



# First Defense™

## Disinfectant (40-80)

### Product Data Sheet

#### PROPERTIES

**TYPE:**

Quaternary Ammonium Chloride

**VOLATILE:**

Water

**AVERAGE WEIGHT/U.S. GALLON (ASTM D1475):**

8.2 lbs. (0.98 kg/l)

**APPLICATION CONSISTENCY:**

Wipe, cloth, mop, sponge or coarse spray

**ODOR:**

Fresh Mild Scent

**AVERAGE COVERAGE RANGE:**

Dependent upon the method of application and the surface. Apply in sufficient quantity to ensure that the surface remains wet continuously for at least ten (10) minutes.

**ALKALINITY (ASTM E70):**

10 – 11 pH

**SAFETY:**

Wet flammability (ASTM D3278)

No flash to boiling, 212°F (100°C)

#### ATTRIBUTES

**Foster® First Defense™ Disinfectant (40-80)** is a convenient, ready-to-use EPA Registered formulation that kills odor-causing bacteria and inhibits the growth of mold and mildew. This all-in-one “disinfectant, cleaner, fungicide, mildewstat, germicide and deodorizer” is designed for use in water damage restoration and for clean-up of mold and microbe impacted porous and non-porous materials. For homes, hospitals, institutions and industrial use.

**First Defense Disinfectant** kills household germs and is effective against a broad spectrum of bacteria, including *Pseudomonas Aeruginosa* (*Pseudomonas*), *Staphylococcus Aureus* (*Staph*), and *Streptococcus Pyogenes* (*Strep*), is virucidal\*, and inhibits the growth of mold and mildew (fungicidal), including *Trichophyton Mentagophytes*, when used as directed.

**First Defense Disinfectant** is effective against odor-causing bacteria and fungi (in water damager restoration situations) on semi-porous and porous materials including carpets, carpet cushion, sub floors, drywall, trim and frame lumber. It helps clean and remove residue resulting from flood and water damage.

**First Defense Disinfectant** may also be used to disinfectant washable hard, non-porous surfaces such as tables, floors, walls, countertops, coils and drain pans of air conditioning and refrigeration equipment and heat pumps and hard, non-porous surfaces such as metal, stainless steel, fiberglass (shower stalls and sinks), finished woodwork, vinyl or plastic upholstery, as well as hard non-porous inanimate environmental surfaces found in hospitals, food processing areas, homes, restaurants, hotels, health clubs and spas.

**LIMITATIONS:**

Do not store or apply to surfaces below 32°F (0°C) or above 100°F (38°C). |

Not for use on duct liner insulations or in HVAC systems.

Consult the Material Safety Data Sheet for additional information.

Do not use inside HVAC ducts, vents or on duct liner insulations.

**KEEP OUT OF REACH OF CHILDREN.**

**DO NOT DILUTE.**

EPA Registration No.6836-152-63836

EPA Est. No. 63836-TX-00105/08

Visit us on the web at [www.fosterproducts.com](http://www.fosterproducts.com)

Foster and First Defense are trademarks of Specialty Construction Brands, Inc.

**Specialty Construction Brands, Inc.**

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# APPLICATION GUIDE FOR Foster® First Defense™ Disinfectant

**MATERIAL PREPARATION:** DO NOT DILUTE! Foster® First Defense™ Disinfectant is full strength. Any attempt to dilute will drastically reduce the efficacy of the material.

**SITE PREPARATION:** Follow all procedures mandated by Federal, State, and local authorities regulating the use of EPA Registered disinfectants, if any.

**DIRECTIONS FOR USE:** It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Before use in federally inspected meat and poultry food processing plants and dairies, food products and packaging materials must be removed from the room or carefully protected. Refer to product label for more information. **Note: This product is not for use on medical device surfaces.**

