

## Safety Data Sheet

### RESFOAM HB 45

Safety Data Sheet dated: 06/16/2021 - version 6

Date of first edition: 09/02/2015



## 1. IDENTIFICATION

### Product identifier

Mixture identification:

Trade name: RESFOAM HB 45

Trade code: 9024453

### Recommended use of the chemical and restrictions on use

Recommended use: Polyurethanic coating

Restrictions on use: N.A.

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

Company: MAPEI CORP. (USA and Puerto Rico)

1144 East Newport Center Drive - 33442 - Deerfield Beach - FL - USA

Responsible: RDProductSafety@mapei.com

### Emergency 24 hour numbers:

Emergency Number (USA/Canada) CHEMTREC 1(800) 424-9300 / 1(703) 527-3887

Emergency Transport CANUTEC (Canada) 1-613-996-6666

## 2. HAZARD(S) IDENTIFICATION



### Classification of the chemical

Skin Irrit. 2	Causes skin irritation.
Resp. Sens. 1	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1	May cause an allergic skin reaction.
Carc. 2	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.
Eye Irrit. 2A	Causes serious eye irritation.
STOT SE 3	May cause respiratory irritation.
STOT RE 2	May cause damage to organs through prolonged or repeated exposure if inhaled or swallowed.

### Label elements

#### Hazard pictograms and Signal Word



Danger

### Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled or swallowed.

### Precautionary statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe vapours.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

- P284 [In case of inadequate ventilation] wear respiratory protection.
- P302+P352 IF ON SKIN: Wash with plenty of water.
- P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P314 Get medical advice/attention if you feel unwell.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER.
- P363 Wash contaminated clothing before reuse.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with applicable regulations.

**Ingredient(s) with unknown acute toxicity:**

None

**Hazards not otherwise classified identified during the classification process:**

None

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substances**

N.A.

**Mixtures**

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

**List of components**

Qty	Name	Ident. Numb.	Classification	Registration Number
25-50 %	dibutyl maleate; 2-butenedioic acid (2Z)-, 1,4-dibutyl ester	CAS:105-76-0	Skin Sens. 1, H317; STOT RE 2, H373	
10-20 %		CAS:101-68-8	Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335; STOT RE 2, H373; Carc. 2, H351; Resp. Sens. 1, H334; Skin Sens. 1, H317	
5-10 %	4,4'-methylenediphenyl diisocyanate, oligomers; Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer	CAS:25686-28-6	Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Resp. Sens. 1, H334; Skin Sens. 1, H317; Carc. 2, H351; STOT SE 3, H335; STOT RE 2, H373	
0.49-1 %		CAS:26447-40-5	STOT RE 2, H373; Eye Irrit. 2A, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Resp. Sens. 1, H334; Skin Sens. 1, H317; Acute Tox. 4, H332; Carc. 2, H351	

**4. FIRST AID MEASURES**

**Description of first aid measures**

In case of skin contact:

- Immediately take off all contaminated clothing.
- OBTAIN IMMEDIATE MEDICAL ATTENTION.
- Obtain medical attention if skin related symptoms persist.
- Remove contaminated clothing immediately and dispose of safely.
- After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

- After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
- Protect uninjured eye.

In case of Ingestion:

- Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

**Most important symptoms/effects, acute and delayed**

Eye irritation  
Eye damages  
Skin Irritation  
Erythema

**Indication of any immediate medical attention and special treatment needed**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

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**5. FIRE-FIGHTING MEASURES**

**Extinguishing media**

Suitable extinguishing media:

Water.  
Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media:**

None in particular.

**Specific hazards arising from the chemical**

Do not inhale explosion and combustion gases.  
Burning produces heavy smoke.  
Hazardous combustion products: N.A.  
Explosive properties: N.A.  
Oxidizing properties: N.A.

**Special protective equipment and precautions for fire-fighters**

Use suitable breathing apparatus.  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Move undamaged containers from immediate hazard area if it can be done safely.

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment.  
Wear breathing apparatus if exposed to vapours/dusts/aerosols.  
Provide adequate ventilation.  
Use appropriate respiratory protection.  
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.  
Limit leakages with earth or sand.

**Methods and material for containment and cleaning up**

Suitable material for taking up: absorbing material, organic, sand  
Retain contaminated washing water and dispose it.

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**7. HANDLING AND STORAGE**

**Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.  
Exercise the greatest care when handling or opening the container.  
Do not use on extensive surface areas in premises where there are occupants.  
Use localized ventilation system.  
Don't use empty container before they have been cleaned.  
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.  
Contaminated clothing should be changed before entering eating areas.  
Do not eat or drink while working.  
See also section 8 for recommended protective equipment.

