



Close this window

MSDS

**Common Name:** 23% HYDROCHLORIC BOWL CLEANER

**Manufacturer:** W.W. GRAINGER

**MSDS Revision Date:** 10/15/2007

**Grainger Item Number(s):** 2LEF5

**Manufacturer Model Number(s):**

### MSDS Table of Contents

Click the desired link below to jump directly to that section in the MSDS.

- [1. PRODUCT AND COMPANY IDENTIFICATION](#)
- [2. HAZARDS IDENTIFICATION](#)
- [3. COMPOSITION/INFORMATION ON INGREDIENTS](#)
- [4. FIRST AID MEASURES](#)
- [5. FIRE-FIGHTING MEASURES](#)
- [6. ACCIDENTAL RELEASE MEASURES](#)
- [7. HANDLING AND STORAGE](#)
- [8. EXPOSURE CONTROLS / PERSONAL PROTECTION](#)
- [9. PHYSICAL AND CHEMICAL PROPERTIES](#)
- [10. STABILITY AND REACTIVITY](#)
- [11. TOXICOLOGICAL INFORMATION](#)
- [12. ECOLOGICAL INFORMATION](#)
- [13. DISPOSAL CONSIDERATIONS](#)
- [14. TRANSPORT INFORMATION](#)
- [15. REGULATORY INFORMATION](#)
- [16. OTHER INFORMATION](#)

MATERIAL SAFETY DATA SHEET

TOUGH GUY

23% HYDROCHLORIC BOWL CLEANER

VERSION NUMBER: 1

PREPARATION DATE: 2007-10-15

### 1. PRODUCT AND COMPANY IDENTIFICATION



PRODUCT NAME: 23% HYDROCHLORIC BOWL CLEANER

MSDS #: MS0600433

PRODUCT CODE: 2LEF5

RECOMMENDED USE: RESTROOM CARE.

MANUFACTURER, IMPORTER, SUPPLIER:

MANUFACTURED FOR:  
 W.W. GRAINGER, INC.  
 100 GRAINGER PARKWAY  
 LAKE FOREST, IL 60045-5201

PHONE: 1-847-535-1000

TECHNICAL SERVICE: 1-847-535-5400

EMERGENCY TELEPHONE NUMBER: 1-800-983-4582

## 2. HAZARDS IDENTIFICATION

 top

### EMERGENCY OVERVIEW:

DANGER  
CORROSIVE  
CAUSES SKIN AND EYE BURNS  
HARMFUL OR FATAL IF SWALLOWED

### PRINCIPLE ROUTES OF EXPOSURE:

EYE CONTACT  
SKIN CONTACT  
INHALATION

### EYE CONTACT:

CORROSIVE  
CAUSES PERMANENT EYE DAMAGE, INCLUDING BLINDNESS

### SKIN CONTACT:

CORROSIVE  
CAUSES PERMANENT DAMAGE

### INHALATION:

MAY CAUSE IRRITATION AND CORROSIVE EFFECTS TO NOSE, THROAT AND RESPIRATORY TRACT

### INGESTION:

CORROSIVE  
CAUSES BURNS TO MOUTH, THROAT AND STOMACH

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

 top

### HAZARDOUS COMPONENTS:

INGREDIENT(S)	CAS #	WEIGHT %
HYDROCHLORIC ACID	7647-01-0	10 - 30%

### HAZARDOUS COMPONENTS:

INGREDIENT(S)	LD50 ORAL - RAT (MG/KG)	LD50 DERMAL - RABBIT	LC50 INHALATION - RAT
HYDROCHLORIC ACID	700	>5010 MG/KG	=3124 PPM (1 H)

## 4. FIRST AID MEASURES

 top

### EYE CONTACT:

IMMEDIATELY FLUSH EYES WITH RUNNING WATER FOR 15-20 MINUTES, KEEPING EYELIDS OPEN

GET MEDICAL ATTENTION IMMEDIATELY

### SKIN CONTACT:

IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR 15-20 MINUTES  
GET MEDICAL ATTENTION IMMEDIATELY

## INHALATION:

IF BREATHING IS AFFECTED, REMOVE TO FRESH AIR  
GET MEDICAL ATTENTION IMMEDIATELY

## INGESTION:

IF SWALLOWED, RINSE MOUTH  
GIVE A CUPFUL OF WATER OR MILK  
THEN IMMEDIATELY CONTACT A PHYSICIAN OR POISON CENTER  
DO NOT INDUCE VOMITING UNLESS DIRECTED TO DO SO BY MEDICAL PERSONNEL  
NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON

## AGGRAVATED MEDICAL CONDITIONS:

INDIVIDUALS WITH CHRONIC RESPIRATORY DISORDERS SUCH AS ASTHMA, CHRONIC  
BRONCHITIS, EMPHYSEMA, ETC., MAY BE MORE SUSCEPTIBLE TO IRRITATING EFFECTS

