



Trade name: Azo-Grout 443-C

SECTION 1: Identification

Product identifier used on the label:

Product Name: Azo-Grout 443-C

Other means of identification:

Product Code Number: None known

Recommended use of the chemical and restrictions on use:

Recommended use: Water stop

Recommended restrictions: Uses other than those described above

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

Company Name: Azon.
Company Address: 2204 Ravine Road,
Kalamazoo 49004, MI, USA
Company Telephone: 269-385-5942

Contact Email:

Emergency phone number: Chemtrec US 1-800-424-9300 (24/7)
International: +1-703-527-3887

SECTION 2: Hazard(s) identification

UNITED STATES:

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Physical hazards

None known

Health hazards

- Skin irritation, category 2
- Skin sensitizer, category 1
- Eye irritation, category 2B
- Acute toxicity, inhalation, category 4
- Respiratory sensitizer, category 1
- Specific target organ toxicity, single exposure, category 3
- Specific target organ toxicity, repeated exposure, category 1

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Environmental hazards

Not adopted under OSHA paragraph (d) of §1910.1200

GHS Signal word: DANGER

GHS Hazard statement(s): Causes skin irritation
May cause an allergic skin reaction
Causes eye irritation
Harmful if inhaled
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause respiratory irritation.
Causes damage to organs (respiratory system) through prolonged or repeated exposure.

GHS Hazard symbol(s):



GHS Precautionary statement(s):

Prevention:

- Do not breathe dust/fume/gas/mist/ vapors/spray.
- Wash thoroughly after handling
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Contaminated work clothing must not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection
- [In case of inadequate ventilation] wear respiratory protection.

Response:

- If on skin: Wash with plenty of water
- If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If experiencing respiratory symptoms: Call a poison center/doctor
- Call a poison center/doctor if you feel unwell.
- Specific treatment (see sections 4 to 8 on the SDS and any additional information on this label)
- If skin irritation or rash occurs: Get medical advice/attention.
- If eye irritation persists: Get medical advice/attention.
- Take off contaminated clothing and wash it before reuse.

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Storage:

- Store in a well-ventilated place. Keep container tightly closed.
- Store locked up

Disposal:

- Dispose of contents/container to an approved disposal site in accordance with local/regional/national/ international regulations

Hazard(s) not otherwise classified (HNOC):

None known.

Percentage of ingredient(s) of unknown acute toxicity:

4% of the mixture consists of ingredients of unknown acute toxicity (oral/inhalation).

35% of the mixture consists of ingredients of unknown acute toxicity (dermal).

CANADA:

Classification of the chemical in accordance with Hazardous Products Regulations (WHMIS 2015):

Physical hazards

None known

Health hazards

Skin irritation, category 2

Skin sensitizer, category 1

Eye irritation, category 2B

Acute toxicity, inhalation, category 4

Respiratory sensitizer, category 1

Specific target organ toxicity, single exposure, category 3

Specific target organ toxicity, repeated exposure, category 1

Environmental hazards

Not adopted under WHMIS 2015.

GHS Signal word:

DANGER

GHS Hazard statement(s):

Causes skin irritation

May cause an allergic skin reaction

Causes eye irritation

Harmful if inhaled

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause respiratory irritation.

Causes damage to organs (respiratory system) through prolonged or repeated exposure.

GHS Hazard symbol(s):



GHS Precautionary statement(s):

Prevention:

- Do not breathe dust/fume/gas/mist/ vapors/spray.
- Wash thoroughly after handling
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Contaminated work clothing must not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection
- [In case of inadequate ventilation] wear respiratory protection.

Response:

- IF ON SKIN: Wash with plenty of water
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If experiencing respiratory symptoms: Call a poison center/doctor
- Call a POISON CENTRE/doctor if you feel unwell.
- Specific treatment (see sections 4 to 8 on the SDS and any additional information on this label)
- If skin irritation or rash occurs: Get medical advice/attention.
- If eye irritation persists: Get medical advice/attention.
- Take off contaminated clothing and wash it before reuse.

