according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 2020/878 and US OSHA HCS 2015

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

1.1 Product Code: 501902

Product Name: Pro Series CA Yellow

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

1.3 Details of the Supplier of the Safety Data Sheet:

Company Name: GranQuartz
455 Satellite Blvd
Suwanee GA, 30024 United States of America

Web site address: www.granquartz.com

1.4 Emergency telephone number:

Emergency Contact: CHEMTREC (800)262-8200
International (703)527-3887

Section 2. Hazards Identification

2.1 Classification of the Substance or Mixture:

Skin Corrosion/Irritation, Category 2

Serious Eye Damage/Eye Irritation, Category 2

Specific Target Organ Toxicity (single exposure), Category 3

2.2 Label Elements:

GHS Signal Word: **Warning**

Hazard-determining components of labelling:

2-Propenoic acid, 2-cyano-, ethyl ester

GHS Hazard Phrases:

H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.

GHS Precautionary Phrases:

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases:

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P332+313 - If skin irritation occurs, get medical advice/attention.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+313 - If eye irritation persists, get medical advice/attention.

GHS Storage and Disposal Phrases:

P403+233 - Store container tightly closed in well-ventilated place.
P501 - Dispose of contents/container to hazardous or special waste facility in accordance to local and national regulations.

UFI:

2.3 Adverse Human Health Effects and Symptoms: Hazards not otherwise classified (HNOC) or not covered by GHS. Cyanoacrylate Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.

Section 3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
7085-85-0	2-Propenoic acid, 2-cyano-, ethyl ester 01-2119527766-29	80.0 -100.0 %	230-391-5 607-236-00-9	Skin Corr. 2: H315 Eye Damage 2A: H319 STOT (SE) 3: H335 H336

Section 4. First Aid Measures

4.1 Description of First Aid Measures: Call a POISON CENTER or doctor/physician if you feel unwell.

In Case of Inhalation: Remove victim to fresh air. Keep victim at rest in a postition comfortable for breathing.If still feeling unwell seek medical attention.

In Case of Skin Contact: Wash off with soap and plenty of water. Do not pull bonded skin apart. Skin may be gently peeled apart using a blunt object such as a spoon, preferably after soaking in warm soapy water. Cyanoacrylates give off heat on solidification. In rare cases a large drop will generate enough heat to cause a burn. Burns should be treated normally after the adhesive has been removed from the skin. If lips are accidentally stuck together apply warm water to the lips and encourage maximum wetting and pressure from saliva inside the mouth. Peel or roll lips apart. Do not try to pull the lips apart with direct opposing action. If skin irritation occurs: Get medical advice/attention.

In Case of Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continure rinsing. If the eye is bonded closed, release eyelashes with warm water by covering with wet pad. Cyanacrylate will bond to eye protein and will cause periods of weeping which will help to debond the adhesive. Keep eye covered until debonding is complete, usually within 1-3 days. Medical advice should be sought in case solid particles of cyanoacrylate trapped behind the eyelid cause abrasive damage

In Case of Ingestion: Ensure that breathing passages are not obstructed. The product will polymerise immediately in the mouth making it almost impossible to swallow. Saliva will slowly separate the solidified product from the mouth over several hours

4.2 Important Symptoms and Effects, Both Acute and Delayed: EYE: irritation, conjunctivitis
SKIN: redness, inflamation
RESPIRATORY: Irritation, shortness of breath, coughing, chest tightness

4.3 Indication of any immediate medical attention and special treatment needed: No data available.

Section 5. Fire Fighting Measures

5.1 Suitable Extinguishing Media: Dry powder, foam, carbon dioxide, or fine water spray

Unsuitable Extinguishing Media: Water Jet

5.2 Flammable Properties and Hazards: Carbon oxides.

Hazardous Combustion Products: Trace amounts of toxic fumes may be released on incineration. Hazardous combustionj products include oxides of carbon, oxides of nitrogen, irritating organic vapors.

Flash Pt: ~ 85.00 C (185.0 F) Method Used: Closed Cup

Explosive Limits: LEL: No data UEL: No data.

Autoignition Pt: 480.00 C (896.0 F)

5.3 Fire Fighting Instructions: Firefighters should wear positive pressure self-contained breathing apparatus (SCBA) and suitable protective clothing.

