

### Crocus Cloth

MSDS Number: 158

Revision Date: 2/25/2015

Page 1 of 8

## 1 PRODUCT AND COMPANY IDENTIFICATION

### Manufacturer

Johnson Abrasives  
49 Fitzgerald Drive  
Jaffrey, NH 03452

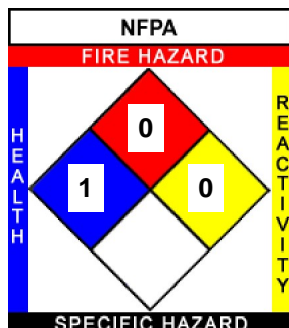
**Contact:** Johnson Abrasives  
**Phone:** +1-603-532-4434  
**Fax:** +1-603-532-4436  
**Web:** www.johnsonabrasives.com

**Product Name:** Crocus Cloth  
**Revision Date:** 2/25/2015  
**Version:** 1  
**MSDS Number:** 158  
**CAS Number:** MIXTURE  
**Product Use:** Abrasive Product  
**Emergency Phone:** +1-800-642-4265 or +1-603-532-4434

## 2 HAZARDS IDENTIFICATION

NFPA:  
HMIS III:

Health = 1, Fire = 0, Reactivity = 0  
H\*1/F0/PH0



HMIS III	
HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARDS	0
PERSONAL PROTECTION E   Safety Glasses, Gloves, Dust Respirator	

PERSONAL PROTECTION INDEX			
A	☒	G	☒ + ☒ + ☒
B	☒ + ☒	H	☒ + ☒ + ☒ + ☒
C	☒ + ☒ + ☒	I	☒ + ☒ + ☒
D	☒ + ☒ + ☒	J	☒ + ☒ + ☒ + ☒
E	☒ + ☒ + ☒	K	☒ + ☒ + ☒ + ☒
F	☒ + ☒ + ☒ + ☒	X	Consult your supervisor or S.O.P. for "SPECIAL" handling directions
A	n	o	p
q	r	s	
t	u	w	y
z	Additional Information		

GHS Signal Word:  
WARNING

GHS Classifications:  
Health, Skin corrosion/irritation, 3  
Health, Serious Eye Damage/Eye Irritation, 2 B

GHS Phrases:  
H316 - Causes mild skin irritation  
H320 - Causes eye irritation

GHS Precautionary Statements:  
P261 - Avoid breathing dust produced while using this product.

### Crocus Cloth

MSDS Number: 158

Revision Date: 2/25/2015

Page 2 of 8

- P264 - Wash face, hands and any exposed skin thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P285 - In case of inadequate ventilation wear respiratory protection.  
P302+352 - IF ON SKIN: Wash with soap and water.  
P304+341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+351+338 - IF IN EYES: Do NOT rub. Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
P332+313 - If skin irritation occurs: Get medical advice/attention.  
P337+313 - If eye irritation persists: Get medical advice/attention.  
P342 - If experiencing respiratory symptoms: Get medical advice/attention.  
P402 - Store in a dry place.

### 3

### COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients:

Cas #	Percentage	Chemical Name
N/A	45-55%	Cloth or Paper
N/A	10-30%	Animal Glue Bond
1309-37-1	15-25%	Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )
14808-60-7	1-5%	Silica, Crystalline Quartz

### 4

### FIRST AID MEASURES

- Inhalation:** Blow nose to remove substance from nasal passages. Give oxygen or artificial respiration if needed. If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.
- Skin Contact:** No need for first aid is anticipated for non-abrasive exposure to product. If reddening develops and/or persists, obtain medical attention.
- Eye Contact:** Do NOT rub eyes. Flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. If irritation persists, obtain medical attention.
- Ingestion:** No need for first aid is anticipated. If symptoms develop, obtain medical attention.

#### Most important symptoms and effects, both acute and delayed:

The most important known symptoms and effects are described in the labelling (see Section 2) and/or Section 11.

Prolonged inhalation of Silica, Crystalline Quartz dust may result in silicosis. Symptoms include disabling pulmonary fibrosis with fibrotic changes and miliary nodules in the lungs, shortness of breath, dry cough, emphysema, shallow breathing and susceptibility to tuberculosis. Advanced stages, in chronic exposure cases, include symptoms of reduced appetite, pleuritic pain and incapacitation. Advanced stages of silicosis may result in death due to cardiac failure and destruction of lung tissue. Acute and chronic symptoms are associated with respirable particles of 3-4 um over repeated, prolonged periods of time.

