

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

075556881

**The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).**

075556840 075556865 075556873 075556899

# Material Safety Data Sheet

DATE OF ISSUE: April 16, 2012

ISSUED BY PASCAL

<b>Product Name:</b>	Occlude®
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## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	Occlude®
Product Use:	Aerosol Indicator Marking Spray
Manufacturer Name	Pascal International, Inc.
Address	2929 NE Northup Way Bellevue, Washington 98004
Emergency Telephone (Infotrac):	1-800-535-5053, 1-352-323-3500
Telephone	1-425-827-4694, 1-800-426-8051
Fax	1-425-827-6893

## 2. HAZARDS IDENTIFICATION

Hazard	Irritating to eyes. Can is under pressure. Unusual fire and explosion hazard. Inhalation of large quantities of propellant may displace oxygen in lungs.
Risk Phrases	R12: Highly flammable R18: Vapor may form flammable mixtures with air R36: Irritating to eyes. R20: Harmful by inhalation
Safety Phrases	S2: Keep out of the reach of children S15: Keep away from heat. S23: Do not breathe vapor. S25: Avoid contact with eyes.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixture	Chemical Entity	CAS No.	Proportion*	ACGIH TLV
Propellant	Isobutane	75-28-5	97%	1000 ppm
	N-Butane	106-97-8	2%	1000 ppm
	Propane	74-98-6	1%	1000 ppm

## 4. FIRST AID MEASURES

Inhalation	Move to fresh air. If unconscious, give oxygen
Ingestion	Ingestion of normal quantities is non-toxic.
Skin	N/A
Eye	Flush with water for 15 minutes. Seek medical aid.

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### 5. FIRE FIGHTING MEASURES

Extinguishing Media:	CO <sub>2</sub> , Foam, Dry Chemical, Water
Specific Hazards:	Extremely flammable and combustible. Temperature above 50°C/120°F may cause bursting and contents under pressure may discharge.
Precautions in connection with Fire:	Confine fire to immediate area. Use of self contained breathing apparatus is recommended. Wear protective clothing to prevent contact with skin and eyes.

### 6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures:	Provide adequate ventilation.
Clean Up Procedure:	Use soap and water after propellant has been dispersed.

### 7. HANDLING AND STORAGE

Handling	Content is under pressure. Keep away from fire. Flammable. Do not puncture.
Storage	Content is under pressure. Store in a cool, dry area away from heat sources and/or prolonged exposure to sun. Keep away from fire. Flammable. Do not puncture.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits	Not determined
Respiratory Protection	Dust mask recommended.
Eye Protection	Recommended
Hand Protection	Gloves recommended
Engineering Controls	Normal room ventilation
Biological Limit Values	Not determined

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Red or green powder dispensed as an aerosol.
Odor	Odorless

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**Product Name:** Occlude<sup>®</sup>

Vapor Pressure (mm Hg and Temperature)	(Isobutane @ 32° F) 1,519.0
Vapor Density (AIR=1)	(Isobutane) 2.01
Boiling Point	(Isobutane) 10.9° F
Freezing / Melting Point	Not Determined
Solubility in Water	Minimal
Specific Gravity	(Isobutane) 0.5631
Evaporation Rate	Not Determined
Water Reactive	N/A
Flash Point	120° F
Flammable Limits LEL	Maintain level below 0.25 LEL. May displace oxygen in air
Flammable Limits UEL	Not determined

### 10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Conditions to Avoid	N/A
Incompatible Materials	May react with oxidizing materials.
Hazardous Decomposition Products	None known
Hazardous Reactions	None known

### 11. TOXICOLOGICAL INFORMATION

Hazardous Ingredient:	N/A
Routes of Exposure:	N/A

### 12. ECOLOGICAL INFORMATION

Ecotoxicity	Contains no CFC's. Propellants are ecologically safe.
Persistence and Degradability	Not determined
Mobility	Not determined

### 13. DISPOSAL CONSIDERATIONS

Disposal Method and Containers	Empty containers may be disposed of in waste containers.
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Special Precautions

Do not incinerate. Do not crush. Dispose in accordance with all local, state and federal regulations.

### 14. TRANSPORT INFORMATION

UN Number	UN1950
UN Proper Shipping Name	Aerosol, flammable
Class and Subsidiary Risk	2.1
Packing Group	N/A
Special Precautions for User	Maximum 75kg on passenger aircraft/rail.
Hazchem Code	1T

### 15. REGULATORY INFORMATION

Consumer Commodity	ORM-D, ID 8000
AICS (Australia)	All ingredients are listed
Precautionary Phrases:	For professional in-office use only. Keep out of reach of children.
Note:	Refer to applicable international, national, and local regulations and provisions.

