

Safety Data Sheet



Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

- Product Name** • **BC-634A Optical Pads**
- Synonyms** • Optical Pads

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

- Relevant identified use(s)** • Optical Interface

1.3 Details of the supplier of the safety data sheet

- Manufacturer** • Saint-Gobain Crystals
 17900 Great Lakes Parkway
 Hiram, OH 44234
 United States
www.crystals.saint-gobain.com
scintillation@saint-gobain.com
- Telephone (General)** • 440-834-5600

1.4 Emergency telephone number

- Manufacturer** • 1-800-424-9300 - ChemTrec
- Manufacturer** • 703-525-3887 - Outside U.S.

Section 2: Hazards Identification

EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 2015/830]

According to: EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

- CLP** • Not classified
- DSD/DPD** • Not classified

2.2 Label Elements

- CLP**
- Hazard statements** • No label element(s) required

- DSD/DPD**
- Risk phrases** • No label element(s) required

2.3 Other Hazards

- CLP**
- According to Regulation (EC) No. 1272/2008 (CLP) this material is not considered hazardous.
- DSD/DPD**
- According to European Directive 1999/45/EC this preparation is not considered dangerous.

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

- OSHA HCS 2012**
- Not classified

2.2 Label elements

- OSHA HCS 2012**
- Hazard statements**
- No label element(s) required

2.3 Other hazards

- OSHA HCS 2012**
- This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

Canada

According to: WHMIS

2.1 Classification of the substance or mixture

- WHMIS**
- Not classified

2.2 Label elements

- WHMIS**
- No label element(s) required.

2.3 Other hazards

- WHMIS**
- In Canada, the product mentioned above is not considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

3.1 Substances

- Material does not meet the criteria of a substance.

3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
<i>Proprietary</i>	<i>Proprietary</i>	55.12912%	NDA	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA
<i>Proprietary</i>	<i>Proprietary</i>	26.15316% TO 43.5886%	NDA	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA
<i>Proprietary</i>	<i>Proprietary</i>	1.654052% TO 1.936109%	NDA	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA

Section 4 - First Aid Measures

4.1 Description of first aid measures

- Inhalation**
- Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. If signs/symptoms continue, get medical attention.
- Skin**
- Wash skin with soap and water. If irritation develops and persists, get medical attention.
- Eye**
- Flush eyes with water for at least 15 minutes while holding eyelids open. If eye irritation persists: Get medical advice/attention.
- Ingestion**
- Obtain medical attention immediately if ingested.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to Physician**
- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

- Suitable Extinguishing Media**
- Water fog, carbon dioxide, foam, dry chemical.

- Unsuitable Extinguishing Media**
- No data available

5.2 Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards**
- No data available

- Hazardous Combustion Products**
- No data available

5.3 Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal Precautions**
- Ventilate the area before entry. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact.
- Emergency Procedures**
- Keep unauthorized personnel away.

6.2 Environmental precautions

- Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

- Containment/Clean-up Measures**
- Carefully shovel or sweep up spilled material and place in suitable container.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

- Use only with adequate ventilation. Wear appropriate personal protective equipment, avoid direct contact. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Store in a cool, dry, well ventilated area.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines

- No applicable exposure limits available for product or components.

8.2 Exposure controls

Engineering Measures/Controls

- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. Ensure that dust handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is not leakage from the equipment).

Personal Protective Equipment

Respiratory

- For limited exposure use an N95 dust mask. For prolonged exposure use an air-purifying respirator with high efficiency particulate air (HEPA) filters. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear safety goggles.

Skin/Body

- Wear appropriate gloves. Wear long sleeves and/or protective coveralls.

Environmental Exposure Controls

- Follow best practice for site management and disposal of waste.

Section 9 - Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Solid optical pad.
Color	Data lacking	Odor	Data lacking
Odor Threshold	Data lacking		
General Properties			
Boiling Point	Data lacking	Melting Point/Freezing Point	Data lacking
Decomposition Temperature	Data lacking	pH	Data lacking
Specific Gravity/Relative Density	Data lacking	Water Solubility	Data lacking
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	Data lacking		

Flammability			
Flash Point	Data lacking	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Data lacking		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- Hazardous polymerization not indicated.

10.4 Conditions to avoid

- No data available

10.5 Incompatible materials

- No data available

10.6 Hazardous decomposition products

- No data available

Section 11 - Toxicological Information

11.1 Information on toxicological effects

GHS Properties	Classification
Acute toxicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Skin corrosion/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Serious eye damage/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Skin sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Respiratory sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Aspiration Hazard	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Carcinogenicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking

Germ Cell Mutagenicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Toxicity for Reproduction	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
STOT-SE	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
STOT-RE	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking

Potential Health Effects

Inhalation

- Acute (Immediate)**
- Processes such as cutting, grinding, crushing, or impact may result in generation of excessive amounts of airborne dusts in the workplace. Nuisance dust may affect the lungs but reactions are typically reversible.
- Chronic (Delayed)**
- No data available

Skin

- Acute (Immediate)**
- Exposure to dust may cause mechanical irritation.
- Chronic (Delayed)**
- No data available.

