# CRC.

# SAFETY DATA SHEET

## 1. Identification

Product identifier Minimal Expansion Foam

Other means of identification

Product code 14077

Recommended use Foam insulator and sealant

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

Company name CRC Industries, Inc.

Address 885 Louis Dr.

Warminster, PA 18974 US

**Telephone** 

**General Information** 215-674-4300 **Technical** 800-521-3168

**Assistance** 

 Customer Service
 800-272-4620

 24-Hour Emergency
 800-424-9300 (US)

(CHEMTREC) 703-527-3887 (International)
Website www.crcindustries.com

# 2. Hazard(s) identification

 Physical hazards
 Gases under pressure
 Liquefied gas

 Health hazards
 Skin corrosion/irritation
 Category 2

 Serious eve damage/eve irritation
 Category 2

Serious eye damage/eye irritation Category 2
Sensitization, respiratory Category 1
Sensitization, skin Category 1

Reproductive toxicity Effects on or via lactation

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

Category 2

Category 2

Specific target organ toxicity, repeated

exposure

Environmental hazards Hazardous to the aquatic environment,

long-term hazard

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement

Contains gas under pressure; may explode if heated. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause harm to breast-fed children. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long

lasting effects.

Material name: Minimal Expansion Foam 14077 Version #: 01 Issue date: 02-13-2015 SDS US

#### **Precautionary statement**

# Prevention

Obtain special instructions before use. Do not puncture or incinerate container. Do not expose to heat or store at temperatures above 49°C/120°F. Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Do not breathe gas. Do not breathe mist or vapor. Avoid contact during pregnancy/while nursing. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves. Wear eye/face protection. In case of inadequate ventilation wear respiratory protection. Avoid release to the environment.

#### Response

If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical attention. Take off contaminated clothing and wash before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center/doctor. Call a poison center/doctor if you feel unwell. 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 attention. If exposed or concerned: Get medical attention. Collect spillage.

Storage

Store locked up. Protect from sunlight. Store in a well-ventilated place. Exposure to high temperature may cause can to burst.

**Disposal** 

Dispose of contents/container in accordance with local/regional/national regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

# 3. Composition/information on ingredients

# **Mixtures**

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Chemical name	Common name and synonyms	CAS number	%
Polypropylene polyol diphenylmethanediisocyanate prepolymer		9048-57-1	50 - 60
1,1,1,2-Tetrafluoroethane	HFC-134A	811-97-2	10 - 20
Alkanes, C14-17, chloro		85535-85-9	10 - 20
Diphenylmethanediisocyanate, isomers and homologues		9016-87-9	5 - 10
Tris(2-chloroisopropyl) phosphate		13674-84-5	5 - 10

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

# 4. First-aid measures

Inha	lati∩n	

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth. Drink plenty of water. Do not induce vomiting. Call a physician immediately.

Most important symptoms/effects, acute and

delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Difficulty in breathing. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Rash. Dermatitis. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

**General information** 

IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

# 5. Fire-fighting measures

Suitable extinguishing media

Water spray. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

shing Water. None known.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment/instructions
General fire hazards

In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.

Contents under pressure. Pressurized container may rupture when exposed to heat or flame.

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not breathe gas. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Keep combustibles (wood, paper, oil, etc.) away from spilled material. The product is immiscible with water and will sediment in water systems. Stop the flow of material, if this is without risk. Prevent product from entering drains. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

**Environmental precautions** 

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

# 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. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. Do not breathe mist or vapor. Do not breathe gas. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. For product usage instructions, please see the product label.

Conditions for safe storage, including any incompatibilities

Level 1 Aerosol.

Contents under pressure. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store in a well-ventilated place. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

#### 8. Exposure controls/personal protection

#### Occupational exposure limits US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Components **Type** Value Diphenylmethanediisocyan 0.2 mg/m3 Ceiling ate, isomers and homologues (CAS 9016-87-9) 0.02 ppm **US. ACGIH Threshold Limit Values** Components Value Type Diphenylmethanediisocyan **TWA** 0.005 ppm ate, isomers and homologues (CAS 9016-87-9)

Components	Туре	Value	
Diphenylmethanediisocyan ate, isomers and homologues (CAS 9016-87-9)	Ceiling	0.2 mg/m3	
		0.02 ppm	
	TWA	0.05 mg/m3	
		0.005 ppm	
US. AIHA Workplace Environmer	ital Exposure Level (WEEL) Gu	ides	
Components	Туре	Value	
1,1,1,2-Tetrafluoroethane (CAS 811-97-2)	TWA	4240 mg/m3	
•		1000 ppm	

**Biological limit values** 

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. 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. General ventilation normally adequate. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

Skin protection

**Hand protection** Wear protective gloves such as: Rubber. Nitrile.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to

determine actual employee exposure levels.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

# 9. Physical and chemical properties

Appearance

Physical state Liquid.
Form Aerosol.
Color Tan.

Odor Mild petroleum.
Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling Not available.

range

Flash point None (Tag Closed Cup)

Evaporation rate Not available.
Flammability (solid, gas) Not available.
Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper No.

Not available.

(%)

Vapor pressure 3326.4 hPa estimated

Vapor density Not available.

1.2 Relative density

Insoluble. Solubility (water) Not available. Partition coefficient

(n-octanol/water)

**Auto-ignition temperature** Not available. **Decomposition temperature** Not available. Not available. Viscosity (kinematic) Percent volatile 22.5 % estimated

# 10. Stability and reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport. Reactivity

**Chemical stability** Material is stable under normal conditions.

Possibility of hazardous

Conditions to avoid

reactions

No dangerous reaction known under conditions of normal use.

Heat, flames and sparks. Contact with incompatible materials.

Incompatible materials Oxidizing agents. Acids. Alcohols.

**Hazardous decomposition** 

products

Carbon oxides. Nitrogen oxides (NOx). Hydrogen cyanide (hydrocyanic acid).

# 11. Toxicological information

#### Information on likely routes of exposure

Ingestion Health injuries are not known or expected under normal use.

Inhalation May cause damage to organs through prolonged or repeated exposure by inhalation. May cause

irritation to the respiratory system. May cause allergy or asthma symptoms or breathing difficulties

if inhaled. Prolonged inhalation may be harmful.

Causes skin irritation. May cause an allergic skin reaction. Skin contact

Eye contact Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Difficulty in breathing. Skin irritation. May cause redness

and pain. May cause an allergic skin reaction. Rash. Dermatitis.

# Information on toxicological effects

May cause an allergic skin reaction. May cause respiratory irritation. **Acute toxicity** 

Product	Species	Test Results	
Minimal Expansion Foam			
Acute			
Dermal			
LD50	Rat	66666.6641 mg/kg estimated	
Inhalation			
LC50	Rat	4920 mg/m3, 4 hours estimated	
		4.5546 mg/l estimated	
Oral			
LD50	Rat	15555.5557 mg/kg estimated	

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

Respiratory sensitization

Causes serious eve irritation.

irritation

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

Skin sensitization May cause an allergic skin reaction.

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Carcinogenicity

Material name: Minimal Expansion Foam 14077 Version #: 01 Issue date: 02-13-2015

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Diphenylmethanediisocyanate, isomers and homologues 3 Not classifiable as to carcinogenicity to humans.

(CAS 9016-87-9)

Reproductive toxicity

single exposure

May cause harm to breastfed babies.

Specific target organ toxicity -

May cause respiratory irritation.

Specific target organ toxicity -

repeated exposure

May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard** Not likely, due to the form of the product.

**Chronic effects** Prolonged inhalation may be harmful. May cause damage to organs through prolonged or

repeated exposure.