### 16. OTHER INFORMATION

Legal Disclaimer:	Information contained in this MSDS is based on data believed to be correct. This information does not purport to be all inclusive and shall be used only as a guide. No warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. In no event will the manufacturer or the distributor be responsible for damages of any nature whatsoever resulting from the use of or reliance upon this information.
MSDS History	Date of Issue: April 16, 2012 Replaces Issue: April 15, 2009 Changes made to previous issue: No changes

# Safety Data Sheet

DATE OF ISSUE: June 15, 2014


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Product Name	Occlude®
Product Use:	Aerosol Indicator Marking Spray
Manufacturer Name	Pascal International, Inc.
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Telephone	1-425-827-4694, 1-800-426-8051
Fax	1-425-827-6893

## 2. HAZARDS IDENTIFICATION

Hazard	 Danger	Category 1: 2.3/1 Extremely flammable aerosol
		Can is under pressure
		Irritating to eyes
		Inhalation of large quantities of propellant may displace oxygen in lungs
Risk Phrases		R12: Extremely flammable R18: Vapor may form flammable mixtures with air R36: Irritating to eyes.
		R20: Harmful by inhalation
Safety Phrases		S2: Keep out of the reach of children S15: Keep away from heat. S23: Do not breathe vapor. S25: Avoid contact with eyes.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixture	Chemical Entity	CAS No.	Proportion*	ACGIH TLV
Propellant	Isobutane	75-28-5	97%	1000 ppm
	N-Butane	106-97-8	2%	1000 ppm
	Propane	74-98-6	1%	1000 ppm

## 4. FIRST AID MEASURES

Inhalation	Move to fresh air. If unconscious, give oxygen
Ingestion	Ingestion of normal quantities is non-toxic.
Skin	N/A
Eye	Flush with water for 15 minutes. Seek medical aid.

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**Product Name:** Occlude<sup>®</sup>

## 5. FIRE FIGHTING MEASURES

Extinguishing Media: CO<sub>2</sub>, Foam, Dry Chemical, Water  
Specific Hazards: Extremely flammable and combustible. Temperature above 50°C/120°F may cause bursting and contents under pressure may discharge.  
Precautions in connection with Fire: Confine fire to immediate area. Use of self contained breathing apparatus is recommended. Wear protective clothing to prevent contact with skin and eyes.

## 6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures: Provide adequate ventilation.  
Clean Up Procedure: Use soap and water after propellant has been dispersed.

## 7. HANDLING AND STORAGE

Handling: Content is under pressure. Keep away from fire. Flammable. Do not puncture.  
Storage: Content is under pressure. Store in a cool, dry area away from heat sources and/or prolonged exposure to sun. Keep away from fire. Flammable. Do not puncture.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits: Not determined  
Respiratory Protection: Dust mask recommended.  
Eye Protection: Recommended  
Hand Protection: Gloves recommended  
Engineering Controls: Normal room ventilation  
Biological Limit Values: Not determined

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Red or green powder dispensed as an aerosol.  
Odor: Odorless  
Vapor Pressure (mm Hg and Temperature): (Isobutane @ 32° F) 1,519.0  
Vapor Density (AIR=1): (Isobutane) 2.01  
Boiling Point: (Isobutane) 10.9° F

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**Product Name:** Occlude®

Freezing / Melting Point	Not Determined
Solubility in Water	Minimal
Specific Gravity	(Isobutane) 0.5631
Evaporation Rate	Not Determined
Water Reactive	N/A
Flash Point	120° F
Self-igniting	Product is not self-igniting
Flammable Limits LEL	Maintain level below 0.25 LEL. May displace oxygen in air
Flammable Limits UEL	Not determined

## 10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Conditions to Avoid	N/A
Incompatible Materials	May react with oxidizing materials.
Hazardous Decomposition Products	None known
Hazardous Reactions	None known

## 11. TOXICOLOGICAL INFORMATION

Hazardous Ingredient	N/A
Routes of Exposure	N/A
Skin	No irritant effect
Eyes	No irritating effect
Sensitization	No sensitizing effects known

## 12. ECOLOGICAL INFORMATION

Ecotoxicity	Contains no CFC's. Propellants are ecologically safe. Not hazardous for water.
Persistence and Degradability	Not determined
Mobility	Not determined

## 13. DISPOSAL CONSIDERATIONS

Disposal Method and Containers	Empty containers may be disposed of in waste containers.
Special Precautions	Do not incinerate. Do not crush. Dispose in accordance with all local, state and federal regulations.



# Safety Data Sheet

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**Product Name:** Occlude®

## 14. TRANSPORT INFORMATION

UN Number	UN1950
UN Proper Shipping Name	Aerosol, flammable
Class and Subsidiary Risk	2.1
Packing Group	N/A
Special Precautions for User	N/A
Hazchem Code	1T
EMS Numbers:	F-D, S-U
Marine Pollutant:	No
Transport Required Labeling:	



Air Transport:



Maritime Transport:



Land Transport:



## 15. REGULATORY INFORMATION

Consumer Commodity	ORM-D (Ground), ID 8000 (Air)
AICS (Australia)	All ingredients are listed
Precautionary Phrases:	For professional in-office use only. Keep out of reach of children.
Note:	Refer to applicable international, national, and local regulations and provisions.

## 16. OTHER INFORMATION

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## MSDS History

Date of Issue: June 15, 2014

Replaces Issue: April 16, 2012

Changes made to previous issue: MSDS to SDS;  
Added SDS hazard pictogram; GHS classification;  
transport pictograms