Eye

- Acute (Immediate)**
- Exposure to dust may cause mechanical irritation. Excessive concentrations of nuisance dust in the workplace may reduce visibility and may cause unpleasant deposits in eyes.
- Chronic (Delayed)**
- No data available.

Ingestion

- Acute (Immediate)**
- Excessive concentrations of nuisance dust in the workplace may cause mechanical irritation to mucous membranes.
- Chronic (Delayed)**
- No data available.

Section 12 - Ecological Information

12.1 Toxicity

- Material data lacking.

12.2 Persistence and degradability

- Material data lacking.

12.3 Bioaccumulative potential

- Material data lacking.

12.4 Mobility in Soil

- Material data lacking.

12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

- No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

- Product waste** • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
- Packaging waste** • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA
TDG	NDA	Not Regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not Regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not Regulated	NDA	NDA	NDA

14.6 Special precautions for user • None specified.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code • Data lacking.

Section 15 - Regulatory Information

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

SARA Hazard Classifications • None

State Right To Know		
Component	CAS	PA
Proprietary	Proprietary	No
Proprietary	Proprietary	No

Inventory						
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS
Proprietary	Proprietary	Yes	No	Yes	No	No
Proprietary	Proprietary	Yes	No	Yes	No	No

Inventory (Con't.)			
Component	CAS	Korea KECL	TSCA
Proprietary	Proprietary	Yes	Yes
Proprietary	Proprietary	Yes	Yes

Canada

Labor			
Canada - WHMIS 1988 - Classifications of Substances			
• Proprietary	Proprietary	Not Listed	
• Proprietary	Proprietary	Not Listed	
Canada - WHMIS 1988 - Ingredient Disclosure List			
• Proprietary	Proprietary	Not Listed	

<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed
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Environment

Canada - CEPA - Priority Substances List

<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed
<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed

China

Environment

China - Ozone Depleting Substances - First Schedule

<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed
<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed

China - Ozone Depleting Substances - Second Schedule

<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed
<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed

China - Ozone Depleting Substances - Third Schedule

<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed
<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed

Other

China - Annex I & II - Controlled Chemicals Lists

<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed
<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed

China - Dangerous Goods List

<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed
<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed

Germany

Labor

Germany - Immission Control - Qualifying Quantities for Major Accident Prevention

<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed
<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed

Germany - Immission Control - Qualifying Quantities for Safety Reporting

<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed
<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed

Germany - TRGS 505 - Specific Lead Regulations

<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed
<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed

Germany - TRGS 511 - Specific Ammonium Nitrate Regulations

<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed
<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed

Environment

Germany - TA Luft - Types and Classes

<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed
<ul style="list-style-type: none"> • <i>Proprietary</i> 	<i>Proprietary</i>	Not Listed

Germany - TA Luft - Emission Limits for Carcinogenic Substances

• Proprietary	Proprietary	Not Listed
• Proprietary	Proprietary	Not Listed
Germany - TA Luft - Emission Limits for Fibers		
• Proprietary	Proprietary	Not Listed
• Proprietary	Proprietary	Not Listed
Germany - TA Luft - Emission Limits for Inorganic Dusts		
• Proprietary	Proprietary	Not Listed
• Proprietary	Proprietary	Not Listed
Germany - TA Luft - Emission Limits for Inorganic Gases		
• Proprietary	Proprietary	Not Listed
• Proprietary	Proprietary	Not Listed
Germany - TA Luft - Emission Limits for Organic Substances		
• Proprietary	Proprietary	Not Listed
• Proprietary	Proprietary	Not Listed
Germany - Water Classification (VwVwS) - Annex 1		
• Proprietary	Proprietary	Not Listed
• Proprietary	Proprietary	Not Listed
Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes		
• Proprietary	Proprietary	ID Number 543, hazard class 1 - low hazard to waters (footnote 13)
• Proprietary	Proprietary	Not Listed
Germany - Water Classification (VwVwS) - Annex 3		
• Proprietary	Proprietary	Not Listed
• Proprietary	Proprietary	Not Listed

United States

Labor		
U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals		
• Proprietary	Proprietary	Not Listed
• Proprietary	Proprietary	Not Listed
U.S. - OSHA - Specifically Regulated Chemicals		
• Proprietary	Proprietary	Not Listed
• Proprietary	Proprietary	Not Listed

Environment		
U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants		
• Proprietary	Proprietary	Not Listed
• Proprietary	Proprietary	Not Listed
U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities		
• Proprietary	Proprietary	Not Listed
• Proprietary	Proprietary	Not Listed
U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities		
• Proprietary	Proprietary	Not Listed
• Proprietary	Proprietary	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

United States - California**Environment****U.S. - California - Proposition 65 - Carcinogens List**

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

United States - Pennsylvania**Labor****U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed
• <i>Proprietary</i>	<i>Proprietary</i>	Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

- Revision Date**
- 23/March/2017
- Preparation Date**
- 23/March/2017
- Disclaimer/Statement of Liability**
- Reasonable care has been taken in the preparation of this information, but the supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Safety Data Sheet before handling product.

Key to abbreviations

NDA = No Data Available