Storage:

- Store in a well-ventilated place. Keep container tightly closed.
- Store locked up

Disposal:

- Dispose of contents/container to an approved disposal site in accordance with local/regional/national/ international regulations

Physical hazards not otherwise classified (PNOC):

None known

Health hazard(s) not otherwise classified (HNOC):

None known

SECTION 3: Composition/information on ingredients

Chemical name	CAS#	Concentration (weight %)
Polymeric Diphenylmethane Diisocyanate	9016-87-9	15 - 40%
4,4'-Diphenylmethane Diisocyanate	101-68-8	15 - 40%
2,4'-Diphenylmethane Diisocyanate	5873-54-1	1 - 5%
2,2'-Diphenylmethane Diisocyanate	2536-05-2	0.1 - 1%

Note: The balance of the ingredients is not classified as hazardous or are below the concentration limit to be classified as hazardous, under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200 and HPR WHMIS 2015.

SECTION 4: First-aid measures**Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion:**

Inhalation: Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Seek medical advice.

Skin contact: Wash with soap and water, and rinse thoroughly. Seek medical advice if irritation or pain develops.

Eye contact: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Ingestion: Do NOT induce vomiting. If swallowed, wash mouth out with water provided the person is conscious. Follow with plenty of water. NEVER GIVE LIQUIDS TO AN UNCONCIOUS PERSON. Call a physician.

Most important symptoms/effects, acute and delayed:

Causes skin irritation. May cause an allergic skin reaction. Causes eye irritation. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Causes damage to organs (respiratory system) through prolonged or repeated exposure.

Indication of immediate medical attention and special treatment needed:

If any symptoms are observed, contact a physician and give them this SDS sheet. Treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) extinguishing media:

Suitable extinguishing media: Foam, extinguishing powder, carbon dioxide, water fog. On large fires, use dry chemical, or foam, water fog/spray. On small fires, use carbon dioxide (CO₂), dry chemical or water spray. Water can be used to cool fire exposed containers.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

Hazardous combustion products may include the following substances: Carbon monoxide, carbon dioxide, irritating or toxic substances.

Special protective equipment and precautions for fire-fighters:

Use water spray or fog for cooling exposed containers. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate all non-emergency personnel from area. Irritating substances may be released during a fire including carbon oxides. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through the spilled material. Avoid breathing vapour or mist. Minimize contact with skin or eyes. Provide adequate ventilation. Wear appropriate protective equipment, as conditions warrant (see Section 8).

See Sections 2 and 7 for additional information on hazards and precautionary measures.

Environmental Precautions:

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. If spill occurs on water notify appropriate authorities.

Methods and material for containment and cleaning up:

Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements, or confined areas.

Contain and collect spillage with non-combustible, absorbent material e.g., sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Thoroughly decontaminate area after spill cleanup. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

See Section 1 for emergency contact information and Section 13 for waste disposal.

SECTION 7: Handling and storage

Precautions for safe handling:

Wear recommended personal protective equipment (See Section 8). Provide adequate ventilation in process areas to prevent formation of vapour. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibles:

Keep only in original container in a dry, well-ventilated place out of direct sunlight. Keep container closed when not in use. Make sure containers are properly labeled. Incompatible materials include Strong oxidizing agents.

SECTION 8: Exposure controls/personal protection

Control Parameters

Polymeric Diphenylmethane Diisocyanate

Canada - Alberta - Occupational Exposure Limits – TWAs - 0.005 ppm, 0.07 mg/m³

4,4''-Methylenediphenyl diisocyanate

Canada - Alberta - Occupational Exposure Limits – TWAs - 0.005 ppm, 0.05 mg/m³

Canada - British Columbia - Occupational Exposure Limits - TWAs - 0.005 ppm

Canada - British Columbia - Occupational Exposure Limits – Ceilings - 0.01 ppm

Canada - Manitoba - Occupational Exposure Limits - TWAs - 0.005 ppm

Canada - New Brunswick - Occupational Exposure Limits – TWAs - 0.005 ppm, 0.051 mg/m³

Canada - Newfoundland & Labrador - Occupational Exposure Limits - TWAs - 0.005 ppm

Canada - Northwest Territories - Occupational Exposure Limits – TWAs - 0.005 ppm

Canada - Northwest Territories - Occupational Exposure Limits - STELs - 0.015 ppm

Canada - Northwest Territories - Occupational Exposure Limits - Ceilings - 0.02 ppm, 0.2 mg/m³

