

**DuPont™ Heavy Duty Tile and Grout Cleaner**

Version 4.1

Revision Date 09/08/2014

Ref. 130000033976

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	DuPont™ Heavy Duty Tile and Grout Cleaner
Tradename/Synonym	:	DuPont Heavy Duty Grout Cleaner
MSDS Number	:	130000033976
Manufacturer	:	DuPont 1007 Market Street Wilmington, DE 19898
Product Information	:	1-800-441-7515 (outside the U.S. 1-302-774-1000)
Medical Emergency	:	1-800-441-3637 (outside the U.S. 1-302-774-1139)
Transport Emergency	:	CHEMTREC: +1-800-424-9300 (outside the U.S. +1-703-527-3887)

SECTION 2. HAZARDS IDENTIFICATION

Potential Health Effects

Skin : May cause skin irritation.
May cause: Discomfort, itching, redness, or swelling.

Eyes : Causes eye irritation.
May cause: Tearing, redness, or discomfort.

Inhalation : May cause respiratory tract irritation.

Ingestion : Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Carcinogenicity

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Water	7732-18-5	>96%
2-Aminoethanol	141-43-5	<2 %
Ethoxylated Quaternary Amine		<2 %
Alcohol Ethoxylate		<2 %
1-(2-Butoxy-1-methylethoxy)propan-2-ol	29911-28-2	<1 %

SECTION 4. FIRST AID MEASURES

- Skin contact : Wash off immediately with soap and plenty of water. Wash contaminated clothing before re-use.
- Eye contact : Rinse immediately with plenty of water for at least 15 minutes. Seek medical advice.
- Inhalation : Move to fresh air. Oxygen or artificial respiration if needed. Symptoms may be delayed. Call a physician immediately.
- Ingestion : Call a physician or poison control centre immediately. If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
- General advice : When symptoms persist or in all cases of doubt seek medical advice.

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SECTION 5. FIREFIGHTING MEASURES**Flammable Properties**

Flash point : does not flash

Thermal decomposition : > 200 °C (> 392 °F)
To avoid thermal decomposition, do not overheat.Fire and Explosion Hazard : The product itself does not burn. Hazardous decomposition products formed under fire conditions. Hazardous combustion products Carbon dioxide (CO₂) Carbon monoxide Other hazardous decomposition products may be formed.

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Firefighting Instructions : Wear self-contained breathing apparatus for firefighting if necessary. Evacuate personnel to safe areas. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Safeguards (Personnel) : Evacuate personnel to safe areas. Use personal protective equipment. Ventilate the area.

Spill Cleanup : Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labelled containers.

Accidental Release Measures : Do not discharge to streams, ponds, lakes or sewers. Avoid subsoil penetration.

SECTION 7. HANDLING AND STORAGE

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- Handling (Personnel) : Avoid breathing vapours or mist. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before re-use.
- Handling (Physical Aspects) : To avoid thermal decomposition, do not overheat. Thermal decomposition can lead to release of irritating gases and vapours. Do not spray near open flame or heated surface.
- Storage : Keep tightly closed in a dry, cool and well-ventilated place. Protect from freezing.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering controls : Use only in area provided with appropriate exhaust ventilation.
- Personal protective equipment
- Respiratory protection : In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.
- Hand protection : Additional protection: Impervious gloves
- Eye protection : Wear safety glasses or coverall chemical splash goggles.
- Skin and body protection : Lightweight protective clothing

**Exposure Guidelines
Exposure Limit Values**

2-Aminoethanol				
Permissible exposure limit:	(OSHA)	3 ppm	6 mg/m3	8 hr. TWA
Permissible exposure limit:	(OSHA)	3 ppm	6 mg/m3	8 hr. TWA
TLV	(ACGIH)	6 ppm	STEL	
TLV	(ACGIH)	3 ppm	TWA	
AEL *	(DUPONT)	3 ppm	8 & 12 hr. TWA	

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1-(2-Butoxy-1-methylethoxy)propan-2-ol
AEL * (DUPONT) 50 ppm 8 & 12 hr. TWA

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid
Color : light yellow
Odor : mild
pH : 10.5 - 11.5
Boiling point/boiling range : 100 °C (212 °F)
Specific gravity : 1.07

SECTION 10. STABILITY AND REACTIVITY

Stability : Stable under normal conditions.
Conditions to avoid : To avoid thermal decomposition, do not overheat.
Incompatibility : Acids Strong oxidizing agents

Hazardous decomposition products : Carbon dioxide , Carbon monoxide
Incompletely burned carbon products
Other hazardous decomposition products may be formed.

SECTION 11. TOXICOLOGICAL INFORMATION

DuPont™ Heavy Duty Tile and Grout Cleaner
Skin irritation : No skin irritation, Rabbit

Non-corrosive

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Eye irritation : Mild eye irritation, Rabbit

Further information : The toxicological data has been taken from products of similar composition.

