|     |   |  |  | - 1      | CRYSTRAN   |  |
|-----|---|--|--|----------|--|--|
|     |   |  | OPTICAL CRYSTAL<br>Julation (EC) No. 1907/2006 (RE |          | UV · VISIBLE · IR SPECIALIST OPTICS              |  |
| 1   |   |  |  |          | ision 2016 : Issued 16 <sup>th</sup> August 2016 |  |
| 1.  |   |  |  |          |  |  |
|     | I. PRODUCT IDENTIFIERS:   |  |  |          |  |  |
|     | Product Name:<br>Synonyms, Trade Names:   | Calcite Optical Crystal  |  |          |  |  |
|     |   | Calcium Carbonate, Calcite, CaCO3<br>THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST                     |  |          |  |  |
|     | Identified Uses:  | Optical Material for manufacture of Optical Components.  |  |          |  |  |
|     | 1.3. DETAILS OF THE SUPPLIER OF THE   |  |  | 113.     |  |  |
|     | Company:  | CRYSTRAN LTD, 1 Broom Road Business Park, Poole, Dorset UK BH12 4PA  |  |          |  |  |
|     |   | <b>≅</b> +44 1202 307650   |  |          |  |  |
|     | .4. EMERGENCY TELEPHONE NUMBER  |  |  |          |  |  |
|     | Emergency Phone:  |  | 50 (Monday to Friday 08:30 to 17:0                 |          |  |  |
|     | Emergency Action:   |  |  |          | ur doctor or local hospital accident             |  |
|     |   | and emergency department. The attending health professional will be able to contact the National Poisons   |  |          |  |  |
| •   |   | Information Service.   |  |          |  |  |
| 2.  | HAZARDS IDENTIFICATION  |  |  |          |  |  |
|     | 2.1. CLASSIFICATION OF THE SUBSTAN  |  |  |          | HMIS PRODUCT IDENTIFIER                          |  |
|     | No Hazardous Product as specified in Direct 2.2. LABEL ELEMENTS   | cuve 6//548/EEC.   |  |          | HEALTH 1   |  |
|     | Precautionary Statements:   |  |  |          | FLAMMABILTY 0                                    |  |
|     | P262 Do not breathe dust/fume   |  |  |          |  |  |
|     |   | 8  |  |          | PERSONAL PROTECTION B                            |  |
|     | 2.3. OTHER HAZARDS  |  |  |          | 1001   |  |
|     | None  |  |  |          | XX Y   |  |
|     |   |  |  |          | Glasses Gloves                                   |  |
| 3.  | COMPOSITION/INFORMATION<br>3.1. SUBSTANCES  | ON INGREDIE  | <u>NIS</u>   |          |  |  |
|     | Component Name CAS number   | %  | EC number (EINECS)                                 | EU index | UN number  |  |
|     | Calcium Carbonate 471-34-1  | 100%   | 207-439-9  | -        | -  |  |
|     |   |  |  |          |  |  |
| 4.  | FIRST AID MEASURES  |  |  |          |  |  |
|     | 4.1. DESCRIPTION OF FIRST AID MEASURES         GENERAL:       Consult a doctor for specific advice.         EYES:       Irrigate thoroughly with water for at least 15 minutes. If discomfort persists obtain medical attention.  |  |  |          |  |  |
|     |   |  |  |          |  |  |
|     |   |  |  |          |  |  |
|     |   |  |  |          |  |  |
|     | INHALATION: Remove to fresh air. Obta   | esh air. Obtain medical attention.<br>uth thoroughly with water. In severe cases obtain Medical Attention. |  |          |  |  |
|     |   | D EFFECTS, BOTH ACUTE AND DELAYED  |  |          |  |  |
|     | Refer to Section 2.2 and to section 11.   | JEFFEC15, DUIN   | ACUTE AND DELATED                                  |          |  |  |
|     |   | DICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED                                   |  |          |  |  |
|     | No Data.  |  |  |          |  |  |
|     |   |  |  |          |  |  |
| 5.  | 5. <u>FIRE FIGHTING MEASURES</u>  |  |  |          |  |  |
|     | 5.1. EXTINGUISHING MEDIA  |  |  |          |  |  |
|     | This product does not burn.   |  |  |          |  |  |
|     | 2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE  |  |  |          |  |  |
|     | None Known  |  |  |          |  |  |
|     | 5.3. ADVICE FOR FIREFIGHTERS  |  |  |          |  |  |
|     | Use breathing apparatus if necessary.   |  |  |          |  |  |
| 6.  | ACCIDENTAL RELEASE MEASURES   |  |  |          |  |  |
| ••• | <ul> <li>6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES         Wear suitable protective clothing &amp; equipment as listed under Section 8. Avoid making dust.</li> <li>6.2. ENVIRONMENTAL PRECAUTIONS         Prevent further leakage or spillage. Do not let product enter drains. Do not discharge to the environment.</li> <li>6.3. METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP</li> </ul> |  |  |          |  |  |
|     |   |  |  |          |  |  |
|     |   |  |  |          |  |  |
|     |   |  |  |          |  |  |
|     |   |  |  |          |  |  |
|     | Take up and containerize for proper disposal. Containerize any cleaning materials used for proper disposal.<br>6.4. REFERENCE TO OTHER SECTIONS   |  |  |          |  |  |
|     | <b>0.4. REFERENCE TO OTHER SECTIONS</b><br>Dispose as in Section 13.  |  |  |          |  |  |
|     |   |  |  |          |  |  |
| 7.  | HANDLING AND STORAGE  |  |  |          |  |  |
|     | 7.1. PRECAUTIONS FOR SAFE HANDLING:   |  |  |          |  |  |
|     | 7.2. Protect against physical damage and avoid generating dust.   |  |  |          |  |  |
|     | 7.3. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES   |  |  |          |  |  |
|     | No special precautions needed.  |  |  |          |  |  |
|     | 7.4. SPECIFIC END USES  |  |  |          |  |  |
|     | Optical Material for Manufacture of Optical   | Components.  |  |          |  |  |
|     |   |  |  |          |  |  |
|     |   |  |  |          |  |  |
|     |   |  |  |          |  |  |

