



Safety Data Sheet

BOSS® 334 Minimal Expanding Foam Straw Grade

Section 1. Identification

Product Identifier BOSS® 334 Minimal Expanding Foam Straw Grade

Synonyms 33412

Manufacturer Stock Numbers 143140

Recommended use Refer to Technical Information

Uses advised against Refer to Technical Information

Manufacturer Contact

Address

Soudal
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USA

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CHEMTREC

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(270) 765-2412

Section 2. Hazards Identification

Classification

CARCINOGENICITY - Category 2
EYE DAMAGE/IRRITATION - Category 2A
FLAMMABLE AEROSOLS - Category 1
GASES UNDER PRESSURE - Liquefied gas
SENSITIZATION - RESPIRATORY - Category 1
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
TOXIC TO REPRODUCTION - EFFECTS ON OR VIA LACTATION

Signal Word

Danger

Pictogram



Hazard Statements

Causes serious eye irritation
Causes skin irritation
Contains gas under pressure; may explode if heated
Extremely flammable aerosol
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 harm to breast-fed children
May cause long lasting harmful effects to aquatic life
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 experiencing respiratory symptoms: Call a poison center/doctor.
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.
Specific treatment (see label)
Take off contaminated clothing and wash it before reuse.
Wash contaminated clothing before reuse.

Prevention

Avoid breathing dust/fume/gas/mist/ vapors/spray.
Avoid contact during pregnancy/while nursing.
Avoid release to the environment
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.

Storage

Protect from sunlight. Do not expose to temperatures exceeding 50C/122F.
Protect from sunlight. Store in a well-ventilated place.

Disposal

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

Store locked up.

Dispose of contents/container in accordance with local, state and federal regulations.

Ingredients of unknown toxicity 0%

Hazards not Otherwise Classified

Other Hazards Gas/vapor spreads at floor level: Ignition hazard.

Section 3. Ingredients

CAS	Ingredient Name	Weight %
75-28-5	Isobutane	5% - 15%
115-10-6	Dimethyl ether	5% - 10%
74-98-6	Propane	5% - 10%
9016-87-9	Polymeric diphenylmethane diisocyanate	25% - 35%
63449-39-8	Chlorinated paraffin waxes and hydrocarbon waxes	20% - 30%
25791-96-2	Glyceryl polypropylene glycol triether	10% - 20%
85535-85-9	alkanes, C14-17, chloro	1% - 5%

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

Section 4. First-Aid Measures

Inhalation Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, oxygen should be administered by qualified personnel. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

Skin Wash with plenty of soap and water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.

Ingestion Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

Eyes Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor/physician.

Most Important Symptoms/Effects Acute
Causes skin irritation. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. May cause respiratory irritation. May cause drowsiness or dizziness.

Delayed
Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure: thyroid gland, liver.

Indication of any immediate medical attention and special treatment needed
Treat symptomatically and supportively.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media	Small fires: Quick-acting ABC-powder extinguisher, Quick-acting BC-powder extinguisher.
Unsuitable Extinguishing Media	Small fires: Quick-acting CO2 extinguisher, Water (water can be used to control jet flame), foam. In case of major fire and large quantities: Water (water can be used to control jet flame), foam.
Special Hazards Arising from the Chemical	Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Pressurized container: Do not pierce or burn, even after use. May polymerize with evolution of heat.
Hazardous Combustion Products	On burning: Irritating and toxic gases or fumes may be released during a fire: oxides of carbon, phosphorus, hydrogen chloride, nitrous vapors. On heating: May release toxic gases and combustible. gases: hydrogen cyanide.
Advice for firefighters	Eliminate all sources of ignition. Do not spray on an open flame or other ignition sources. If safe to do so, move undamaged containers from the fire area. 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. Let the fire burn. Stay away from the ends of tanks. Prevent entry into sewers, drains, ditches, underground or confined spaces and waterways. Avoid inhalation of material or combustion by-products.
Special Protective Equipment and Precautions for Firefighters	Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures	Wear personal protective clothing and equipment, see Section 8.
Methods and Materials for Containment and Cleaning Up	Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Reduce vapors with water spray. Small spills: Absorb spill with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Large spills: Dike for later disposal. Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas.
Environmental Precautions	Avoid release to the environment.