2-Aminoethanol

Dermal LD50 : 1,017 mg/kg , Rabbit

Oral LD50 : 1,098 mg/kg , Rat

Inhalation : An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.

Skin sensitization : Does not cause skin sensitisation., Guinea pig

Repeated dose toxicity : Oral
Rat

No toxicologically significant effects were found.

Inhalation
Rat

No toxicologically significant effects were found.

Mutagenicity : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Animal testing did not show any mutagenic effects.

Reproductive toxicity : No toxicity to reproduction
Animal testing showed no reproductive toxicity.

Teratogenicity : Animal testing showed no developmental toxicity.

Ethoxylated Quaternary Amine

Oral LD50 : 580 mg/kg , Rat

Skin sensitization : Does not cause skin sensitisation., Guinea pig

Mutagenicity : Did not cause genetic damage in cultured bacterial cells.

Alcohol Ethoxylate

Dermal LD50 : 2,000 - 5,000 mg/kg , Rabbit

Oral LD50 : 1,100 mg/kg , Rat



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Skin sensitization : Does not cause skin sensitisation., Guinea pig

Repeated dose toxicity : Dermal
Rat

Skin effects, Thickening of skin

Oral
Rat

No toxicologically significant effects were found.

Reproductive toxicity : No toxicity to reproduction
Evidence suggests the substance is not a reproductive toxin in animals.

Teratogenicity : Evidence suggests the substance is not a developmental toxin in animals.

1-(2-Butoxy-1-methylethoxy)propan-2-ol

Dermal LD50 : > 2,000 mg/kg , Rat

Oral LD50 : 3,700 mg/kg , Rat

Inhalation 4 h LC50 : > 5.4 mg/l , Rat

Skin sensitization : Does not cause skin sensitisation., Guinea pig

Repeated dose toxicity : Ingestion
Rat

No toxicologically significant effects were found.

Carcinogenicity : Not classifiable as a human carcinogen.
Animal testing did not show any carcinogenic effects.
Information given is based on data obtained from similar substances.

Mutagenicity : Animal testing did not show any mutagenic effects.
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Reproductive toxicity : No toxicity to reproduction
Animal testing showed no reproductive toxicity.

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Teratogenicity : Animal testing showed no developmental toxicity.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

2-Aminoethanol

- | | |
|------------|--|
| 96 h LC50 | : Cyprinus carpio (Carp) 349 mg/l |
| 72 h ErC50 | : Pseudokirchneriella subcapitata (green algae) 2.5 mg/l OECD Test Guideline 201 |
| 72 h NOEC | : Pseudokirchneriella subcapitata (green algae) 1 mg/l OECD Test Guideline 201 |
| 48 h | : Daphnia magna (Water flea) 50 mg/l Directive 67/548/EEC, Annex V, C.2. |
| 30 d | : NOEC Oryzias latipes (medaka) 1.2 mg/l OECD Test Guideline 210 |
| 21 d | : NOEC Daphnia magna (Water flea) 0.85 mg/l OECD Test Guideline 211 |

Ethoxylated Quaternary Amine

- | | |
|-----------|--|
| 96 h LC50 | : Oncorhynchus mykiss (rainbow trout) 24 mg/l |
| 72 h EC50 | : Algae 1.6 mg/l |
| 48 h EC50 | : Daphnia magna (Water flea) 13 mg/l OECD Test Guideline 202 |

Alcohol Ethoxylate

- | | |
|-----------|--|
| 96 h LC50 | : Pimephales promelas (fathead minnow) 8.5 - 11 mg/l |
| 48 h EC50 | : Daphnia magna (Water flea) 2.7 - 12 mg/l |

1-(2-Butoxy-1-methylethoxy)propan-2-ol

- | | |
|------------|---|
| 96 h LC50 | : Poecilia reticulata (guppy) 841 mg/l OECD Test Guideline 203 |
| 96 h ErC50 | : Pseudokirchneriella subcapitata (green algae) 519 mg/l |
| 48 h EC50 | : Daphnia magna (Water flea) > 100 mg/l OECD Test Guideline 202 |



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Environmental Fate

2-Aminoethanol

Biodegradability : > 90 % OECD Test Guideline 301
Readily biodegradable.

Ethoxylated Quaternary Amine

Biodegradability : 11 %
Not readily biodegradable.

Alcohol Ethoxylate

Biodegradability : 80 %
Readily biodegradable.

Bioaccumulation : Bioaccumulation is unlikely.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal : In accordance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

TSCA : On the inventory, or in compliance with the inventory

SARA 313 Regulated Chemical(s) : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65 : Chemicals known to the State of California to cause cancer, birth defects or any other harm: none known

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SECTION 16. OTHER INFORMATION

HMIS

Health	:	2
Flammability	:	0
Reactivity/Physical hazard	:	0
PPE	:	Personal Protection rating to be supplied by user depending on use conditions.

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Contact person : MSDS Coordinator, DuPont Chemicals and Fluoroproducts, Wilmington, DE
19898, (800) 441-7515

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