



# Safety Data Sheet

## BOSS® 334 Minimal Expanding Foam Straw Grade

### Section 1. Identification

Product Identifier BOSS® 334 Minimal Expanding Foam Straw Grade  
Synonyms 33412; 04403TN10  
Manufacturer Stock Numbers 04403TN10

Recommended use Refer to Technical Information  
Uses advised against Refer to Technical Information

Manufacturer Contact  
Address Soudal Accumetric  
350 Ring Road  
Elizabethtown, KY, 42701  
USA

Phone  
(270) 769-3385

Emergency Phone  
(800) 424-9300  
CHEMTREC

Fax  
(270) 765-2412

### Section 2. Hazards Identification

Classification ACUTE TOXICITY - DERMAL - Category 4  
ACUTE TOXICITY - INHALATION - Category 4  
ACUTE TOXICITY - ORAL - Category 4  
CARCINOGENICITY - Category 2  
EYE DAMAGE/IRRITATION - Category 2A  
FLAMMABLE AEROSOLS - Category 1  
SENSITIZATION - RESPIRATORY - Category 1A  
SENSITIZATION - SKIN - Category 1  
SKIN CORROSION/IRRITATION - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (Repeated Exposure) - Category 2

# SPECIFIC TARGET ORGAN TOXICITY (Single Exposure) - Category 3

Signal Word

Danger

Pictogram



Hazard Statements

Causes serious eye irritation  
Causes skin irritation  
Extremely flammable aerosol  
Harmful if inhaled  
Harmful if swallowed  
Harmful in contact with skin  
May cause allergy or asthma symptoms or breathing difficulties if inhaled  
May cause an allergic skin reaction  
May cause damage to organs through prolonged or repeated exposure.  
May cause respiratory irritation.  
Suspected of causing cancer.

Precautionary Statements

Response

Call a poison center or doctor if you feel unwell.  
Get medical advice/attention if you feel unwell.  
If exposed or concerned: Get medical advice/attention.  
If eye irritation persists: Get medical advice/attention.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.  
If on skin: Wash with plenty of soap and water.  
If skin irritation or rash occurs: Get medical advice/attention.  
If swallowed: Call a poison center/doctor if you feel unwell.  
Rinse mouth.  
Specific treatment (see label)  
Take off contaminated clothing and wash it before reuse.  
Take off immediately all contaminated clothing and wash it before reuse.  
Wash contaminated clothing before reuse.

Prevention

[In case of inadequate ventilation] wear respiratory protection.  
Avoid breathing dust/fume/gas/mist/ vapors/spray.  
Contaminated work clothing must not be allowed out of the workplace.  
Do not eat, drink or smoke when using this product.  
Do not handle until all safety precautions have been read and understood.  
Do not spray on an open flame or other ignition source.  
Keep away from heat.  
Obtain special instructions before use.  
Pressurized container: Do not pierce or burn, even after use.  
Use only outdoors or in a well-ventilated area.  
Wash hands thoroughly after handling.  
Wear eye protection/face protection.  
Wear protective gloves/protective clothing.

Storage	Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container in accordance with local, state and federal regulations.

Ingredients of unknown toxicity 0%

Hazards not Otherwise Classified

Other Hazards Contains isocyanates. See information supplied by the manufacturer. Allergic sensitization may be possible with isocyanates. Persons already sensitized to diisocyanates may develop allergic reactions when using this product.

## Section 3. Ingredients

CAS	Ingredient Name	Weight %
9016-87-9	Polymeric diphenylmethane diisocyanate	> 25 %
13674-84-5	Trichorylpropylene Phosphate	< 25 %
63449-39-8	Chlorinated paraffin waxes and hydrocarbon waxes	< 25 %
75-28-5	Isobutane	< 20 %
74-98-6	Propane	< 10 %

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First-Aid Measures

Description of necessary measures	IF exposed or concerned: Get medical advice/attention; Call a POISON CENTER or doctor/physician. Get medical advice/attention if you feel unwell.
Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician. Specific treatment (see label). If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
Skin	IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/physician if you feel unwell. Specific treatment (see ... on this label). Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.
Eyes	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
Indication of any immediate medical attention and special treatment needed	Treat symptomatically and supportively. Persons already sensitized to diisocyanates may develop allergic reactions when using this product.

Most Important  
Symptoms/Effects

Acute  
Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Delayed  
May cause allergic or asthmatic symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure: respiratory tract.

## Section 5. Fire Fighting Measures

Suitable Extinguishing Media	Water, carbon dioxide
Unsuitable Extinguishing Media	None known
Special Hazards Arising from the Chemical	Extremely flammable aerosol.
Hazardous Combustion Products	Oxides of carbon, Phosphorus oxides, hydrogen cyanide, hydrogen chloride. May polymerize when heated.
Special Protective Equipment and Precautions for Firefighters	Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Do not spray on an open flame or other ignition sources. Do not pierce or burn, even after use. Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.
Fire Fighting Measures	Danger of explosion. Keep unnecessary people away, isolate hazard area and deny entry. Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. Do not allow to enter into surface water or drains.

## Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures	Wear appropriate personal protective equipment recommended in Section 8 of the SDS. Do not smoke when using this product or handle near an open flame or sparks. Use explosion-proof electrical/ventilating/lighting equipment.
Methods and Materials for Containment and Cleaning Up	Do not pierce or burn, even after use.
Environmental Precautions	Do not allow to enter into surface water or drains. Dike for later disposal.

## Section 7. Handling and Storage

Precautions for Safe Handling	Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Do not spray on an open flame or other ignition sources. Do not pierce or burn, even after use. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Wear protective gloves/clothing and eye/face protection. Take off contaminated clothing and wash before re-use. Contaminated work clothing should not be allowed out of the workplace. Do not breathe dust/fume/gas/mist
-------------------------------	---

/vapors/spray. Use only outdoors or in a well-ventilated area. [In case of inadequate ventilation] wear respiratory protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use explosion-proof electrical/ventilating/lighting equipment.

Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place. Keep container tightly closed.  
Store locked up.  
Protect from sunlight. Do not expose to temperatures exceeding 50C/122F.  
Ensure adequate ventilation of the storage area. Maximum storage period (time): 1 year.

Incompatible Materials

Heat, strong acids, strong bases, Amines. Keep away from all ignition sources.

## Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits

Ingredient Name	ACGIH TLV	OSHA PEL	STEL
Polymeric diphenylmethane diisocyanate	0.005 ppm	0.02 mg/m <sup>3</sup>	N/A
Trichorylpropylene Phosphate	N/A	N/A	N/A
Chlorinated paraffin waxes and hydrocarbon waxes	N/A	N/A	N/A
Isobutane	1000 ppm	N/A	1000 ppm
Propane	1000 ppm TWA	1000 ppm PEL	N/A

Personal Protective Equipment

Goggles, Gloves

Component Exposure Limits

Isobutane (75-28-5)  
ACGIH: 1000 ppm STEL  
NIOSH: 800 ppmTWA; 1900 mg/m<sup>3</sup>TWA

Propane (74-98-6)  
ACGIH: 1000 ppm TWA  
NIOSH: 1000 ppmTWA; 1800 mg/m<sup>3</sup>TWA; 2100 ppmIDLH (10% LEL)  
OSHA (US): 1000 ppmTWA; 1800 mg/m<sup>3</sup>TWA

Biological limit value  
Engineering Controls

There are no biological limit values for any of this product's components.  
Use explosion-proof electrical/ventilating/lighting equipment. Keep away from heat/sparks/open flames/hot surfaces.

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection  
Wear splash resistant safety goggles.  
  
Skin Protection  
Wear suitable protective clothing and gloves.

Respiratory Protection  
Use a respirator with an organic vapor cartridge for concentrations exceeding the occupational exposure limit.

Glove Recommendations

## Section 9. Physical and Chemical Properties

Physical State	Aerosol
Color	Champagne
Odor	Characteristic
Odor Threshold	Not available
Solubility	Insoluble in water
Partition coefficient Water/n-octanol	Not available
VOC%	25% (by wt) 235 g/L
Viscosity	No data available
Specific Gravity	No data available
Density lbs/Gal	N/A
Pounds per Cubic Foot	N/A
Flash Point	Not available
FP Method	N/A
pH	Not available
Melting Point	No data available
Boiling Point	No data available
Boiling Range	N/A
LEL	N/A
UEL	N/A
Evaporation Rate	Not available
Flammability	Not available
Decomposition Temperature	Not available
Auto-ignition Temperature	No data available
Vapor Pressure	No data available
Vapor Density	No data available

### Note

The above information is not intended for use in preparing product specifications. Contact Soudal Accumetric before writing specifications.

## Section 10. Stability and Reactivity

### Reactivity

May polymerize when heated.

Chemical Stability	Stable under normal conditions of use.
Possibility of Hazardous Reactions	May polymerize when heated.
Conditions to Avoid	Avoid contact with incompatible materials. Keep away from heat/sparks/open flame/hot surfaces - No smoking. Do not spray on an open flame or other ignition sources. Do not pierce or burn, even after use.
Incompatible Materials	Heat, strong acids, strong bases, Amines, Keep away from all ignition sources.
Thermal Decomposition Products	Oxides of carbon, oxides of phosphorus, hydrogen cyanide, hydrogen chloride

