

PERMASIL MOLD RELEASE 909C

CURRENT FORMULA - FLAMMABLE

(with n-Propyl bromide)

SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Chemical Name	Mixture
CAS No.	Mixture
Trade Name	PERMASIL MOLD RELEASE 909C
Product Code	M-5335

Relevant identified uses of the substance or mixture and uses advised against

Identified Use(s)	Mold Releasing Agent
Uses Advised Against	None

Company Identification

M.J. Gordon Co., Inc.
255 North Street, Suite 2
P.O. Box 4441
Pittsfield, MA 01202-4441

Telephone

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(413) 448-2932

E-Mail (competent person)

allangordon@mjgordonco.com

Emergency telephone number

CHEMTREC Account Number: CCN14819

Emergency Phone No.

Transportation Emergency:

CHEMTREC 24 hr. – Within USA 1 (800) 424-9300

Outside USA 1 (703)527-3887 (Collect calls accepted)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200)

Flam. Aerosol 2; Liquefied gas; Skin Irrit. 2; Eye Irrit. 2; Repr. 1B ; STOT SE 3; STOT RE 2

Label elements

Hazard Symbol



DANGER

Signal word(s)

Hazard Statement(s)

Flammable aerosol.

Contains gas under pressure; may explode if heated.

May damage fertility or the unborn child.

May cause damage to organs through prolonged or repeated exposure: Liver, Central nervous system.

Causes skin irritation.

Causes serious eye irritation.

May cause drowsiness or dizziness.

May cause respiratory irritation.

Precautionary Statement(s)

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Do not spray on an open flame or other ignition source.

Do not pierce or burn, even after use.

Avoid breathing mist/vapours/spray.

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Wear protective gloves/protective clothing/eye protection/face protection.

Wash hands and exposed skin after use.

Use only outdoors or in a well-ventilated area.

Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.

Other hazards

Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	% wt.	CAS No.	Hazard classification
1-Bromopropane	40 - 45	106-94-5	Flam. Liq. 2; H225 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Repr. 1B: H360 STOT SE 3: H335, H336 STOT RE 2: H373 Aquatic Acute 3; H402 Aquatic Chronic 3; H412
Xylene	< 10	1330-20-7	Flam. Liq. 3; H226 Eye Irrit. 2; H320 Skin Irrit. 2; H315 Asp. Tox. 1; H304 STOT SE 3; H335
1,1,1,2-Tetrafluoroethane	30 - 40	811-97-2	Liquified Gas; H280 Simple Asphyxiant
Dimethyl ether	10 - 20	115-10-6	Flam. Gas 1; H220 Liquefied gas; H280
n-Propanol	<2	71-23-8	Flam. Liq. 2: H225 Eye Dam. 1: H318 STOT SE 3: H336
1,2-Butylene oxide	<0.5	106-88-7	Flam. Liq. 2: H225 Acute Tox. 4: H302, H312, H332 Eye Irrit. 2A; H319 STOT SE 3: H335
t-Butyl alcohol	<0.5	75-65-0	Flam. Liq. 2: H225 Acute Tox. 4: H332 Eye Irrit. 2; H319 STOT SE 3: H335, H336

Additional Information – Substances in the product which may present a health or environmental hazard, or which have been assigned occupational exposure limits, are detailed below.:

- Ethylbenzene (CAS No. 100-41-4)

SECTION 4: FIRST AID MEASURES



Description of first aid measures

Inhalation

If inhaled: Remove person to fresh air and keep comfortable for breathing. If breathing is labored, administer oxygen. If symptoms develop, obtain medical attention.

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Skin Contact	Wash affected skin with soap and water. If irritation (redness, rash, blistering) develops, get medical attention. Take off contaminated clothing and wash it before reuse.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Do not induce vomiting. Do not give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	May cause drowsiness or dizziness.
Indication of any immediate medical attention and special treatment needed	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

-Suitable Extinguishing Media	Extinguish with carbon dioxide, dry chemical, foam or water spray.
-Unsuitable Extinguishing Media	Do not use water jet.

Special hazards arising from the substance or mixture

None

Advice for fire-fighters

A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool by spraying with water if exposed to fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Eliminate sources of ignition. Avoid contact with skin and eyes. Avoid breathing spray. Wear protective gloves/eye protection.

Environmental precautions

Prevent liquid entering sewers, basements and work pits. Avoid release to the environment.

Methods and material for containment and cleaning up

Cover spills with inert absorbent material. Transfer to a container for disposal or recovery.

Reference to other sections Additional Information

None
None

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use product in a well-ventilated area only. Avoid contact with skin and eyes. Avoid breathing spray. Wear protective gloves/eye protection.

Conditions for safe storage, including any incompatibilities

-Storage temperature	Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F. Keep container tightly closed. Store locked up.
-Incompatible materials	This product should be stored away from sources of strong heat, oxidizing agents, reducing agents, and strong acids. Do not mix with finely divided alkali or alkaline earth metals. May attack some plastics, rubbers, and coatings.

Specific end use(s)

Mold Releasing Agent

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

SUBSTANCE.	CAS No.	(8hr TWA)		(STEL)		Note:
		PEL (OSHA)	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	
1-Bromopropane	106-94-5	----	0.1 ppm	----	-----	-----
Xylene	1330-20-7	100 ppm	100 ppm	----	150 ppm	----
Ethylbenzene	100-41-4	100 ppm	20 ppm	----	-----	----
t-Butyl alcohol	75-65-0	100 ppm	100 ppm	----	-----	----
n-Propanol	71-23-8	200 ppm	100 ppm	----	-----	----

*Assure minimum oxygen content of work atmosphere.

Recommended monitoring method

NIOSH 1025 (Bromopropane); NIOSH 1401 (Alcohols II); NIOSH 1501 (Hydrocarbons, Aromatic)

Exposure controls

Appropriate engineering controls

Use only with adequate ventilation to keep exposures (airborne levels of dust, fume, vapour etc) below recommended exposure limits.

Personal protection equipment

Eye/face protection



Wear protective eyewear (goggles, face shield, or safety glasses).

Skin protection (Hand protection/ Other)



Wear suitable gloves if prolonged skin contact is likely. Check with protective equipment manufacturer's data.

Respiratory protection



Normally no personal respiratory protection is necessary. In case of insufficient ventilation, wear suitable respiratory equipment. Check with protective equipment manufacturer's data.

Thermal hazards

Not normally required. Use gloves with insulation for thermal protection, when needed.

Environmental Exposure Controls

Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Aerosol spray
Color.	Clear
Odor	Pleasant
Odor Threshold (ppm)	Not available
pH (Value)	Not available
Melting Point (°C) / Freezing Point (°C)	Not available
Boiling point/boiling range (°C):	Not available
Flash Point (°C)	-41 °C (Dimethyl ether)
Evaporation Rate	Not available
Flammability (solid, gas)	Flammable aerosol.
Explosive Limit Ranges	3.4% - 18% v/v (Dimethyl ether)
Vapor pressure (Pascal)	42.7 x 10 ⁴ (Dimethyl ether)
Vapor Density (Air=1)	1.6 (Dimethyl ether)

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Density (g/ml)	Not available
Solubility (Water)	Not available
Solubility (Other)	Not available
Partition Coefficient (n-Octanol/water)	Not available
Auto Ignition Point (°C)	Not available
Decomposition Temperature (°C)	Not available
Kinematic Viscosity (cSt)	Not available
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Other information	None

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable.
Possibility of hazardous reactions	None anticipated.
Conditions to avoid	Avoid contact with heat and ignition sources.
Incompatible materials	This product should be stored away from sources of strong heat , oxidizing agents, reducing agents, and strong acids. Do not mix with finely divided alkali or alkaline earth metals. May attack some plastics, rubbers, and coatings.
Hazardous decomposition product(s)	Carbon monoxide, Carbon dioxide, Acrid smoke, Hydrogen Bromide, Hydrogen Flouride, Carbonyl Fluoride, Fluorinated Hydrocarbons, Bromine.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Inhalation, Skin Contact, Eye Contact

Information on toxicological effects

1-Bromopropane (CAS No. 106-94-5):

Acute toxicity	Oral LD50 >2000 mg/kg bw (rat) Dermal LD50 >2000 mg/kg bw (rat) Inhalation LC50 14,374 ppm (4 hour(s)) (rat)
Irritation/Corrosivity	Causes skin irritation. Causes serious eye irritation.
Sensitization	It is not a skin sensitizer.
Repeated dose toxicity	May cause damage to organs through prolonged or repeated exposure: Liver, Central nervous system.
Carcinogenicity	It is unlikely to present a carcinogenic hazard to man.

NTP	IARC	ACGIH	OSHA	NIOSH
No.	No.	No.	No.	No.

Mutagenicity	Negative
Reproductive toxicity	May damage fertility or the unborn child.
Other information	None known.

Xylenes (CAS No.1330-20-7)

Acute toxicity	Oral LD50 = 3520 mg/kg (rat) Dermal LD50 >5000 mg/kg (rabbit) Inhalation LC50 = 27.6 mg/L (4 hour(s)) (rat) - Vapours may cause drowsiness and dizziness. May cause respiratory irritation.
Irritation / Corrosivity	Causes eye irritation. Causes skin irritation. Repeated exposure may cause skin dryness or cracking.
Sensitisation	It is not a skin sensitizer.

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Repeated dose toxicity Oral NOAEL = 900 mg/kg/day (rat) (90-days)
Inhalation NOAEL \geq 19,000 ppm (rat)

Carcinogenicity Not to be expected

NTP	IARC	ACGIH	OSHA
No.	No.	No.	No.

Mutagenicity Not to be expected

Toxicity for reproduction Not to be expected

Other information Contains: Ethylbenzene (CAS# 100-41-4). A3 - Confirmed Animal Carcinogen (ACGIH)

1,2-Butylene oxide (CAS No. 106-88-7):

Carcinogenicity IARC Classification: Group 2B. - Possibly carcinogenic to humans.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

1-Bromopropane (CAS No. 106-94-5):

Short term LC50 (96 hour): 24.3 mg/L (Fish)
EC50 (48 hour): 99.3 mg/L (Daphnia magna)
ErC50 (96 hour): 72.3 mg/L (Algae)

Long Term Not available.

Persistence and degradability Not readily biodegradable.

Bioaccumulative potential Not available.

Mobility in soil Not available.

Results of PBT and vPvB assessment Not classified as PBT or vPvB.

Other adverse effects None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

SECTION 14: TRANSPORT INFORMATION

	<u>U.S. DOT</u>	<u>Sea transport (IMDG)</u>	<u>Air transport (ICAO/IATA)</u>
UN number	1950	1950	1950
Proper Shipping Name	Aerosols, flammable	Aerosols, flammable	Aerosols, flammable
Transport hazard class(es)	2.1	2.1	2.1
Packing group	Not applicable	Not applicable	Not applicable
Environmental hazards	None assigned	None assigned	None assigned
Special precautions for user	None assigned	None assigned	None assigned

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

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Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

Chemical Name	CAS No.	Typical %wt.	RQ (Pounds)
Xylene	1330-20-7	5 - 10	100
Ethylbenzene	100-41-4	2 - 3	1000
1,2-Butylene oxide	106-88-7	<0.5	100

SARA 311/312 - Hazard Categories:

Fire Sudden Release Reactivity Immediate (acute) Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

Chemical Name	CAS No.	Typical %wt.
Xylene	1330-20-7	5 - 10
Ethylbenzene	100-41-4	2 - 3
1,2-Butylene oxide	106-88-7	<0.5
t-Butyl alcohol	75-65-0	<0.5

SARA 302 - Extremely Hazardous Substances (40 CFR 355):

Chemical Name	CAS No.	Typical %wt.	TPQ (pounds)
None	----	----	----

California Proposition 65 List:

Chemical Name	CAS No.	Type of Toxicity
1-Bromopropane	106-94-5	Developmental (male, female)
Ethylbenzene	100-41-4	Cancer
Benzene	71-43-2	Cancer
Toluene	108-88-3	Cancer

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

Date of preparation: July 17, 2015

Hazard Statement(s) and Risk Phrases Listed in: SECTION 2:/ SECTION 3:

Hazard Statement(s)

- H220: Extremely flammable gas.
- H222: Extremely flammable aerosol.
- H225: Highly flammable liquid and vapour.
- H226: Flammable liquid and vapour.
- H280: Contains gas under pressure; may explode if heated.
- H302: Harmful if swallowed.
- H304: May be fatal if swallowed and enters airways.
- H312: Harmful in contact with skin.
- H315: Causes skin irritation.
- H318: Causes serious eye damage.
- H319: Causes serious eye irritation.
- H320: Causes eye irritation.
- H331: Toxic if inhaled.
- H332: Harmful if inhaled.
- H335: May cause respiratory irritation.
- H336: May cause drowsiness or dizziness.
- H360: May damage fertility or the unborn child.
- H373: May cause damage to organs through prolonged or repeated exposure.
- H402: Harmful to aquatic life.
- H412: Harmful to aquatic life with long lasting effects.

Training advice: None.

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