**5. FIRE-FIGHTING MEASURES**

SUITABLE EXTINGUISHING MEDIA: NOT APPLICABLE

SPECIFIC HAZARDS: NOT APPLICABLE

UNUSUAL HAZARDS: NONE KNOWN

SPECIFIC METHODS: NO SPECIAL METHODS REQUIRED

## SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:

AS IN ANY FIRE, WEAR SELF-CONTAINED BREATHING APPARATUS PRESSURE-DEMAND,  
MSHA/NIOSH (APPROVED OR EQUIVALENT) AND FULL PROTECTIVE GEAR

## EXTINGUISHING MEDIA WHICH MUST NOT BE USED FOR SAFETY REASONS:

NO INFORMATION AVAILABLE

**6. ACCIDENTAL RELEASE MEASURES**

PERSONAL PRECAUTIONS: USE PERSONAL PROTECTIVE EQUIPMENT

ENVIRONMENTAL PRECAUTIONS AND CLEAN-UP METHODS: NO INFORMATION AVAILABLE

**7. HANDLING AND STORAGE**

## HANDLING:

AVOID CONTACT WITH SKIN, EYES AND CLOTHING  
DO NOT TASTE OR SWALLOW  
AVOID BREATHING VAPORS OR MISTS  
USE ONLY WITH ADEQUATE VENTILATION  
REMOVE AND WASH CONTAMINATED CLOTHING AND FOOTWEAR BEFORE RE-USE  
WASH THOROUGHLY AFTER HANDLING  
PRODUCT RESIDUE MAY REMAIN ON/IN EMPTY CONTAINERS

ALL PRECAUTIONS FOR HANDLING THE PRODUCT MUST BE USED IN HANDLING THE EMPTY  
CONTAINER AND RESIDUE

MIX ONLY WITH WATER

DO NOT MIX WITH AMMONIA, BLEACH, OR OTHER CHLORINATED COMPOUNDS

FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

## STORAGE:

PROTECT FROM FREEZING  
KEEP TIGHTLY CLOSED IN A DRY, COOL AND WELL-VENTILATED PLACE

KEEP OUT OF REACH OF CHILDREN

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION



ENGINEERING MEASURES TO REDUCE EXPOSURE:  
GOOD GENERAL VENTILATION SHOULD BE SUFFICIENT TO CONTROL AIRBORNE LEVELS  
RESPIRATORY PROTECTION IS NOT REQUIRED IF GOOD VENTILATION IS MAINTAINED

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION: CHEMICAL-SPLASH GOGGLES

HAND PROTECTION: CHEMICAL-RESISTANT GLOVES

SKIN AND BODY PROTECTION:

PROTECTIVE FOOTWEAR

IF MAJOR EXPOSURE IS POSSIBLE, WEAR SUITABLE PROTECTIVE CLOTHING AND FOOTWEAR

RESPIRATORY PROTECTION:

IN CASE OF INSUFFICIENT VENTILATION WEAR SUITABLE RESPIRATORY EQUIPMENT

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHAS 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE

HYGIENE MEASURES:

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE

PERSONAL PROTECTIVE EQUIPMENT:

CHEMICAL GOGGLES

GLOVES

BOOTS

INGREDIENT(S)	CAS #	ACGIH	OSHA	MEXICO
HYDROCHLORIC ACID	7647-01-0	2 PPM (CEILING)	5 PPM (CEILING) 7 MG/M3 (CEILING)	5 PPM (CEILING) 7 MG/M3 (CEILING)

## 9. PHYSICAL AND CHEMICAL PROPERTIES



PHYSICAL STATE: LIQUID

APPEARANCE: NO INFORMATION AVAILABLE

SPECIFIC GRAVITY: NO INFORMATION AVAILABLE

pH: NO INFORMATION AVAILABLE

DILUTION pH: NO INFORMATION AVAILABLE.

ELEMENTAL PHOSPHORUS: 0% P

DENSITY: NO INFORMATION AVAILABLE.

BULK DENSITY: NO INFORMATION AVAILABLE

VAPOR DENSITY: NO INFORMATION AVAILABLE

EVAPORATION RATE: NO INFORMATION AVAILABLE

SOLUBILITY: NO INFORMATION AVAILABLE

VOC: 0% \*

VISCOSITY: NO INFORMATION AVAILABLE

SOLUBILITY IN OTHER SOLVENTS: NO INFORMATION AVAILABLE

PARTITION COEFFICIENT (n-OCTANOL/WATER): NO INFORMATION AVAILABLE

COLOR: WHITE

ODOR: ACIDIC

BOILING POINT/RANGE: NOT DETERMINED

MELTING POINT/RANGE: NOT DETERMINED

FLASH POINT:  
> 200 DEG. F  
> 93.3 DEG. C

DECOMPOSITION TEMPERATURE: NOT DETERMINED

AUTOIGNITION TEMPERATURE: NO INFORMATION AVAILABLE

\* - TITLE 17, CALIFORNIA CODE OF REGULATIONS, DIVISION 3, CHAPTER 1,  
SUBCHAPTER 8.5, ARTICLE 2, CONSUMER PRODUCTS, SECTIONS 94508

## 10. STABILITY AND REACTIVITY



STABILITY: THE PRODUCT IS STABLE

POLYMERIZATION: HAZARDOUS POLYMERIZATION DOES NOT OCCUR

HAZARDOUS DECOMPOSITION PRODUCTS: NONE REASONABLY FORESEEABLE.