Section 7. Handling and Storage

Precautions for Safe Handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated
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area. Do not spray on an open flame or other ignition sources. Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Take action to prevent static discharges. Do not breathe vapor or spray. Use non-sparking tools. Contaminated work clothing must not be allowed out of the workplace. Do not eat, drink, or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling.

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

Conditions for Safe Storage, Including any Incompatibilities
Incompatible Materials

strong acids, strong bases, amines

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits

Ingredient Name	ACGIH TLV	OSHA PEL	STEL
Isobutane	1000 ppm	N/A	1000 ppm
Dimethyl ether	N/A	400 ppm	N/A
Propane	1000 ppm TWA	1000 ppm PEL	N/A
Polymeric diphenylmethane diisocyanate	0.005 ppm	0.02 mg/m ³	N/A
Chlorinated paraffin waxes and hydrocarbon waxes	N/A	N/A	N/A
Glyceryl polypropylene glycol triether	N/A	N/A	N/A
alkanes, C14-17, chloro	N/A	N/A	N/A

Personal Protective Equipment

Goggles, Gloves

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

There are no biological limit values for any of this product's components.

Engineering Controls

Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

Wear splash resistant safety goggles with a faceshield.

Skin Protection

Wear fire/flame resistant/retardant clothing. Refer to NFPA 2112, Standard on Flame-Resistant Garments for Protection of Industrial Personnel Against Flash Fire and NFPA 2113, Standard on the Selection, Use, Care and Maintenance of Flame-Resistant Garments for Protection of Industrial Personnel Against Short-duration Thermal Exposures from Fire (2015).

Respiratory Protection

If airborne contaminant levels may exceed recommended exposure limits,

NIOSH approved respiratory protection appropriate for employee exposure levels is recommended. Consult with a health and safety professional for specific respirators appropriate for your use.

Glove Recommendations
Wear appropriate chemical resistant gloves.

Section 9. Physical and Chemical Properties

Physical State	Aerosol
Color	Variable
Odor	Characteristic
Odor Threshold	Not available
Solubility	Organic solvents
Partition coefficient Water/n-octanol	Not available
VOC%	18% (by wt) 175 g/L
Viscosity	No data available
Specific Gravity	0.95 at 20C
Density lbs/Gal	N/A
Pounds per Cubic Foot	N/A
Flash Point	Not available
FP Method	N/A
pH	Not available
Melting Point	Not available
Boiling Point	Not available
Boiling Range	N/A
LEL	N/A
UEL	N/A
Evaporation Rate	Not available
Flammability	Extremely flammable aerosol
Decomposition Temperature	Not available
Auto-ignition Temperature	Not available
Vapor Pressure	Not available
Vapor Density	>1 (relative)

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

Section 10. Stability and Reactivity

Reactivity	Reacts violently with acids bases. May be ignited by heat, sparks or flames. Gas/vapor spreads at floor level: Ignition hazard.
Chemical Stability	Stable under normal conditions of storage and handling.
Possibility of Hazardous Reactions	May polymerize: strong bases, amines.
Conditions to Avoid	Keep away from heat, sparks and naked flames. Keep away from ignition sources - No smoking. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Avoid contact with incompatible materials.
Incompatible Materials	strong acids, strong bases, amines
Hazardous decomposition products	On heating. May release toxic gases, combustible gases, vapors: hydrogen cyanide. On burning: Irritating and toxic gases or fumes may be released during a fire: oxides of carbon, phosphorus, hydrogen chloride, nitrous vapors.

Section 11. Toxicological Information

Information on Likely Routes of Exposure	<p>Inhalation May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.</p> <p>Skin Contact Causes skin irritation. May cause allergic skin reaction.</p> <p>Eye Contact Causes serious eye irritation. May cause redness, pain, and tearing.</p>
Component Analysis - LD50/LC50	<p>Ingestion No information on significant adverse effects.</p> <p>The components of this material have been reviewed in various sources and the following selected endpoints are published:</p> <p>Polymethylene polyphenylene isocyanate (9016-87-9) Oral LD50 Rat 49 g/kg Dermal LD50 Rabbit >9.4 g/kg Inhalation LC50 Rat 11 mg/L 4 h</p> <p>Chlorinated paraffin waxes and hydrocarbon waxes (63449-39-8) Oral LD50 Rat >21500 µL/kg</p> <p>Glyceryl polypropylene glycol triether (25791-96-2) Oral LD50 Rat 2830 µL/kg Dermal LD50 Rabbit >20 mL/kg</p> <p>Isobutane (75-28-5) Inhalation LC50 Rat 658 mg/L 4 h</p> <p>Dimethyl ether (115-10-6) Inhalation LC50 Rat 164000 ppm 4 h</p> <p>2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5) Oral LD50 Rat 1500 mg/kg</p>