## Section 11. Toxicological Information

Information on Likely Routes of Exposure	Inhalation May cause allergic or asthmatic symptoms or breathing difficulties if inhaled. May cause respiratory irritation.
	Skin Contact Harmful in contact with skin. May cause allergic skin reaction. Causes skin irritation.
	Eye Contact Causes serious eye irritation.
	Ingestion Harmful if swallowed.
Acute and Chronic Toxicity	<p>Component Analysis - LD50/LC50 The components of this material have been reviewed in various sources and the following selected endpoints are published:</p> <p>Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9) Inhalation LC50Rat 490 mg/m<sup>3</sup> 4 h</p> <p>2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5) Oral LD50Rat 500 mg/kg Dermal LD50Rabbit 1230 mg/kg Inhalation LC50Rat 5 mg/L 4 h</p> <p>Isobutane (75-28-5) Inhalation LC50Rat 658 mg/L 4 h</p> <p>Propane (74-98-6) Inhalation LC50Rat 658 mg/L 4 h</p> <p>Immediate Effects Harmful in contact with skin. Causes serious eye irritation. Harmful if swallowed. May cause damage to organs. Causes skin irritation.</p> <p>Delayed Effects May cause allergic skin reaction. May cause allergic or asthmatic symptoms or breathing difficulties if inhaled. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.</p> <p>Irritation/Corrosivity Data</p>



Causes serious eye irritation. Causes skin irritation.

Respiratory Sensitization

May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.

Dermal Sensitization

May cause allergic skin reaction.

Germ Cell Mutagenicity

No data available.

Reproductive Toxicity

No data available.

Specific Target Organ Toxicity - Single Exposure

heart.

Specific Target Organ Toxicity - Repeated Exposure

respiratory system.

Aspiration hazard

No data available.

Component  
Carcinogenicity

Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)

IARC: Supplement 7 [1987]; Monograph 19 [1979](Group 3 (not classifiable))

DFG: Category 4 (no significant contribution to human cancer)

Chlorinated paraffin waxes and hydrocarbon waxes (63449-39-8)

IARC: Monograph 48 [1990](Group 2B (possibly carcinogenic to humans))

DFG: Category 3B (could be carcinogenic for man)

OSHA: Present

Medical Conditions  
Aggravated by Exposure

eye disorders, respiratory disorders, heart disorders, skin disorders and allergies. May produce an allergic reaction. Persons already sensitized to diisocyanates may develop allergic reactions when using this product.

## Section 12. Ecological Information

Component Analysis -  
Aquatic Toxicity

2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)

Fish:

LC50 96 h Brachydanio rerio 56.2 mg/L [static]; LC50 96 h Pimephales promelas 98 mg/L [static]; LC50 96 h Poecilia reticulata 30 mg/L [static]

Algae:

EC50 72 h Desmodesmus subspicatus 45 mg/L IUCLID; EC50 96 h Pseudokirchneriella subcapitata 4 mg/L IUCLID

Invertebrate:

EC50 48 h Daphnia magna 63 mg/L IUCLID

Chlorinated paraffin waxes and hydrocarbon waxes (63449-39-8)

Fish:

LC50 96 h Lepomis macrochirus >300 mg/L [static]; LC50 96 h Oncorhynchus mykiss >0.0109 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 94.5 -



271 mg/L [static]; LC50 96 h Lepomis macrochirus >0.1 mg/L [flow-through];  
LC50 96 h Pimephales promelas >100 mg/L [static]

## Section 13. Disposal

**Disposal Methods** Dispose of contents/container in accordance with local/regional/national/international regulations. Do not allow to enter into ground-water, surface water or drains.

## Section 14. Transport Information

**UN Number** 1950  
**UN Proper Shipping Name** AEROSOLS  
**DOT Classification** Hazard Class 2.1  
**Packing Group** 2.1

## Section 15. Regulatory Information

**U.S. Federal Regulations** This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)

SARA 313: 1 % de minimis concentration

SARA Section 311/312 (40 CFR 370 Subparts B and C)

Acute Health: Yes Chronic Health: Yes Fire: Yes Pressure: Yes Reactivity: Yes

**U.S. State Regulations** The following components appear on one or more of the following state hazardous substances lists:

Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)

NJ

Propane (74-98-6)

MA, MN, NJ, PA

Isobutane (75-28-5)

MA, NJ, PA

Not listed under California Proposition 65

**Canadian WHMIS Ingredient Disclosure List (IDL)** The components of this product are either not listed on the IDL or are present below the threshold limit listed on the IDL.

**WHMS Classification** B5, D2A, D2B

## Section 16. Other Information

## HMIS and NFPA Rating

### HMIS

Health: 2\*

Fire: 3

Reactivity: 3

### NFPA

Health: 2

Fire: 3

Reactivity: 3

### Hazard Scale:

0 = Minimal

1 = Slight

2 = Moderate

3 = Serious

4 = Severe

\* = Chronic hazard

## Disclaimer

The data contained herein is based upon information that Soudal Accumetric believes to be reliable. Users of this product have the responsibility to determine that suitability of use and to adopt all necessary precautions to ensure the safety and protection of property and persons involved in said use. All statements or suggestions are made without warranty, expressed or implied, regarding the accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof.