

Safety Data Sheet

BOSS® 334 Minimal Expanding Foam Genius Gun

Section 1. Identification

Product Identifier BOSS® 334 Minimal Expanding Foam Genius Gun

Synonyms 33420 Manufacturer Stock 143138

Numbers

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

Manufacturer Contact

Address Soudal

350 Ring Road

Elizabethtown, KY, 42701

USA

Phone Emergency Phone Fax

(270) 769-3385 (800) 424-9300 (270) 765-2412

CHEMTREC

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

Signal Word 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 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.

Contaminated work clothing must not be allowed out of the workplace.

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.

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 Gas/vapor spreads at floor level: Ignition hazard.

Section 3. Ingredients

CAS	Ingredient Name	Weight %
115-10-6	Dimethyl ether	5% - 10%
75-28-5	Isobutane	5% - 10%
9016-87-9	Polymeric diphenylmethane diisocyanate	30% - 40%
63449-39-8	Chlorinated paraffin waxes and hydrocarbon waxes	20% - 30%
13674-84-5	2-Propanol, 1-chloro-, phosphate (3:1)	1% - 5%
74-98-6	Propane	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	Acute
Symptoms/Effects	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 Treat symptomatically and supportively.

medical attention and special treatment needed

Section 5. Fire Fighting Measures

Suitable Extinguishing Small fires: Quick-acting ABC-powder extinguisher, Quick-acting BC-powder

Unsuitable Extinguishing Media

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

extinguisher.

Personal Precautions. Protective Equipment and **Emergency Procedures**

Wear personal protective clothing and equipment, see Section 8.

Methods and Materials for Up

Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Reduce Containment and Cleaning 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 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.

Conditions for Safe Storage, Including any Incompatibilities Incompatible Materials Store in a well-ventilated place. Keep container tightly closed. Store locked up.

strong acids, strong bases, amines

Section 8. Exposure Controls/Personal Protection

Occupational	Exposure
Limits	

Ingredient Name	ACGIH TLV	OSHA PEL	STEL
Dimethyl ether	N/A	400 ppm	N/A
Isobutane	1000 ppm	N/A	1000 ppm
Polymeric diphenylmethane diisocyanate	0.005 ppm	0.02 mg/m≈	N/A
Chlorinated paraffin waxes and hydrocarbon waxes	N/A	N/A	N/A
2-Propanol, 1-chloro-, phosphate (3:1)	N/A	N/A	N/A
Propane	1000 ppm TWA	1000 ppm PEL	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	Champagne
Odor	Characteristic
Odor Threshold	Not available
Solubility	Insoluble in water
Partition coefficient Water/n-octanol	Not available
VOC%	18% (by wt) 175 g/L
Viscosity	No data available
Specific Gravity	0.92 at 20C
Density lbs/Gal	N/A
Pounds per Cubic Foot	N/A
Flash Point	Not available
FP Method	N/A
рН	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 May polymerize: strong bases, amines.

Reactions

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.

and the second s

Incompatible Materials strong acids, strong bases, amines

products

Hazardous decomposition 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

Inhalation

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

Skin Contact

Causes skin irritation. May cause allergic skin reaction.

Eye Contact

Causes serious eye irritation. May cause redness, pain, and tearing.

Ingestion

No information on significant adverse effects.

Component Analysis -LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

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

Chlorinated paraffin waxes and hydrocarbon waxes (63449-39-8) Oral LD50 Rat >21500 µL/kg

Glyceryl polypropylene glycol triether (25791-96-2) Oral LD50 Rat 2830 µL/kg Dermal LD50 Rabbit >20 mL/kg

Isobutane (75-28-5)

Inhalation LC50 Rat 658 mg/L 4 h

Dimethyl ether (115-10-6)

Inhalation LC50 Rat 164000 ppm 4 h

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

Oral LD50 Rat 1500 mg/kg

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

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.

Carcinogenicity

Dermal > 2000 mg/kg

Oral > 2000 mg/kg

Component 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

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

Aquatic Toxicity 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]

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

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

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

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

SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories Flammable; Gas Under Pressure; Carcinogenicity; 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

California Safe Drinking

Water and Toxic **Enforcement Act** (Proposition 65)

Not listed under California Proposition 65.

Section 16. Other Information

11/14/2019 **Revision Date**

HMIS HMIS and NFPA Rating

> 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.



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 143140

Numbers

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

Manufacturer Contact

Address

Soudal

350 Ring Road

Elizabethtown, KY, 42701

USA

Phone Emergency Phone Fax

(270) 769-3385 (800) 424-9300 (270) 765-2412

CHEMTREC

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.

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 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 t	to fresh air and kee	p comfortable for breathing	a. 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.

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 Acute

Eyes

Symptoms/Effects 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 Treat symptomatically and supportively. medical attention and special treatment needed

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

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

Precautions for Firefighters

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 Up

Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Reduce Containment and Cleaning 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

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.

Conditions for Safe Storage, Including any Incompatibilities Store in a well-ventilated place. Keep container tightly closed. Store locked up.

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≈	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
рН	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

products

Hazardous decomposition 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

Inhalation

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

Skin Contact

Causes skin irritation. May cause allergic skin reaction.

Eye Contact

Causes serious eye irritation. May cause redness, pain, and tearing.

Ingestion

No information on significant adverse effects.