Dermal LD50 Rabbit >5000 mg/kg (no deaths occurred)
Inhalation LC50 Rat >5.05 mg/L 4 h

Propane (74-98-6)
Inhalation LC50 Rat >800000 ppm 15 min

Alkanes, C14-17, chloro (85535-85-9)
Oral LD50 Rat 2000 mg/kg

Acute and Chronic Toxicity

Immediate Effects

Causes skin irritation. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause respiratory irritation. May cause drowsiness or dizziness.

Delayed Effects

Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure: thyroid gland, liver.

Irritation/Corrosivity Data

eye irritation, skin irritation, respiratory tract irritation

Respiratory Sensitization

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Dermal Sensitization

May cause an allergic skin reaction

Germ Cell Mutagenicity

No information available for the product.

Tumorigenic Data

No information available for the product.

Reproductive Toxicity

No information available for the product.

Specific Target Organ Toxicity - Single Exposure

No target organs identified.

Specific Target Organ Toxicity - Repeated Exposure

liver, thyroid gland

Aspiration hazard

Not expected to be an aspiration hazard.

Medical Conditions Aggravated by Exposure

No information available for the product.

Product Toxicity Data

Acute Toxicity Estimate

Dermal > 2000 mg/kg

Oral > 2000 mg/kg

Component

Carcinogenicity

Polymethylene polyphenylene isocyanate 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

Suspected of causing cancer.

Section 12. Ecological Information

Ecotoxicity	May cause long-term adverse effects in the aquatic environment.
Component Analysis - Aquatic Toxicity	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]
Persistence and Degradability	Not readily biodegradable (according to OECD criteria).
Bioaccumulative Potential	No information available for the product.
Mobility in Soil	No information available for the product.
Bioconcentration	No information available for the product.
Other Toxicity	No additional information available for the product.

Section 13. Disposal

Disposal Methods	Dispose of contents/container in accordance with local/regional/national /international regulations.
Component Waste Numbers	The U.S. EPA has not published waste numbers for this product's components.

Section 14. Transport Information

UN Number	1950
UN Proper Shipping Name	AEROSOLS
DOT Classification	Hazard Class 2.1
Packing Group	2.1
IATA Information	Shipping Name: AEROSOLS, FLAMMABLE Hazard Class: 2.1 UN#: UN1950 Required Label(s): 2.1
ICAO Information	Shipping Name: AEROSOLS, FLAMMABLE Hazard Class: 2.1

UN#: UN1950
Required Label(s): 2.1

IMDG Information

Shipping Name: AEROSOLS, FLAMMABLE
Hazard Class: 2
UN#: UN1950
Required Label(s): 2

International Bulk Chemical Code

This material contains one or more of the following chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.
Polymethylene polyphenylene isocyanate (9016-87-9)
IBC Code: Category Y
Glyceryl polypropylene glycol triether (25791-96-2)
IBC Code: Category Z
Alkanes, C14-17, chloro (85535-85-9)
IBC Code: Category X (with $\geq 50\%$ Chlorine, and $< 1\%$ C13 or shorter chains)

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.
Polymethylene polyphenylene isocyanate (9016-87-9)
SARA 313: 1 % de minimis concentration
Alkanes, C14-17, chloro (85535-85-9)
TSCA 12b: Section 5 , 1 % de minimis concentration EPA: P-12-0453

SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories
Flammable; Gas Under Pressure; Carcinogenicity; Reproductive Toxicity; Skin Corrosion/Irritation; Respiratory/Skin Sensitization; Serious Eye Damage/Eye Irritation; Specific Target Organ Toxicity

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Polymethylene polyphenylene isocyanate (9016-87-9)
NJ

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

Isobutane (75-28-5)
MA, NJ, PA

Dimethyl ether (115-10-6)
MA, MN, NJ, PA

Propane (74-98-6)
MA, MN, NJ, PA

Section 16. Other Information

Revision Date 11/14/2019

HMIS and NFPA Rating HMIS
Health: 2*
Fire: 3
Reactivity: 0

NFPA
Health: 2
Fire: 3
Reactivity: 0

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 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.