MATERIALS TO AVOID:  
AMMONIA  
DO NOT MIX WITH CHLORINATED PRODUCTS  
BASES

## 11. TOXICOLOGICAL INFORMATION



ACUTE TOXICITY:  
ORAL LD50: ESTIMATED TO BE BETWEEN 500 - 2000 MG/KG.  
DERMAL LD50: ESTIMATED TO BE > 2000 MG/KG.

COMPONENT INFORMATION: SEE SECTION 3

CHRONIC TOXICITY: NONE KNOWN

SPECIFIC EFFECTS:

CARCINOGENIC EFFECTS: NONE KNOWN

MUTAGENIC EFFECTS: NONE KNOWN

REPRODUCTIVE TOXICITY: NONE KNOWN

TARGET ORGAN EFFECTS: NONE KNOWN

## 12. ECOLOGICAL INFORMATION



ENVIRONMENTAL INFORMATION: NO DATA AVAILABLE

**13. DISPOSAL CONSIDERATIONS**

top

WASTE FROM RESIDUES / UNUSED PRODUCTS:  
 UNDILUTED PRODUCT IS REGULATED UNDER ENVIRONMENTAL AND TRANSPORTATION LAWS AS A CORROSIVE WASTE

DISPOSE OF IN COMPLIANCE WITH ALL FEDERAL, STATE, PROVINCIAL, AND LOCAL LAWS AND REGULATIONS. INCINERATION IS THE PREFERRED METHOD. RELATIVELY SMALL QUANTITIES OF PRODUCT MAY BE NEUTRALIZED AS STATED ABOVE, AND IF IN ACCORDANCE WITH LOCAL LAWS AND THE OPERATORS OF THE LOCAL SEWAGE TREATMENT PLANT, THE NEUTRALIZED MATERIAL MAY BE DISCHARGED INTO THE SEWER SYSTEM

RCRA HAZARD CLASS: D002

**14. TRANSPORT INFORMATION**

top

DOT/TDG:  
 PLEASE REFER TO THE BILL OF LADING/RECEIVING DOCUMENTS FOR UP TO DATE SHIPPING INFORMATION

**15. REGULATORY INFORMATION**

top

INTERNATIONAL INVENTORIES:

ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE FOLLOWING INVENTORIES:  
 U.S.A. (TSCA).

U.S. REGULATIONS:

CALIFORNIA PROPOSITION 65:  
 THIS PRODUCT IS NOT SUBJECT TO THE REPORTING REQUIREMENTS UNDER CALIFORNIA'S PROPOSITION 65

SARA 311/312 HAZARD CATEGORIES:

IMMEDIATE (X)  
 DELAYED ( )  
 FIRE ( )  
 REACTIVITY ( )  
 SUDDEN RELEASE OF PRESSURE ( )

CANADA:

WHMIS HAZARD CLASS: NOT FOR SALE IN CANADA.

STATE RIGHT TO KNOW:

INGREDIENT(S)	CAS #	NJRTK	MARTK	PARTK	RIRTK
WATER	7732-18-5				
HYDROCHLORIC ACID	7647-01-0	X	X	X	X
ALCOHOL ETHOXYLATES	68131-39-5				
OPACIFER	N/A*				

CERCLA/ SARA:

INGREDIENT(S)	CAS #	WEIGHT %	CERCLA/SARA RQ (LBS)	SECTION 302 TPQ (LBS)	SECTION 313
HYDROCHLORIC ACID	7647-01-0	10 - 30%	5000	5000	X

INGREDIENT(S)	CAA HAP	CAA ODS	CWA PRIORITY POLLUTANTS
HYDROCHLORIC ACID	X		

**16. OTHER INFORMATION**

HMIS:  
HEALTH 3  
FIRE HAZARD 0  
REACTIVITY 1

NFPA:  
HEALTH 3  
FLAMMABILITY 0  
INSTABILITY 1

REASON FOR REVISION: NOT APPLICABLE

PREPARED BY: NAPRAC

ADDITIONAL ADVICE: NONE

**NOTICE TO READER:**

THIS DOCUMENT HAS BEEN PREPARED USING DATA FROM SOURCES CONSIDERED TECHNICALLY RELIABLE. IT DOES NOT CONSTITUTE A WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY OF THE INFORMATION CONTAINED WITHIN. ACTUAL CONDITIONS OF USE AND HANDLING ARE BEYOND SELLER'S CONTROL. USER IS RESPONSIBLE TO EVALUATE ALL AVAILABLE INFORMATION WHEN USING PRODUCT FOR ANY PARTICULAR USE AND TO COMPLY WITH ALL FEDERAL, STATE, PROVINCIAL AND LOCAL LAWS AND REGULATIONS.