Prolonged inhalation of Iron Oxide (Fe<sub>2</sub>O<sub>3</sub>) dust may result in siderosis. Siderosis is considered to be a benign pneumoconiosis and does not normally cause significant physiological impairment. Siderosis can be observed in x-rays with the lungs having a mottled appearance.

#### Indication of any immediate medical attention and special treatment needed:

No data available.

## Crocus Cloth

MSDS Number: 158

Revision Date: 2/25/2015

Page 3 of 8

### 5 FIRE FIGHTING MEASURES

<b>Flammability:</b>	Not classified
<b>Flash Point:</b>	DNA
<b>Flash Point Method:</b>	DNA
<b>Burning Rate:</b>	No data available
<b>Autoignition Temp:</b>	No data available
<b>LEL:</b>	DNA
<b>UEL:</b>	DNA

Product is flammable when exposed to direct flame. During proper, recommended use of this product, no flammability hazard exists.

#### Extinguishing Media:

Water Spray  
Carbon Dioxide  
Alcohol-Resistant Foam  
Dry Chemical

#### Special Hazards Arising From the Substance or Mixture:

Carbon Oxides  
Iron Oxides  
Silicon Oxides

#### Advice for Firefighters:

Firefighters should wear full-face, positive-pressure respirators.

#### Further Information:

If incinerated, may release toxic fumes.  
See Section 7 for more information on safe handling.  
See Section 8 for more information on personal protection equipment.

### 6 ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment, including dust respirator.  
Avoid breathing dust.  
Ensure adequate ventilation.

#### Environmental precautions:

No special environmental precautions required.

#### Methods and materials for containments and cleaning up:

Pick up and arrange disposal without creating dust.  
Sweep up, shovel or collect spillage and place material into suitable container for disposal.  
Inspect product for torn or damaged areas. Do not use if product is torn or damaged.  
Dispose of contaminated material according to Section 13.  
Ensure adequate ventilation.

#### Reference to other sections:

See Section 7 for information on safe handling.



## Crocus Cloth

MSDS Number: 158

Revision Date: 2/25/2015

Page 4 of 8

See Section 8 for information on personal protection equipment.  
See Section 13 for information on proper disposal.

7

### HANDLING AND STORAGE

#### Handling Precautions:

Ensure adequate ventilation.  
Avoid breathing of dust created while sanding, grinding or machining - use dust respirator while using product.  
Avoid contact with skin, eyes and clothing.  
Damaged product can break apart during use and cause serious bodily injury, specifically to the eyes - use safety glasses while using product.  
Check product for damages such as tears or cracks prior to use. Do not use damaged product.  
Comply with RPM rating specified on this product.  
Comply with ANSI B7.1-2010 Safety Requirements for the Use, Care and Protection of Abrasive Wheels (if applicable).  
Combustible dust may be formed as a result of using this product. Take care to not let generated dust accumulate.  
Accumulated dust may present an explosive hazard when dispersed in sufficient concentration while near an ignition source.  
Collect dust and dispose of regularly.

#### Storage Requirements:

Keep away from heat, sparks and flames.  
Store in a dry place - keep away from moisture.  
Store at temperatures between 40-90 °F at 30-80% relative humidity.  
Store away from strong acids, strong oxidizing agents, Chloroformates and Hydrogen Fluoride.

8

### EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Engineering Controls:

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

#### Personal Protective Equip:

Eye/face protection:  
When using material use safety glasses, gloves, and dust respirator according to HMIS PP, E. All safety equipment should be tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

#### Skin protection:

Handling material with gloves is not required, but strongly recommended in order to prevent accidental secondary contact with eyes. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact. Dispose of contaminated gloves according to applicable laws and practices.

#### Body Protection:

Safety glasses, gloves and dust respirator are recommended. Type of protective equipment should be selected based on ventilation conditions and other conditions of use of this material.

#### Respiratory protection:

Use a NIOSH/MSHA dust mask according to 24 CFR 1910.134. Full-face dust respirator may be required as backup to engineering controls when proper engineering controls are not in

## Crocus Cloth

MSDS Number: 158

Revision Date: 2/25/2015

Page 5 of 8

place to keep TLV and PEL limits below defined thresholds.

Control of environmental exposure:  
No special requirements are necessary.