**Conditions for safe storage, including any incompatibilities**

Storage temperature: N.A.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Community Occupational Exposure Limits (OEL)

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour	Notes
	ACGIH				0,005				respiratory under Meth isocyanate
	OSHA		C			0,2	0,02		
	MAK	GERMANY		0,05					
	ACGIH				0,005				respiratory under Meth isocyanate
	MAK	AUSTRIA		0,05	0,005	0,1	0,01		
	OSHA		C			0,2	0,02		
	MAK	AUSTRIA				0,1	0,01		

Appropriate engineering controls: N.A.

#### Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; 29 CFR 1910.138 - ANSI/ISEA 105:

Polychloroprene - CR: thickness  $\geq 0,5\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Nitrile rubber - NBR: thickness  $\geq 0,35\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Butyl rubber - IIR: thickness  $\geq 0,5\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Fluorinated rubber - FKM: thickness  $\geq 0,4\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Use impervious gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to 29 CFR 1910.134 - CSA Z94.4 for information on selection and use of appropriate respiratory protection equipment.

Use adequate protective respiratory equipment.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: cloudy

Odour: No data available

Odour threshold: No data available

pH: No data available

Melting point / freezing point: No data available

Initial boiling point and boiling range: No data available

Flash point: 100 °C (212 °F)

Evaporation rate: No data available

Upper/lower flammability or explosive limits: No data available

Vapour density: No data available

Vapour pressure: No data available

Relative density: No data available

Solubility in water: No data available

Solubility in oil: No data available

Partition coefficient (n-octanol/water): No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity: No data available

Explosive properties: No data available

Oxidizing properties: No data available

Solid/gas flammability: No data available

### Other information

Substance Groups relevant properties No data available  
Miscibility: No data available  
Fat Solubility: No data available  
Conductivity: No data available

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## 10. STABILITY AND REACTIVITY

### Reactivity

Stable under normal conditions

### Chemical stability

Data not available.

### Possibility of hazardous reactions

None.

### Conditions to avoid

Stable under normal conditions.

### Incompatible materials

None in particular.

### Hazardous decomposition products

None.

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## 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

#### Toxicological Information of the Preparation

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

#### Toxicological information on main components of the mixture:

dibutyl maleate; 2-butenedioic acid (2Z)-, 1,4-dibutyl ester	a) acute toxicity	LD50 Oral Rat = 3730 mg/kg
	a) acute toxicity	LC50 Inhalation Rat = 369 mg/m <sup>3</sup> 4h LD50 Oral Rat = 31600 mg/kg
	a) acute toxicity	LD50 Skin Rabbit > 6200 mg/kg LC50 Inhalation Rat = 369 mg/l 4h LD50 Oral Rat > 7400 mg/kg LD50 Skin Rabbit > 10000 mg/kg LC50 Inhalation Rat = 490 mg/m <sup>3</sup> 4h LD50 Oral Rat > 10000 mg/kg

**If not differently specified, the information required in the regulation and listed below must be considered as N.A.**

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- Toxicological kinetics, metabolism and distribution information
- i) STOT-repeated exposure
- j) aspiration hazard

#### Substance(s) listed on the IARC Monographs:

Group 3  
Group 3

**Substance(s) listed as OSHA Carcinogen(s):**

None

**Substance(s) listed as NIOSH Carcinogen(s):**

None

**Substance(s) listed on the NTP report on Carcinogens:**

None

**12. ECOLOGICAL INFORMATION**

**Toxicity**

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

**List of Eco-Toxicological properties of the components**

Component	Ident. Numb.	Ecotox Data
dibutyl maleate; 2-butenedioic acid (2Z)-, 1,4-dibutyl ester	CAS: 105-76-0	a) Aquatic acute toxicity : EC50 Daphnia magna = 21 mg/L 48h IUCLID
		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 1,2 mg/L 96h ECHA
		a) Aquatic acute toxicity : EC50 Algae Scenedesmus subspicatus = 6,2 mg/L 72h IUCLID
	CAS: 26447-40-5	d) Terrestrial toxicity : LC50 Worm Eisenia foetida > 1000 mg/kg 14d IUCLID
		d) Terrestrial toxicity : NOEC Worm Eisenia foetida >= 1000 mg/kg 14d IUCLID

**Persistence and degradability**

N.A.

**Bioaccumulative potential**

N.A.

**Mobility in soil**

N.A.

**Other adverse effects**

N.A.

