
- Sluggish Drain Flow Improver/Opener
- Drainpipe and Drywell Soap and Buildup Remover
- Sewer & Septic Main Line Cleaner
- GLUG for Kitchen*
- GLUG for Bathroom*
- R-D Root Destroyer*
- Dual Action Emergency Drain Opener

*chemical products

STORAGE AND DISPOSAL: Store in original container and keep in locked storage area. Do not contaminate water, food or feed by storage or disposal. To dispose of container, triple rinse and dispose of at local recycling (if allowable) or sanitary landfill. For accidentally opened bags, dispose of contents into toilet and rinse container thoroughly and dispose of water into toilet.

DIRECTIONS FOR USE

Residential Sewer Line - Partial Stoppage: To use as a "preventive" and ensure root-free drainage lines, use an 8 oz. bag every three weeks during the growing season between March and August and follow with an 8 oz. bag every eight weeks between September and March. If drainage is very slow, use an 8 oz. application twice a week until improvement is noticeable. The soluble bags are dropped (unopened) directly into toilet bowl. The water soluble bag will soften, dissolve and release the chemicals into the water. 2-3 minutes after the addition flush the contents. Stirring will accelerate the dissolving process. The mechanical flushing action will activate the foaming surfactants and carry the active ingredients throughout the full dimensions of the sewer pipe. Restrict water usage for 6-8 hours after flushing. Only apply through toilet. The water soluble bags are there for your protection. If the bag is broken, empty contents into toilet, rinse container with water and pour into toilet and flush. When using this product indoor, the exhaust fan in the bathroom must be operating during application. If the fan is not available, the window must be open during application.

Complete Stoppage: If root growth is severe and there is complete blockage with no flow, mechanical removal with a snake or sewer rod may be required.

MATERIAL SAFETY INFORMATION

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Internet	See MSDS section of www.herchem.com
Mail	Contact Hercules at address below or any Hercules representative

HMS Hazard Warning 1-1-0-E.

INGREDIENTS	CAS#	Percentage
Active: dichlobenil herbicide	1194-65-6	0.55%
Inert		99.45%

*For special applications which may not be covered on this or other Hercules literature, please contact Hercules Technical Services Department by phone 1-800-221-9330, or fax 1-800-333-3456, or visit our technical database web-site at www.herchem.com.



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