### Components with workplace control parameters:

Component(s): Animal Glue Bond; Iron Oxide (Fe<sub>2</sub>O<sub>3</sub>); Silica, Crystalline Quartz  
CAS No(s): N/A; 1309-37-1; 14808-60-7  
USA OSHA Occupational Exposure Limits Table Z-1 Limits for Air Contaminant (TWA): 15.0 mg/m<sup>3</sup> (as total dust)  
USA OSHA Occupational Exposure Limits Table Z-1 Limits for Air Contaminant (TWA): 5.0 mg/m<sup>3</sup> (as respirable fraction)  
USA OSHA Table Z-1 Limits for Air Contaminants - 1910-1000 (TWA): 10.0 mg/m<sup>3</sup> (as total dust)  
USA OSHA Table Z-1 Limits for Air Contaminants - 1910-1000 (TWA): 5.0 mg/m<sup>3</sup> (as respirable fraction)  
USA ACGIH (TWA/TLV): 0.025 mg/m<sup>3</sup>  
USA NIOSH (TWA): 10.0 mg/m<sup>3</sup> (as total dust)  
USA NIOSH (TWA): 5.0 mg/m<sup>3</sup> (as respirable fraction)

### Biological occupational exposure limits:

Contains no substances with biological occupational exposure limits values.

9

## PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Cloth or paper coated with abrasive material	<b>Odor:</b>	Odorless
<b>Physical State:</b>	Solid	<b>Molecular Formula:</b>	MIXTURE
<b>Odor Threshold:</b>	DNA	<b>Solubility:</b>	DNA
<b>Particle Size:</b>	DNA	<b>Softening Point:</b>	DNA
<b>Spec Grav./Density:</b>	DNA	<b>Percent Volatile:</b>	DNA
<b>Viscosity:</b>	DNA	<b>Heat Value:</b>	DNA
<b>Sat. Vap. Conc.:</b>	DNA	<b>Freezing/Melting Pt.:</b>	DNA
<b>Boiling Point:</b>	DNA	<b>Flash Point:</b>	DNA
<b>Flammability:</b>	(solid, gas): Not classified	<b>Octanol:</b>	DNA
<b>Partition Coefficient:</b>	DNA	<b>Vapor Density:</b>	DNA
<b>Vapor Pressure:</b>	DNA	<b>VOC:</b>	DNA
<b>pH:</b>	DNA	<b>Bulk Density:</b>	DNA
<b>Evap. Rate:</b>	DNA	<b>Auto-Ignition Temp:</b>	DNA
<b>Molecular weight:</b>	DNA	<b>UFL/LFL:</b>	DNA
<b>Decomp Temp:</b>	DNA		

10

## STABILITY AND REACTIVITY

<b>Stability:</b>	Product is stable under normal conditions.
<b>Conditions to Avoid:</b>	Incompatibilities, flames, ignition sources and moisture.
<b>Materials to Avoid:</b>	Strong acids, strong oxidizing agents, Chloroformates and Hydrogen Fluoride.
<b>Hazardous Decomposition:</b>	Carbon Oxides, Iron Oxides and Silicon Oxides.
<b>Hazardous Polymerization:</b>	Will not occur.

### Crocus Cloth

MSDS Number: 158

Revision Date: 2/25/2015

Page 6 of 8

## 11 TOXICOLOGICAL INFORMATION

**Component(s):** Iron Oxide (Fe<sub>2</sub>O<sub>3</sub>); Silica, Crystalline Quartz  
**CAS No(s):** 1309-37-1; 14808-60-7

### Acute Toxicity:

LDLo Intratracheal - Rat: 200 mg/kg  
LDLo Intravenous - Rat: 90 mg/kg  
LDLo Intravenous - Mouse: 40 mg/kg  
LCLo Inhalation - Human: 0.300 mg/m<sup>3</sup> (10 y, Silica, Crystalline Quartz)  
LCLo Inhalation - Rat: 0.500 mg/m<sup>3</sup> (24 h, Iron Oxide (Fe<sub>2</sub>O<sub>3</sub>))

**Skin Corrosion/Irritation:** Skin - Human: Causes irritation. Mechanical irritation (abrasion) may also cause skin irritation.

**Serious Eye Damage/Eye Irritation:** The product itself does no present hazards. Dust created by grinding, sanding or machining may cause eye irritation.