Section 6. Accidental Release Measures

6.1 Protective Precautions, Protective Equipment and Emergency Procedures: Ensure adequate ventilation. Wear protective gloves, protective clothing, eye protection, and face protection. Avoid skin and

6.2 Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and Material For Containment and Cleaning Up: Do not use clothes for mopping up. Flood contaminated area with water to complete polymerisation and scrape off floor. Cured material can be disposed of as non-hazardous waste.

Section 7. Handling and Storage

7.1 Precautions To Be Taken in Handling: Avoid breathing dust, fumes, gas, mist, vapoours, or spray. Use only outdoors or in a well-ventilated area. Low level ventilation is recommended when using large volumes. Use of dispensing equipment is recommended to minimize the risk of skin or eye contact. Wash hands thoroughly after handling.

7.2 Precautions To Be Taken in Storing: For optimum shelf life store in original containers under refrigerated conditions at 2 degrees Celsius to 8 degrees Celsius. Store locked up in tightly closed containers.

Other Precautions: Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
7085-85-0	2-Propenoic acid, 2-cyano-, ethyl ester	ACGIH TLV	TLV: 0.2 ppm	
		Australia	TWA: 9 mg/m3 (2 ppm)	
		Belgium OEL	TWA: 1.04 mg/m3 (0.2 ppm)	
		Switzerland OEL	TWA: 9 mg/m3 (2 ppm)	
		Germany MAK/TRK	TWA: 9 mg/m3 (2 ppm)	
		Denmark OEL	TWA: 10 mg/m3 (2 ppm) STEL: 20 mg/m3 (4 ppm)	
		Spain OEL	TWA: 0.2 ppm	
		Finland OEL	TWA: 1 mg/m3 (0.2 ppm)	

Multi-region format

7085-85-0 2-Propenoic acid, 2-cyano-, ethyl ester (continued)	France VL	TWA: 5 mg/m3	
	Hungary OEL	TWA: 5 mg/m3 STEL: 20 mg/m3	
	Ireland OEL	TWA: 0.2 ppm	
	NIOSH	CEIL: 5 mg/m3 (10m)	
	Netherlands OEL	TWA: 1 mg/m3 STEL: 10 mg/m3	
	OSHA PELs	TWA: 5 mg/m3	
	Poland	TWA: 1 mg/m3 STEL: 2 mg/m3	
	Sweden OEL	TWA: 10 mg/m3 (2 ppm) STEL: 20 mg/m3 (4 ppm) (15 min)	
	Britain EH40	STEL: 1.5 mg/m3 (0.3 ppm)	

Derived No-Effect Levels / Predicted No Effect Concentrations:

7085-85-0 2-Propenoic acid, 2-cyano-, ethyl ester

DNEL Worker	Value		Remarks
Long-term - Inhalation, local effects	9.250	mg/m³	DNEL (Derived No Effect Level)
Long-term - Inhalation, systemic effects	9.250	mg/m³	DNEL (Derived No Effect Level)

DNEL Consumer	Value		Remarks
Long-term - Inhalation, local effects	9.250	mg/m³	DNEL (Derived No Effect Level)
Long-term - Inhalation, systemic effects	9.250	mg/m³	DNEL (Derived No Effect Level)

PNEC	Value	Remarks
aquatic, sediment, marine water		no data available: testing technically not feasible.
aquatic, freshwater		no data available: testing technically not feasible.
predators, secondary poisoning		no data available: testing technically not feasible.
aquatic, STP		no data available: testing technically not feasible.

8.2 Exposure Controls:

8.2.1 Engineering Controls (Ventilation etc.): Provide adequate ventilation in area of use. Do NOT use this product in an enclosed or poorly ventilated area. Local exhaust ventilation is normally required when handling or using this product to keep airborne powder below the nationally authorized limits. If ventilation alone cannot control exposure, respiratory protection must be used.

8.2.2 Personal protection equipment:

Personal Protective Equipment Symbols:

Eye Protection: Safety glasses with side-shields conforming to EN166.

Protective Gloves: Nitrile gloves should be used to handle this product. Do not use gloves made of PVC, cotton or nylon. Gloves must be inspected prior to use. Handle with gloves. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Other Protective Clothing: Impervious clothing.

Respiratory Equipment (Specify Type): Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls.

If the respirator is the sole means of protection, use a full-face supplied air respirator.