Canada - Nova Scotia - Occupational Exposure Limits - TWAs - 0.005 ppm

Canada - Nunavut - Occupational Exposure Limits – TWAs - 0.005 ppm

Canada - Nunavut - Occupational Exposure Limits – STELs - 0.015 ppm

Canada - Nunavut - Occupational Exposure Limits – Ceilings - 0.02 ppm, 0.2 mg/m³

Canada - Ontario - Occupational Exposure Limits - TWAs - 0.005 ppm

Canada - Ontario - Occupational Exposure Limits - Ceilings - 0.02 ppm

Canada - Prince Edward Island - Occupational Exposure Limits - TWAs - 0.005 ppm

Canada - Quebec - Occupational Exposure Limits – TWAEVs - 0.005 ppm, 0.051 mg/m³

Canada - Saskatchewan - Occupational Exposure Limits - TWAs - 0.005 ppm

Canada - Saskatchewan - Occupational Exposure Limits - STELs - 0.015 ppm

Canada - Yukon - Occupational Exposure Limits - Ceilings - 0.02 ppm, 0.2 mg/m³

U.S. - OSHA - Final PELs - Ceiling Limits - 0.02 ppm, 0.2 mg/m³

Appropriate engineering controls:

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Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

If exposure limits have not been established, maintain airborne levels to an acceptable level.

Provide eyewash station. Eye wash fountain and emergency showers are recommended.

Concentrations should be monitored hazardous substances in the workplace in accordance with recognized test methods. Mode, method, type and frequency of testing and measurement of harmful factors in the working environment should meet the requirements of local/regional/national laws.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Wear safety glasses, safety glasses with side shields or safety goggles. Use equipment for eye protection tested and approved under NIOSH standards.

Skin and hand protection: The selection of suitable gloves does not only depend on the material, but also on further criteria of quality which may vary from one manufacturer to another. Since the product represents a preparation composed of several substances, the resistance of the glove materials cannot be calculated in advance and must therefore be checked before use.

Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. Use respirators and components evaluated and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

General hygiene considerations: Wear safety shoes. Wear rubber boots to clean up a spill. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Wash hands after use.

SECTION 9: Physical and chemical properties

Appearance (physical state, color, etc.):

Physical state:	Transparent liquid
Colour:	Brown to Light Brown
Odour:	Slightly musty
Odor threshold:	Not available

pH: Not available

Melting point/freezing point: Not available

Initial boiling point and boiling range: Not available

Flash point: >93.33°C (>200°F) [Pensky-Martens] EPA 1010

Evaporation rate: Not available

Flammability (solid, gas): Not applicable.

Upper/lower flammability or explosive limits

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Flammability limit – lower (%):	Not available
Flammability limit – upper (%):	Not available
Explosive limit – lower (%):	Not available
Explosive limit – upper (%):	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Relative density:	1.122 - 1.130
Solubility (ies):	Not available.
Partition coefficient (n-octanol/water):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available

SECTION 10: Stability and reactivity

Reactivity:	None expected under recommended storage and handling conditions.
Chemical stability:	Stable under recommended storage and handling conditions.
Possibility of hazardous reactions:	Hazardous reactions will not occur under normal handling, transport and storage conditions.
Conditions to avoid:	Do not expose this product to excessive heat conditions.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition Products:	During a fire irritating and toxic substances will be released including carbon monoxide, carbon dioxide, irritating or toxic substances.

SECTION 11: Toxicological information

Information on likely routes of exposure:

Inhalation:	Expected to be a route of exposure
Ingestion:	Expected to be a route of exposure
Skin:	Expected to be a route of exposure
Eyes:	Expected to be a route of exposure

Target Organs: Skin, Eyes, Respiratory Tract

Symptoms related to the physical, chemical, and toxicological characteristics:

Inhalation: Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Causes damage to organs (respiratory system) through prolonged or repeated exposure.

Skin Contact: Causes skin irritation. May cause an allergic skin reaction.

Eye Contact: Causes serious eye irritation

Delayed and immediate effects and chronic effects from short or long-term exposure:

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Causes damage to organs (respiratory system) through prolonged or repeated exposure.

Numerical measures of toxicity (such as acute toxicity estimates):

Ingredient Information:

Substance	Test Type (species)	Value
Polymeric Diphenylmethane Diisocyanate	LD ₅₀ Oral (Rat)	49 g/kg
	LD ₅₀ Dermal (Rabbit)	> 9.4 g/kg
	LC ₅₀ Inhalation (Rat)	490 mg/m ³ 4h
4,4'-Diphenylmethane Diisocyanate	LD ₅₀ Oral (Rat)	31600 mg/kg
	LD ₅₀ Dermal (Rabbit)	None known
	LC ₅₀ Inhalation (Rat)	369 mg/m ³ 4h
2,4'-Diphenylmethane Diisocyanate	LD ₅₀ Oral (Rat)	None known
	LD ₅₀ Dermal (Rabbit)	None known
	LC ₅₀ Inhalation (Rat)	None known
2,2'-Diphenylmethane Diisocyanate	LD ₅₀ Oral (Rat)	None known
	LD ₅₀ Dermal (Rabbit)	None known
	LC ₅₀ Inhalation (Rat)	None known