**Respiratory or Skin Sensitation:** No data available.

**Germ Cell Mutagenicity:** No data available.

**Carcinogenicity:** This product is or contains a component that is classifiable as to its carcinogenicity by the IARC, ACGIH, NTP or OSHA (Silica, Crystalline Quartz) and a component that is not classifiable as to its carcinogenicity by the IARC, ACGIH, NTP or OSHA (Iron Oxide (Fe<sub>2</sub>O<sub>3</sub>)). Iron Oxide (Fe<sub>2</sub>O<sub>3</sub>) is shown to be an equivocal tumorigenic agent by RTECS criteria (causing tumors at site or application) in rats via subcutaneous exposures.

IARC: 1 - Group 1: Carcinogenic to humans (Silica, Crystalline Quartz); 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Iron Oxide (Fe<sub>2</sub>O<sub>3</sub>)).

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: Known to be a human carcinogen (Silica, Crystalline Quartz).

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.

**Reproductive Toxicity:** No data available.

**Specific Target Organ Toxicity - Single Exposure:** Respiratory system: The product itself does no present hazards. Dust created by grinding, sanding or machining may cause respiratory irritation.

**Specific Target Organ Toxicity - Repeated Exposure:** Respiratory system: May cause damage to the respiratory system through prolonged or repeated exposure.

**Aspiration Hazard:** No data available.

### Additional Information:

Component: Iron Oxide (Fe<sub>2</sub>O<sub>3</sub>); RTECS: NO7400000

Component: Silica, Crystalline Quartz; RTECS: VV7330000



## Crocus Cloth

MSDS Number: 158

Revision Date: 2/25/2015

Page 7 of 8

### 12 ECOLOGICAL INFORMATION

**Component(s):** Iron Oxide (Fe<sub>2</sub>O<sub>3</sub>); Silica, Crystalline Quartz  
**CAS No(s):** 1309-37-1; 14808-60-7

**Toxicity:**

*Toxicity to fish:*  
No data available.

*Toxicity to daphnia and other aquatic invertebrates:*  
No data available.

**Persistence and Degradability:**  
No data available.

**Bioaccumulative potential:**  
No data available.

**Mobility in Soil:**  
No data available.

**Results of PBT and vPvB assessment:**  
Not required/conducted.

**Other Adverse Effects:**  
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

### 13 DISPOSAL CONSIDERATIONS

Product: Hazardous wastes shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution, release into the environment or damage to people and animals. Contact a licensed professional waste disposal service to dispose of this material. Consult all applicable authorities and regulations to ensure proper classification. Any abraded material remaining on used product (from the substrate being abraded) may need to be considered as a factor in the disposal classification, method or handling of used product.

Contaminated Packaging: Dispose of as unused product.

### 14 TRANSPORT INFORMATION

**DOT (US)**  
Non-regulated material

**IMDG**  
Non-regulated material

**IATA**  
Non-regulated material

**IMO**  
Non-regulated material



# Safety Data Sheet (SDS)

## Johnson Abrasives

### Crocus Cloth

MSDS Number: 158

Revision Date: 2/25/2015

Page 8 of 8

#### 15 REGULATORY INFORMATION

##### COMPONENT / (CAS/PERC) / CODES

\*Iron Oxide (Fe<sub>2</sub>O<sub>3</sub>) (1309371 15-25%) MASS, NJHS, OSHAWAC, PA, SARA311/312, TSCA, TXAIR

\*Silica, Crystalline Quartz (14808607 1-5%) MASS, NJHS, NRC, OSHAWAC, PA, PROP65, SARA311/312, TSCA, TXAIR

##### REGULATORY KEY DESCRIPTIONS

MASS = MA Massachusetts Hazardous Substances List  
NJHS = NJ Right-to-Know Hazardous Substances  
NRC = Nationally Recognized Carcinogens  
OSHA WAC = OSHA workplace Air Contaminants  
PA = PA Right-To-Know List of Hazardous Substances  
PROP65 = CA Prop 65  
SARA311/312 = SARA 311/312 Toxic Chemicals  
TSCA = Toxic Substances Control Act  
TXAIR = TX Air Contaminants with Health Effects Screening Level

#### 16 OTHER INFORMATION

##### Disclaimer:

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material in any process. The information set forth herein is furnished free of charge and is based on technical data that Johnson Abrasives believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside of Johnson Abrasives' control, Johnson Abrasives makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under, or a recommendation to infringe upon, any patents.

##### Preparation Information:

GHS Conversion Services  
www.ghsconversionservices.com  
(414) 336-2546  
(669) 236-0304