**SAFETY DATA SHEET** 

# **CRYSTRAN LTD**

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# SAFETY DATA SHEET CALCITE OPTICAL CRYSTAL

According to Regulation (EC) No.1907/2006 (REACH)

# 8. EXPOSURE CONTROL AND PERSONAL PROTECTION

# 8.1. CONTROL PARAMETERS

ACGIH TLV (United States 1/2009)

OCCUPATIONAL EXPOSURE LIMITS (OEL) = 10mg/m<sup>3</sup> Inhalable; Particulates (Insoluble) (PNOS) 8 hour Time Weighted Average (TWA)  $= 4 \text{mg/m}^3$  Respirable; Particulates (Insoluble) (PNOS) 8 hour Time Weighted Average (TWA)

### EXPOSURE CONTROLS

Protective gloves made of PVA are required. Use of a laboratory coat is suggested. Safety goggles or safety glasses with side shields are required if there is any possibility of chipping or dust creation. Respirators must be worn when the threshold limit is exceeded. Provide adequate general mechanical ventilation, and local exhaust ventilation. Wash hands immediately after handling the product.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES APPEARANCE : Clear glassy geometric shapes, no odour. BOILING POINT (760mm Hg) Not Applicable. Decomposes. MELTING POINT: 824°C (decomposition) SPECIFIC GRAVITY: 2.71 g/mL SOLUBILITY IN WATER: Insoluble 0.0014g/100g H2O at 25°C 9.2. OTHER SAFETY INFORMATION

FLASH POINT: FLAMMABILITY: EXPLOSIVE PROPERTIES: VAPOUR PRESSURE: pH IN AQUEOUS SOLUTION: Not determined

12.5. RESULTS OF PBT AND vPvB ASSESSMENT

handled and disposed of with due care and attention.

No environmental hazard is anticipated provided that the material is

Not required or conducted

12.6. OTHER ADVERSE AFFECTS

14.4. PACKING GROUP: None

14.5. ENVIRONMENTAL HAZARDS: None

14.6. SPECIAL PRECAUTIONS FOR USER: None

14.7. TRANSPORT IN BULK MARPOL / IBC: No Data

Not Applicable Not Applicable Not Applicable Negligible at 25°C

None

### 10. STABILITY AND REACTIVITY

10.1. REACTIVITY Reacts with mineral acids. Generates carbon dioxide gas

10.3. POSSIBILITY OF HAZARDOUS REACTIONS None known 10.4. CONDITIONS TO AVOID

Avoid strong acids and oxidising agents

10.5. INCOMPATIBLE MATERIALS Strong Mineral Acids. HAZARDOUS DECOMPOSITION 10.6 PRODUCTS Normally none.

Stable under normal conditions of storage and use.

10.2. CHEMICAL STABILITY

### 11. TOXICOLOGICAL INFORMATION

### 11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

Animal experiments have shown that lungaveolitis may occur after subacute high exposure (50mg/m<sup>3</sup>) to dust. No toxicological effects were observed after 4 weeks subacute exposure at 10mg/m<sup>3</sup>. Nevertheless, particular care should be exercised when machining and creating dust or particles. **TOXIC DOSE - LD50 > 3160 \text{ mg/kg (oral/rat)}** CARCINOGENICITY: No evidence of carcinogenic properties. MUTAGENICITY/TERATOGENICITY: No evidence of reproductive effects.

### 12. ECOLOGICAL INFORMATION

- 12.1. TOXICITY No Data 12.2. PERSISTENCE AND DEGRADABILITY
- No Data **12.3. BIOACCUMULATIVE POTENTIAL**
- No Data 12.4. MOBILITY IN SOIL
  - No Data

### 13. DISPOSAL CONSIDERATIONS

**13.1. WASTE TREATMENT METHODS** Can be disposed of as ordinary refuse.

### 14. TRANSPORT INFORMATION

- 14.1. UN NUMBER: None
- 14.2. UN PROPER SHIPPING NAME:
- Not subject to transportation regulations.
- 14.3. TRANSPORT HAZARD CLASS: None

# **15. REGULATORY INFORMATION**

15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS / LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE TSCA: Listed in the TCSA Inventory

# 16. OTHER INFORMATION

REVISION DATE: 15th August 2016 ©2016 Crystran Ltd. The above information is believed to be correct but does not purport to be all inclusive and must be used only as a guide.

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