# 12. Ecological information

Toxic to aquatic life with long lasting effects. **Ecotoxicity** 

No data is available on the degradability of this product. Persistence and degradability

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

1,1,1,2-Tetrafluoroethane 1.274

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

#### 13. Disposal considerations

Disposal of waste from residues / unused products

This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty containers may be recycled. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose in accordance with all applicable regulations.

Hazardous waste code Not regulated.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

#### 14. Transport information

DOT

**UN** number UN1950

**UN proper shipping name** Aerosols, non-flammable, Limited Quantity

Transport hazard class(es)

2.2 Subsidiary risk 2.2 Label(s)

Packing group Not applicable.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions Not available.

Packaging exceptions 306 Packaging non bulk None Packaging bulk None

IATA

UN1950 **UN number** 

**UN** proper shipping name Aerosols, non-flammable

Transport hazard class(es)

2.2 Class Subsidiary risk

**Packing group** Not applicable.

**Environmental hazards** No. **ERG Code** 2L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Material name: Minimal Expansion Foam 14077 Version #: 01 Issue date: 02-13-2015 Other information

Passenger and cargo

aircraft

Allowed.

Cargo aircraft only

Allowed.

**IMDG** 

UN1950 UN number

**UN** proper shipping name AEROSOLS, LIMITED QUANTITY, MARINE POLLUTANT

Transport hazard class(es)

Class Subsidiary risk

Not applicable. Packing group

**Environmental hazards** 

Yes Marine pollutant F-D, S-U **EmS** 

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

#### 15. Regulatory information

**US** federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### SARA 304 Emergency release notification

Not regulated.

# US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Diphenylmethanediisocyanate, isomers and homologues (CAS 9016-87-9)

# **CERCLA Hazardous Substance List (40 CFR 302.4)**

Diphenylmethanediisocyanate, isomers and homologues (CAS 9016-87-9)

# **CERCLA Hazardous Substances: Reportable quantity**

Diphenylmethanediisocyanate, isomers and homologues 5000 LBS (CAS 9016-87-9)

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

## Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Diphenylmethanediisocyanate, isomers and homologues (CAS 9016-87-9)

# Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

Food and Drug

Not regulated.

Administration (FDA)

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Section 311/312** Immediate Hazard - Yes Delayed Hazard - Yes **Hazard categories** Fire Hazard - No

Pressure Hazard - Yes Reactivity Hazard - No

**SARA 302 Extremely** No hazardous substance

# **US** state regulations

#### US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

#### US. New Jersey Worker and Community Right-to-Know Act

Diphenylmethanediisocyanate, isomers and homologues (CAS 9016-87-9)

#### **US. Massachusetts RTK - Substance List**

Diphenylmethanediisocyanate, isomers and homologues (CAS 9016-87-9)

#### US. Pennsylvania Worker and Community Right-to-Know Law

Diphenylmethanediisocyanate, isomers and homologues (CAS 9016-87-9)

#### US. Rhode Island RTK

Diphenylmethanediisocyanate, isomers and homologues (CAS 9016-87-9)

#### **US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

#### Volatile organic compounds (VOC) regulations

**EPA** 

VOC content (40 CFR

51.100(s))

2.9 %

**Consumer products** 

(40 CFR 59, Subpt. C)

Not regulated

Inventory name

State

**Consumer products** Not regulated 2.9 % VOC content (CA) 2.9 % VOC content (OTC)

#### International Inventories

Country(s) or region

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Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

<sup>\*</sup>A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

# 16. Other information, including date of preparation or last revision

Issue date 02-13-2015 Allison Cho Prepared by

Version # 01

**Further information** Not available. **HMIS®** ratings Health: 2\* Flammability: 1

Physical hazard: 1 Personal protection: B

Health: 2 NFPA ratings

Flammability: 1 Instability: 1

NFPA ratings



On inventory (yes/no)\*

#### **Disclaimer**

CRC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries.