

Expand-O-Flash Tab Caulking

Version 1.2

Revision Date 11/13/2017

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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Trade name : Expand-O-Flash® Tab Caulking

Manufacturer or supplier's details

Company : Johns Manville
Address : P.O. Box 5108
Denver, CO USA 80127
Telephone : +1 303-978-2000 8:00 a.m.-5:00 p.m. M-F
Emergency telephone : 1-800-424-9300 (Chemtrec, in English)
number
Prepared by : productsafety@jm.com

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Respiratory sensitisation : Category 1
Skin sensitisation : Category 1
Germ cell mutagenicity : Category 1B
Carcinogenicity : Category 1A

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H340 May cause genetic defects.
H350 May cause cancer.

Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P285 In case of inadequate ventilation wear respiratory protection.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P281 Use personal protective equipment as required.

Expand-O-Flash Tab Caulking

Version 1.2

Revision Date 11/13/2017

Print Date 11/13/2017

Response:

P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor/.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

P321 Specific treatment (see .? on this label).

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**Hazardous components**

Chemical name	CAS-No.	Concentration (%)
limestone	1317-65-3	>= 10 - <= 30
Solvent naphtha (petroleum), heavy arom.	64742-94-5	>= 3 - <= 7
carbon black	1333-86-4	>= 1 - <= 5
Solvent naphtha (petroleum), light arom.	64742-95-6	>= 0.5 - <= 1.5
1,2,4-trimethylbenzene	95-63-6	>= 0.5 - <= 1.5
4,4'-methylenediphenyl diisocyanate	101-68-8	>= 0.5 - <= 1.5
polymethylenepolyphenylene isocyanate	9016-87-9	>= 0.1 - <= 1
1,3,5-Trimethylbenzene	108-67-8	>= 0.1 - <= 1
crystalline silica	14808-60-7	>= 0.1 - <= 1
methylenediphenyl diisocyanate	26447-40-5	>= 0.1 - <= 1

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : Call a physician or poison control centre immediately.
If not breathing, give artificial respiration.
Move to fresh air.
If breathing is difficult, give oxygen.
- In case of skin contact : Take off contaminated clothing and shoes immediately.

Expand-O-Flash Tab Caulking

Version 1.2

Revision Date 11/13/2017

Print Date 11/13/2017

Wash off with soap and water.
If skin irritation persists, call a physician.
Wash contaminated clothing before reuse.
Destroy contaminated shoes.

- In case of eye contact : Remove contact lenses.
Immediately flush eye(s) with plenty of water.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Rinse mouth.
If swallowed, call a poison control centre or doctor immediately.
- Most important symptoms and effects, both acute and delayed : Irritation

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Carbon dioxide (CO₂)
Dry chemical
Dry sand
Alcohol-resistant foam
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon oxides
hydrogen cyanide
isocyanates
nitrogen oxides
- Specific extinguishing methods : Standard procedure for chemical fires.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.
Use personal protective equipment.
Ensure adequate ventilation.

Expand-O-Flash Tab Caulking

Version 1.2

Revision Date 11/13/2017

Print Date 11/13/2017

- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Use only in area provided with appropriate exhaust ventilation.
- Advice on safe handling : Avoid formation of respirable particles.
Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Provide sufficient air exchange and/or exhaust in work rooms.
Dispose of rinse water in accordance with local and national regulations.
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Observe label precautions.
- Materials to avoid : Keep away from oxidizing agents and strongly acid or alkaline materials.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
limestone	1317-65-3	TWA (total dust)	15 mg/m3	OSHA
		TWA (respirable fraction)	5 mg/m3	OSHA
Solvent naphtha (petroleum), heavy arom.	64742-94-5	TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH
carbon black	1333-86-4	TWA	3.5 mg/m3	ACGIH
		TWA	3.5 mg/m3	NIOSH REL
		TWA	3.5 mg/m3	OSHA

Expand-O-Flash Tab Caulking

Version 1.2

Revision Date 11/13/2017

Print Date 11/13/2017

		TWA	0.1 mg/m3 (PAHs)	NIOSH REL
		TWA (Inhalable fraction)	3 mg/m3	ACGIH
Solvent naphtha (petroleum), light arom.	64742-95-6	TWA	500 ppm 2,000 mg/m3	OSHA
		TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH
1,2,4-trimethylbenzene	95-63-6	TWA	25 ppm 125 mg/m3	NIOSH REL
		TWA	25 ppm	ACGIH
		TWA	25 ppm 125 mg/m3	OSHA
4,4'-methylenediphenyl diisocyanate	101-68-8	TWA	0.005 ppm	ACGIH
		TWA	0.005 ppm 0.05 mg/m3	NIOSH REL
		C	0.02 ppm 0.2 mg/m3	NIOSH REL
		C	0.02 ppm 0.2 mg/m3	OSHA
1,3,5-Trimethylbenzene	108-67-8	TWA	25 ppm 125 mg/m3	NIOSH REL
		TWA	25 ppm	ACGIH
		TWA	25 ppm 125 mg/m3	OSHA
crystalline silica	14808-60-7	TWA (Respirable fraction)	0.025 mg/m3	ACGIH
		TWA (respirable)	10 mg/m3 / %SiO ₂ +2	OSHA
		TWA (respirable)	250 mppcf / %SiO ₂ +5	OSHA
		TWA (Respirable dust)	0.05 mg/m3	NIOSH REL
		TWA (Respirable dust)	0.05 mg/m3	OSHA

Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

If used and stored as directed, no special protective

Expand-O-Flash Tab Caulking

Version 1.2

Revision Date 11/13/2017

Print Date 11/13/2017

equipment is necessary.

Hand protection

Remarks : Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Eye protection : Tightly fitting safety goggles
Face-shield

Skin and body protection : If used and stored as directed, no special protective equipment is necessary.

Protective measures : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.
Written instructions for handling must be available at the work place.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : paste

Colour : black

Odour : mild

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 : No data available

Evaporation rate : < 1

Flammability (solid, gas) : not auto-flammable

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Expand-O-Flash Tab Caulking

Version 1.2

Revision Date 11/13/2017

Print Date 11/13/2017

Relative vapour density	: Vapors are heavier than air and may travel along the floor and in the bottom of containers.
Relative density	: 1.1344
Solubility(ies)	
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: Heat
Incompatible materials	: Alcohols Amines Strong acids Strong bases Oxidizing agents Water Moisture
Hazardous decomposition products	: In case of fire hazardous decomposition products may be produced such as: carbon oxides Hydrogen cyanide (hydrocyanic acid) nitrogen oxides Sulphur oxides

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Expand-O-Flash Tab Caulking

Version 1.2

Revision Date 11/13/2017

Print Date 11/13/2017

Acute oral toxicity : 40,625.17 mg/kg
Method: Acute toxicity estimate

Acute inhalation toxicity : Acute toxicity estimate : > 10 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Acute dermal toxicity : 8,487.66 mg/kg
Method: Acute toxicity estimate

Acute toxicity**Components:****limestone:**

Acute oral toxicity : LD50 (Rat): > 6,450 mg/kg

Acute toxicity**4,4'-methylenediphenyl diisocyanate:**

Acute oral toxicity : LD50 (Rat): 31,600 mg/kg
LD50 (Rat): > 7,616 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat, male): 0.368 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit, male and female): > 9,400 mg/kg
Method: OECD Test Guideline 402

Acute toxicity**polymethylenepolyphenylene isocyanate:**

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0.49 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit, male and female): > 9,400 mg/kg
Method: OECD Test Guideline 402

Skin corrosion/irritation**Components:****4,4'-methylenediphenyl diisocyanate:**

Species: Rabbit
Method: Draize Test
Result: Mild skin irritant

Species: Human
Result: irritating

Expand-O-Flash Tab Caulking

Version 1.2

Revision Date 11/13/2017

Print Date 11/13/2017

Skin corrosion/irritation**polymethylenepolyphenylene isocyanate:**

Species: Rabbit

Result: Skin irritation

Serious eye damage/eye irritation**Components:****4,4'-methylenediphenyl diisocyanate:**

Species: Rabbit

Result: Moderate eye irritation

Method: Draize Test

Species: Human

Result: irritating

Serious eye damage/eye irritation**polymethylenepolyphenylene isocyanate:**

Species: Rabbit

Result: Mild eye irritation

Respiratory or skin sensitisation**Product:**

Remarks: May cause sensitisation of susceptible persons by skin contact or by inhalation of aerosol or dust.

Respiratory or skin sensitisation**Components:****4,4'-methylenediphenyl diisocyanate:**

Exposure routes: Dermal

Species: Mouse

Assessment: May cause sensitisation by skin contact.

Method: OECD Test Guideline 429

Result: positive

Exposure routes: Inhalation

Species: Guinea pig

Assessment: May cause sensitisation by inhalation.

Result: positive

Respiratory or skin sensitisation**polymethylenepolyphenylene isocyanate:**

Exposure routes: Dermal

Species: Mouse

Assessment: May cause sensitisation by skin contact.

Method: OECD Test Guideline 429

Result: positive

Exposure routes: Inhalation

Species: Guinea pig

Assessment: May cause sensitisation by inhalation.

Result: positive

Expand-O-Flash Tab Caulking

Version 1.2

Revision Date 11/13/2017

Print Date 11/13/2017

IARC	Group 1: Carcinogenic to humans	
	crystalline silica	14808-60-7
	Group 2B: Possibly carcinogenic to humans	
	carbon black	1333-86-4
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.	
NTP	Known to be human carcinogen	
	crystalline silica	14808-60-7

STOT - single exposure**Components:****4,4'-methylenediphenyl diisocyanate:**

Exposure routes: Inhalation

Target Organs: Respiratory Tract

Assessment: May cause respiratory irritation.

STOT - single exposure**polymethylenepolyphenylene isocyanate:**

Exposure routes: Inhalation

Target Organs: Respiratory Tract

Assessment: May cause respiratory irritation.

STOT - repeated exposure**Components:****4,4'-methylenediphenyl diisocyanate:**

Exposure routes: Inhalation

Target Organs: Respiratory Tract

Assessment: Causes damage to organs through prolonged or repeated exposure.

STOT - repeated exposure**polymethylenepolyphenylene isocyanate:**

Exposure routes: Inhalation

Target Organs: Respiratory Tract

Assessment: Causes damage to organs through prolonged or repeated exposure.

Further information**Product:**

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Expand-O-Flash Tab Caulking

Version 1.2

Revision Date 11/13/2017

Print Date 11/13/2017

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects**Product:**

Additional ecological information : Very toxic to aquatic life.

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**Disposal of residual product : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.**SECTION 14. TRANSPORT INFORMATION****International transport regulations**

These products are not classified as dangerous goods according to international transport regulations.

SECTION 15. REGULATORY INFORMATION**TSCA list**

TSCA - 5(a) Significant New Use Rule List of Chemicals : No substances are subject to a Significant New Use Rule.

U.S. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D) : No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act**CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ	Calculated product RQ
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Expand-O-Flash Tab Caulking

Version 1.2

Revision Date 11/13/2017

Print Date 11/13/2017

		(lbs)	(lbs)
4,4'-methylenediphenyl diisocyanate	101-68-8	5000	*
naphthalene	91-20-3	100	*
xylene	1330-20-7	100	*
ethylbenzene	100-41-4	1000	*
ethylbenzene	100-41-4	100	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
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SARA 311/312 Hazards : Acute Health Hazard
Chronic Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

4,4'-methylenediphenyl diisocyanate	101-68-8	0.5 - 1.5 %
1,2,4-trimethylbenzene	95-63-6	0.5 - 1.5 %

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

4,4'-methylenediphenyl diisocyanate	101-68-8	0.5 - 1.5 %
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The following chemical(s) are listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F):

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

4,4'-methylenediphenyl diisocyanate	101-68-8
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US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)

WARNING! This product contains a chemical known to the State of California to cause cancer.

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

DSL : All components of this product are on the Canadian DSL

SECTION 16. OTHER INFORMATION

Further information

Revision Date : 11/13/2017

Expand-O-Flash Tab Caulking

Version 1.2

Revision Date 11/13/2017

Print Date 11/13/2017

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.