Acute Toxicity:	Harmful if inhaled.
Skin corrosion/irritation:	Causes skin irritation.
Serious eye damage/eye irritation:	Causes eye irritation.
Respiratory sensitization:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitization:	May cause an allergic skin reaction.
Germ cell mutagenicity:	Does not meet the criteria for classification
Carcinogenicity:	Does not meet the criteria for classification.
Reproductive toxicity:	Does not meet the criteria for classification.
Specific target organ toxicity- Single exposure:	May cause respiratory irritation.
Specific target organ toxicity- Repeat exposure:	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard:	Does not meet the criteria for classification

Whether the hazardous chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA:

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Component	IARC	NTP	ACGIH	OSHA
Polymeric Diphenylmethane Diisocyanate	Not Listed	Not Listed	Not Listed	Not Listed
4,4'-Diphenylmethane Diisocyanate	Not Listed	Not Listed	Not Listed	Not Listed
2,4'-Diphenylmethane Diisocyanate	Not Listed	Not Listed	Not Listed	Not Listed
2,2'-Diphenylmethane Diisocyanate	Not Listed	Not Listed	Not Listed	Not Listed

SECTION 12: Ecological information

Ecotoxicity (aquatic and terrestrial, where available):

This product contains no ingredients with ecotoxicity data.

Persistence and Degradability:

No data available for this product.

Bioaccumulative Potential:

No data available for this product.

Mobility in Soil:

No data available for this product

Other adverse effects (such as hazardous to the ozone layer):

No data available for this product

SECTION 13: Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.

Product

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Dispose via a licensed waste disposal contractor. Observe all federal, state/provincial and municipal regulations.

Contaminated packaging

Since emptied containers retain product residue, follow label warnings even after container is emptied. Empty containers should be properly labeled to supplier or everywhere there is a recovery program.

SECTION 14: Transport Information

DOT - US Department of Transportation Classification (49CFR)

Not regulated under DOT.

Canada TDG Transportation of Dangerous Goods Regulations (SOR/2001-286)

Not regulated under TDG.

IMDG (Transport by sea)

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Not regulated under IMDG.

IATA (Country variations may apply)

Not regulated under IATA

Environmental hazards

Marine pollutant: No

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

No additional information.

Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises.

No additional information.

SECTION 15: Regulatory Information

USA:

United States Federal Regulations: This SDS complies with the OSHA, 29 CFR 1910.1200. The product is classified as hazardous under OSHA.

Toxic Substances Control Act (TSCA) – All of the components are listed on the U.S. EPA TSCA Inventory List or are exempt from listing.

SARA Superfund and Reauthorization Act of 1986 Title III sections 302, 311, 312 and 313:

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A) (> 0.1%):
None of the components are listed.

Section 311/312 (40 CFR 370) (> 0.1%):

Acute toxicity

Skin corrosion or irritation

Respiratory or skin sensitization

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure);

Section 313 Toxic Release Inventory (40 CFR 372) (> 0.1%):

Polymeric Diphenylmethane Diisocyanate and 4,4'-Methylenediphenyl diisocyanate are listed

CERCLA RQ (lbs) Ingredients (> 0.1%):

4,4'-Methylenediphenyl diisocyanate - 5000 lb final RQ; 2270 kg final RQ

STATE REGULATIONS:

This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements, you should contact the appropriate agency in your state.

California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986): None listed

Massachusetts Right to Know:

None of the components are listed

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New Jersey Right to Know:

Polymeric Diphenylmethane Diisocyanate and 4,4"-Methylenediphenyl diisocyanate are listed

Pennsylvania Right to Know:

None of the components are listed

CANADA:

This SDS complies with the requirements of WHMIS 2015.

Canadian NPRI: Polymeric Diphenylmethane Diisocyanate and 4,4"-Methylenediphenyl diisocyanate are both listed in Part 1 as Group A Substance on the National Pollutant Release Inventory.

DSL: The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

SECTION 16: Other Information

Revision Date: June 15th, 2022

DISCLAIMER: This document has been prepared in accordance with the SDS requirements of the OSHA HCS regulations and the Canadian WHMIS GHS Regulations. To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier nor any of its subsidiaries assumes any liability whatsoever for completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.