Component Analysis -LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

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

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

Oral LD50 Rat >21500 µL/kg

Glyceryl polypropylene glycol triether (25791-96-2)

Oral LD50 Rat 2830 µL/kg

Dermal LD50 Rabbit >20 mL/kg

Isobutane (75-28-5)

Inhalation LC50 Rat 658 mg/L 4 h

Dimethyl ether (115-10-6)

Inhalation LC50 Rat 164000 ppm 4 h

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

Oral LD50 Rat 1500 mg/kg

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

Polymethylene polyphenylene isocyanate 9016-87-9

Carcinogenicity 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 -

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

Aquatic Toxicity

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

Not readily biodegradable (according to OECD criteria).

Degradability

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 >=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 minimus 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 California Safe Drinking Water and Toxic Enforcement Act (Proposition 65) Not listed under California Proposition 65.

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.



Safety Data Sheet

BOSS® 334 Minimal Expanding Foam Gun Grade

Section 1. Identification

Product Identifier BOSS® 334 Minimal Expanding Foam Gun Grade

Synonyms 33424

Manufacturer Stock 142498; 146818

Numbers

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

Manufacturer Contact

Address Soudal

350 Ring Road

Elizabethtown, KY, 42701

USA

Phone Emergency Phone Fax

(270) 769-3385 (800) 424-9300 (270) 765-2412

CHEMTREC

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

Signal Word 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

(respiratory tract).

May cause respiratory irritation.

Suspected of causing cancer.

Precautionary Statements

Response

Call a poison center/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.

Read label before use. If medical advice is needed, have product container or

label at hand.

Wash contaminated clothing before reuse.

Prevention

Avoid breathing dust/fume/gas/mist/ vapors/spray.

Contaminated work clothing must not be allowed out of the workplace.

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, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

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 thoroughly after handling.

Wear protective gloves/protective clothing/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.

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

Store locked up.

Disposal

Dispose of contents/container to in accordance with local/regional/national

/international regulations.

Hazards not Otherwise

Classified

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

Section 3. Ingredients

CAS	Ingredient Name	Weight %		
115-10-6	Dimethyl ether	5% - 15%		
8001-79-4	Caster Oil	5% - 15%		
75-28-5	Isobutane	5% - 10%		
9016-87-9	Polymeric diphenylmethane diisocyanate	40% - 50%		
13674-84-5	2-Propanol, 1-chloro-, phosphate (3:1)	20% - 30%		
74-98-6	Propane	1% - 5%		

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

Section 4. First-Aid Measures

Inha	lation	Remove person to	fres	h air and	keep com	fortable fo	or breathing.	If breathing is
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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 Acute

Symptoms/Effects 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 Treat symptomatically and supportively.

medical attention and special treatment needed

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

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

Precautions for Firefighters

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 Up

Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Reduce Containment and Cleaning 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 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.

Conditions for Safe Storage, Including any Incompatibilities Incompatible Materials Store in a well-ventilated place. Keep container tightly closed. Store locked up.

strong acids, strong bases, amines

Section 8. Exposure Controls/Personal Protection

Occupational	Exposure
Limits	

Ingredient Name	ACGIH TLV	OSHA PEL	STEL
Dimethyl ether	N/A	400 ppm	N/A
Caster Oil	N/A	N/A	N/A
Isobutane	1000 ppm	N/A	1000 ppm
Polymeric diphenylmethane diisocyanate	0.005 ppm	0.02 mg/m≈	N/A
2-Propanol, 1-chloro-, phosphate (3:1)	N/A	N/A	N/A
Propane	1000 ppm TWA	1000 ppm PEL	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	Champagne
Odor	Characteristic
Odor Threshold	Not available
Solubility	Soluble in
	organic
	solvents
Partition coefficient Water/n-octanol	Not available
VOC%	20% (by wt)
	189 g/L
Viscosity	Not available
Specific Gravity	0.95
Density lbs/Gal	7.928
Pounds per Cubic Foot	59.307
Flash Point	Not available
FP Method	N/A
рН	Not available
Melting Point	Not available
Boiling Point	Not available
Boiling Range	Not available
LEL	N/A
UEL	N/A
Evaporation Rate	Not available
Flammability	Not available
Decomposition Temperature	Not available
Auto-ignition Temperature	Not available
Vapor Pressure	Not available
Vapor Density	Not available

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 May polymerize: strong bases, amines.

Reactions

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

products

Hazardous decomposition 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

Inhalation

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

Skin Contact

Causes skin irritation. May cause allergic skin reaction.

Eye Contact

Causes serious eye irritation. May cause redness, pain, and tearing.

Ingestion

No information on significant adverse effects.

Component Analysis -LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

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

Isobutane (75-28-5)

Inhalation LC50 Rat 658 mg/L 4 h

Dimethyl ether (115-10-6)

Inhalation LC50 Rat 164000 ppm 4 h

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

Oral LD50 Rat 1500 mg/kg

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

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 Polymethylene polyphenylene isocyanate 9016-87-9

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

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

Suspected of causing cancer.

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

No information available for the product.

Mobility in Soil

Bioaccumulative Potential No information available for the product.

Persistence and Not readily biodegradable (according to OECD criteria).

Degradability

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 The U.S. EPA has not published waste numbers for this product's components.

Numbers

Section 14. Transport Information

UN Number 1950

UN Proper Shipping Name AEROSOLS, FLAMMABLE

DOT Classification Hazard Class: 2 Required Label: 2.1

Packing Group N/A

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

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 Castor Oil (8001-79-4) IBC Code: Category Y

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

SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories Flammable; Gas Under Pressure; Carcinogenicity; 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

Isobutane (75-28-5)

MA, NJ, PA

Dimethyl ether (115-10-6)

MA, MN, NJ, PA

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

California Safe Drinking Water and Toxic Enforcement Act

(Proposition 65)

Not listed under California Proposition 65.

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.