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

**14. TRANSPORT INFORMATION**

Not classified as dangerous in the meaning of transport regulations.

**UN number**

ADR-UN number: N.A.  
DOT-UN Number: N.A.  
IATA-Un number: N.A.  
IMDG-Un number: N.A.

**UN proper shipping name**

ADR-Shipping Name: N.A.  
DOT-Proper Shipping Name: N.A.  
IATA-Technical name: N.A.  
IMDG-Technical name: N.A.

**Transport hazard class(es)**

ADR-Class: N.A.  
DOT-Hazard Class: N.A.  
IATA-Class: N.A.  
IMDG-Class: N.A.

**Packing group**

ADR-Packing Group: N.A.  
DOT Packing Group: N.A.  
IATA-Packing group: N.A.  
IMDG-Packing group: N.A.

**Environmental hazards**

Marine pollutant: No  
Environmental Pollutant: N.A.

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

N.A.

**Special precautions**

Department of Transportation (DOT):

N.A.

Road and Rail ( ADR-RID ) :

N.A.

Air ( IATA ) :

N.A.

Sea ( IMDG ) :

N.A.

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**15. REGULATORY INFORMATION**

**USA - Federal regulations**

**TSCA - Toxic Substances Control Act**

**TSCA inventory:**

All the components are listed on the TSCA inventory

**TSCA listed substances:**

dibutyl maleate; 2-butenedioic acid (2Z)-, 1,4-dibutyl ester is listed in TSCA Section 8b

is listed in TSCA Section 8b Section 8a - PAIR

4,4'-methylenediphenyl diisocyanate, oligomers; Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer is listed in TSCA Section 8b

is listed in TSCA Section 8b Section 8a - PAIR

**SARA - Superfund Amendments and Reauthorization Act**

**Section 302 - Extremely Hazardous Substances:**

No substances listed

**Section 304 - Hazardous substances:**

**Section 313 - Toxic chemical list:**

**CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act**

**Substance(s) listed under CERCLA:**

Reportable quantity: 5000 pounds

**CAA - Clean Air Act**

**CAA listed substances:**

is listed in CAA Section 112(b) - HAP Section 112(b) - HON

**CWA - Clean Water Act**

**CWA listed substances:**

No substances listed

**USA - State specific regulations**

**California Proposition 65**

**Substance(s) listed under California Proposition 65:**

No substances listed

**Massachusetts Right to know**

**Substance(s) listed under Massachusetts Right to know:**

**Pennsylvania Right to know**

**Substance(s) listed under Pennsylvania Right to know:**

**New Jersey Right to know**

**Substance(s) listed under New Jersey Right to know:**

**Canada - Federal regulations**

**DSL - Domestic Substances List**

**DSL (Domestic Substances List)**

All the substances are listed in the DSL.

**NDSL - Non Domestic Substances List**

**NDSL (Non Domestic Substances List)**

No substances listed

**NPRI - National Pollutant Release Inventory**

**NPRI (National Pollutant Release Inventory) - List of substances listed.**

No substances listed

**16. OTHER INFORMATION**

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**Additional classification information**

NFPA Health: 1 = Slight

NFPA Flammability: 1 = Combustible if heated

NFPA Reactivity: 0 = Minimal

NFPA Special Risk: N.A.



NFPA

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Code	Description
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H351	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure.

H373 May cause damage to organs through prolonged or repeated exposure if inhaled or swallowed.

**Legend to abbreviations and acronyms used in the safety data sheet:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.  
IMDG: International Maritime Code for Dangerous Goods.  
IATA: International Air Transport Association.  
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).  
ICAO: International Civil Aviation Organization.  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).  
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
CLP: Classification, Labeling, Packaging.  
EINECS: European Inventory of Existing Commercial Chemical Substances.  
INCI: International Nomenclature of Cosmetic Ingredients.  
CAS: Chemical Abstracts Service (division of the American Chemical Society).  
GefStoffVO: Ordinance on Hazardous Substances, Germany.  
LC50: Lethal concentration, for 50 percent of test population.  
LD50: Lethal dose, for 50 percent of test population.  
DNEL: Derived No Effect Level.  
PNEC: Predicted No Effect Concentration.  
TLV: Threshold Limiting Value.  
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).  
STEL: Short Term Exposure limit.  
STOT: Specific Target Organ Toxicity.  
WGK: German Water Hazard Class.  
KSt: Explosion coefficient.

**Paragraphs modified from the previous revision:**

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 6. ACCIDENTAL RELEASE MEASURES
- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 14. TRANSPORT INFORMATION
- 16. OTHER INFORMATION