**CLEAN AND DEODORIZE:** Apply undiluted to surfaces with a cloth, mop, sponge or sprayer. Wipe or allow to air dry.

**WATER DAMAGE RESTORATION AGAINST ODOR-CAUSING BACTERIA AND FUNGI FOR HOME, INSTITUTIONAL, INDUSTRIAL, AND HOSPITAL USE.** This product is particularly suitable for use in water damage restoration situations against odor causing bacteria on the following porous and semi-porous materials: carpets, carpet cushion, sub floors, drywall, trim, and frame lumber, tackless strip and paneling. Saturate affected materials with enough product to remain wet for at least 10 minutes. **Sewer Backup and River Flooding:** During mitigation procedures remove gross filth or heavy soil along with non-salvageable materials. Saturate all affected areas with a coarse spray device before and after cleaning and extraction. **Carpets, Carpet Cushion and Other Porous Materials such as Sub Floors, Drywall, Trim and Frame Lumber, Tackless Strip and Paneling:** For water damage from a clean source, extract excess water. Test hidden area for colorfastness. Remove gross filth or heavy soil. Saturate all affected areas with a coarse spray device. Roll, brush or agitate into the materials and allow the materials to remain wet for 10 minutes. Follow with a thorough extraction. Dry rapidly and thoroughly. **Special Instructions for Cleaning Carpet Against Odor Causing Bacteria:** Use this product in industrial and institutional areas such as homes, motels, hotels, nursing homes, schools and hospitals. Use on wet cleanable synthetic fibers. Do not use on wool. Vacuum carpet thoroughly prior to cleaning. Test fabric for color fastness. Do not mix this product with other cleaning products. Follow the cleaning procedures specified by the manufacturer of the cleaning equipment. After using this product, set the carpet pile and protect the carpet from furniture legs and bases while drying. Do not over wet. If applied to stain resistant nylon carpet, apply a fabric protector according to the manufacturer's direction.

**DISINFECTION / VIRUCIDAL\* / FUNGICIDAL / MOLD & MILDEW CONTROL DIRECTIONS:** Apply First Defense Disinfectant undiluted to hard, nonporous surfaces, thoroughly wetting the surfaces with a cloth, mop, sponge, sprayer or by immersion. Treated surfaces must remain wet for 10 minutes. Wipe dry with a cloth, sponge or mop or allow to air dry. For heavily soiled areas, a preliminary cleaning is recommended. For sprayer applications, use a coarse spray device. Spray 6 - 8 inches from surface; rub with brush, sponge or cloth. Avoid breathing spray. **For fungicidal activity:** First Defense Disinfectant is an effective one-step fungicide against Trichophyton mentagrophytes when used on surfaces in areas such as locker rooms, dressing rooms, shower and bath areas and exercise facilities. **For mold and mildew:** Repeat treatment every 7 days or more often if new growth appears. Rinse all surfaces that come in contact with food such as countertops, appliances, tables and stovetops with potable water before reuse. Do not use on utensils, glassware and dishes. **For Animal Care Disinfection Directions:** For cleaning and disinfecting hard nonporous surfaces: equipment used for animal food or water, utensils, instruments, cages, kennels, stables, catteries. Remove all animals and feeds from premises, animal transportation vehicles, crates, etc. Remove all litter, droppings and manure from floors, walls and surfaces of facilities occupied or traversed by animals. Thoroughly clean all surfaces with soap or detergent and rinse with water. Empty all feeding and watering appliances. Saturate surfaces with First Defense Disinfectant for a period of 10 minutes. Wipe or allow to air dry. Immerse all halters, ropes, and other types of equipment used in handling and restraining animals as well as forks, shovels, and scrapers used for removing litter and manure. Rinse all surfaces that come in contact with food, including equipment used for feeding or watering, with potable water before reuse. Ventilate buildings and other closed spaces. Do not house animals or employ equipment until treatment has been absorbed, set or dried.

**KILLS HIV-1 AND HBV AND HCV ON PRE-CLEANED ENVIRONMENTAL SURFACES / OBJECTS PREVIOUSLY SOILED WITH BLOOD / BODY FLUIDS** in health care settings or other settings in which there is an expected likelihood of soiling of inanimate surfaces / objects with blood or body fluids and in which the surfaces / objects likely to be soiled with blood or body fluids can be associated with the potential for transmission of Human Immunodeficiency Virus Type 1 (HIV-1) (associated with AIDS) or Hepatitis B Virus (HBV) or Hepatitis C Virus (HCV).

**SPECIAL INSTRUCTIONS FOR CLEANING AND DECONTAMINATION AGAINST HIV-1 OR HBV OR HCV ON SURFACES / OBJECTS SOILED WITH BLOOD / BODY FLUIDS.**

**Personal protection:** Clean-up should always be done wearing protective gloves, gowns, masks and eye protection. **Cleaning procedure:** Blood and other body fluids containing HIV or HBV or HCV must be thoroughly cleaned from surfaces and objects before application of First Defense Disinfectant. **Contact time:** Leave surface wet for 1 minute (60 seconds) for HIV-1 and 10 minutes for HBV and HCV. Use a 10 minute contact time for disinfection against all other viruses, bacteria and fungi claimed. **Disposal of infectious material:** Blood, body fluids, cleaning materials and clothing should be autoclaved and disposed of according to local regulations for infectious waste disposal.

**PRECAUTIONS and First Aid:** Refer to product label and MSDS sheet for information.



**CUSTOMER SERVICE: 800-231-9541**

**ADEQUATE TESTS:** The information contained herein we believe is correct to the best of our knowledge and tests. The recommendations and suggestions herein are made without guarantee or representation as to results. We recommend that adequate tests be performed by you to determine if this product meets all of your requirements. Refer to product label before use.

**For professional use only. Keep out of reach of children.  
Consult Material Safety Data Sheet and container label for further information.**

## MATERIAL SAFETY DATA SHEET

REVISION DATE: 07-14-2009

SUPERSEDES: 08-26-2008

### SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### COMPANY INFORMATION

Specialty Construction Brands, Inc.  
An H.B. Fuller Company  
1105 S. Frontenac Street  
Aurora, IL 60504  
Phone: 1-800-323-7407

Medical Emergency Phone Number (24 Hours): 1-888-853-1758  
Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

#### PRODUCT INFORMATION

PRODUCT NUMBER: FOSTER FIRST DEFENSE (40-80)  
PRODUCT DESCRIPTION: Disinfectant  
PRODUCT IDENTIFIER: 802320PM

### SECTION 2: HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

PHYSICAL STATE: Liquid  
COLOR: Light Green  
ODOR: Fragrant

Moderate eye irritant.

#### POTENTIAL HEALTH EFFECTS BY ROUTE OF ENTRY

EYE: Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.

SKIN: No irritation hazard in normal industrial use.

INHALATION: No irritation hazard in normal industrial use.

INGESTION: Ingestion is not an anticipated route of exposure. No hazard in normal industrial use.

#### LONG-TERM (CHRONIC) HEALTH EFFECTS

TARGET ORGAN(S): No organs known to be damaged from exposure to this product.

#### REGULATED CARCINOGEN STATUS:

Unless noted below, this product does not contain regulated levels of NTP, IARC, ACGIH, or OSHA listed carcinogens.

EXISTING HEALTH CONDITIONS AFFECTED BY EXPOSURE: No medical conditions affected by exposure.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	PERCENT
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Unlisted ingredients are not 'hazardous' per the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200) and/or are not found on the Canadian Workplace Hazardous Materials Information System ingredient disclosure list. See Section 8 for exposure limit guidelines.

### SECTION 4: FIRST AID MEASURES

IF IN EYES: Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

IF ON SKIN: Wash with soap and water.

IF VAPORS INHALED: Remove individual to fresh air after an airborne exposure if any symptoms develop, as a precautionary measure.

## MATERIAL SAFETY DATA SHEET

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IF SWALLOWED: Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this MSDS. Induced vomiting may lead to aspiration of the material into the lungs potentially causing chemical pneumonitis that may be fatal.

### SECTION 5: FIRE FIGHTING MEASURES

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FLASH POINT:	Non flammable
AUTOIGNITION TEMPERATURE:	Not established
LOWER EXPLOSIVE LIMIT (% in air):	Not established
UPPER EXPLOSIVE LIMIT (% in air):	Not established
EXTINGUISHING MEDIA:	Use water spray, foam, dry chemical or carbon dioxide.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	There is a possibility of pressure buildup in closed containers when heated. Water spray may be used to cool the containers.
SPECIAL FIRE FIGHTING INSTRUCTIONS:	Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.
HAZARDOUS COMBUSTION PRODUCTS:	Carbon dioxide, Carbon monoxide

### SECTION 6: ACCIDENTAL RELEASE MEASURES

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SPECIAL PROTECTION:	Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred.
CLEAN-UP:	Dike if necessary, contain spill with inert absorbent and transfer to containers for disposal. Keep spilled product out of sewers, watersheds, or water systems.
Transport Emergency Phone Number (CHEMTREC):	1-800-424-9300

### SECTION 7: HANDLING AND STORAGE

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Handling:	Harmful or irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area.
Storage:	Store in a cool, dry place.
Consult the Technical Data Sheet for specific storage instructions.	

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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EYE PROTECTION:	Wear safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Have an eye wash station available.
SKIN PROTECTION:	Not normally considered a skin hazard. Where use can result in skin contact, practice good personal hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.
GLOVES:	Nitrile
RESPIRATORY PROTECTION:	No respiratory protection required under normal conditions of use. Respirators should be selected by and used following requirements found in OSHA's respirator standard (29 CFR 1910.134).
VENTILATION:	No exposure limits exist for the constituents of this product. No engineering controls are likely to be required to maintain operator comfort under normal conditions of use.
EXPOSURE LIMITS:	

**MATERIAL SAFETY DATA SHEET**

Chemical Name	ACGIH EXPOSURE LIMITS	OSHA PEL
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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL STATE:	Liquid
COLOR:	Light Green
ODOR:	Fragrant
ODOR THRESHOLD:	Not established
WEIGHT PER GALLON (lbs.):	8.32
SPECIFIC GRAVITY:	1.000
SOLIDS (% by weight):	0.2
pH:	9.7
FLASH POINT:	Non flammable
BOILING POINT (deg. C):	Not established
FREEZING/MELTING POINT (deg. C):	Not established
VAPOR PRESSURE (mm Hg):	Not established
VAPOR DENSITY:	Not established
EVAPORATION RATE:	Not established
OCTANOL/WATER COEFFICIENT:	Not established
VOC, weight percent	Not determined

**SECTION 10: STABILITY AND REACTIVITY**

STABILITY:	Stable under normal conditions.
CHEMICAL INCOMPATIBILITY:	Not established
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, carbon dioxide

**SECTION 11: TOXICOLOGICAL INFORMATION**

COMPONENT	LD50/LC50
TOXICOLOGY SUMMARY:	No additional health information available.

**SECTION 12: ECOLOGICAL INFORMATION**

OVERVIEW: No ecological information available

**SECTION 13: DISPOSAL CONSIDERATIONS**

To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Solidify and dispose of in an approved landfill. Consult state, local or provincial authorities for more restrictive requirements.

**SECTION 14: TRANSPORTATION INFORMATION**

Consult Bill of Lading for transportation information.

DOT: NOT REGULATED  
IATA: NOT REGULATED

**SECTION 15: REGULATORY INFORMATION****INVENTORY STATUS**

U.S. EPA TSCA: This product is in compliance with the Toxic Substances Control Act's Inventory requirements.

CANADIAN CEPA DSL: The components of this product are included on the DSL or are exempt from DSL requirements.

EUROPEAN EINECS: As a result of the introduction of REACH into Europe, this product cannot be imported into Europe unless the REACH requirements are met.

If you need more information about the inventory status of this product call 651-236-5858.

## MATERIAL SAFETY DATA SHEET

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This product may contain chemical substances that are regulated for export by various government agencies (such as the Environmental Protection Agency, the Bureau of Industry and Security, or the Drug Enforcement Administration, among others). Before exporting this product from the USA or Canada, we recommend you contact us at 651-236-5858 (USA) or 450-655-1306 x227 (Canada) to request an export review.

### FEDERAL REPORTING

EPA SARA Title III Section 313

Unless listed below, this product does not contain toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 372. EPA has advised that when a percentage range is listed the midpoint may be used to fulfill reporting obligations.

Chemical Name	CAS#	%
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WHMIS STATUS: Unless listed below, this product is not controlled under the Canadian Workplace Hazardous Materials Information System.

D2B

### STATE REPORTING

This MSDS is not prepared for distribution in California.

### SECTION 16: ADDITIONAL INFORMATION

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This Material Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

HMIS RATING: HEALTH -- 2 FLAMMABILITY -- 0 REACTIVITY -- 0

See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

Prepared by: The Global Regulatory Department

Phone: 651-236-5842

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