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

8.2.3 Environmental Exposure Controls: Ensure adequate ventilation. Do not let product enter drains. Prevent further leakage or spillage if safe to do so.

Exposure Scenarios: Good general ventilation should be sufficient to control airborne levels. General industrial hygiene practice.

Section 9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical States:	[ ] Gas [X] Liquid [ ] Solid
Appearance and Odor:	Transparent. characteristic odor.
pH:	Not available
Melting Point:	~ -34.4 C (~ -30.00 F)
Boiling Point:	~ 214.00 C (417.2 F)
Flash Pt:	~ 85.00 C (185.0 F) Method Used: Closed Cup
Evaporation Rate:	Not available
Saturated Vapor Concentration:	No data.
Flammability (solid, gas):	No data available.
Explosive Limits:	LEL: No data UEL: No data.
Vapor Pressure (vs. Air or mm Hg):	< = 0.21 hPa at 20.0 C (68.0 F) No data.
Vapor Density (vs. Air = 1):	Not available
Specific Gravity (Water = 1):	No data.
Density:	1.040 G/CM3
Solubility in Water:	0.00002 at 20.0 C (68.0 F)
Octanol/Water Partition Coefficient:	1.42
Autoignition Pt:	480.00 C (896.0 F)
Decomposition Temperature:	No data.
Viscosity:	Not available
Explosive Properties:	No data available.
Oxidizing Properties:	No data available.

9.2 Other Information

9.2.1 Information with regard to physical hazard classes

Information with regard to primary physical hazard:

9.2.2 Other safety characteristics

Section 10. Stability and Reactivity

10.1	**Reactivity:**	No data available.
10.2	**Stability:**	Unstable [ ] Stable [X]
10.3	**Conditions To Avoid - Hazardous Reactions:**	Spontaneous polymerization will occur in the presence of moisture and other basic materials.
	Possibility of Hazardous Reactions:	Will occur [ ] Will not occur [X]
10.4	**Conditions To Avoid - Instability:**	Heat, flames and sparks. Stable under normal conditions of storage and use. This material should not be exposed to excessive moisture, humidity, or basic materials.
10.5	**Incompatibility - Materials To Avoid:**	Reducing agents, Water, Amines, Alcohols, Alkali metals, Oxidizing agents.
10.6	**Hazardous Decomposition or Byproducts:**	Oxides of carbon and oxides of nitrogen

Section 11. Toxicological Information

11.1	**Information on Toxicological Effects:**	Acute toxicity. ORAL: LD50(oral,rat) > 5000 mg/kg bw (OECD 401) DERMAL: LD50(dermal,rabbit) > 2000mg/kg bw (OCED 402) INHHALATION: In dry atmosphere with <50% humidity, vapours may irritate the eyes and respiratory system. Prolonged exposure to high concentrations of vapours may lead to chronic effects in sensitive individuals.
	Irritation or Corrosion:	Skin corrosion/irritation. Irritating to eyes. In a dry atmosphere of less than 50% relative humidity, vapours may cause irritation and lachrymatory effect.
	Sensitization:	Due to polymerisation at the skin surface, allergic reaction is not considered possible. The polymerized material is not able to penetrate into the epidermis.
	Chronic Toxicological Effects:	STOT (Single Exposure) - Ethyl 2-cyanoacrylate may cause irritation for skin, eyes and respiratory system. STOT (Repeated Exposure) - Ethyl 2-cyanoacrylate is not toxic by repeated abroption.
	Carcinogenicity/Other Information:	This product is non-carcinogenic and not toxic by reproduction. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. 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: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. 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. Because of the reduced exposure to monomer and the reported negative test result in various mutagenicity tests. ethyl-2-cyanoacrylate cannot be classified as a mutagen. Aspiration Hazard - No Data Available
Carcinogenicity:		NTP? No IARC Monographs? No OSHA Regulated? No

Section 12. Ecological Information

12.1	**Toxicity:**	Low ecotoxicity
12.2	**Persistence and Degradability:**	Not Applicable (the test compound would polymerize immediately on contact with water or the moisture in the soil
12.3	**Bioaccumulative Potential:**	Not Applicable - In the presence of moisture, ethyl-2-cyanoacrylate polymerises within seconds.
12.4	**Mobility in Soil:**	Not Applicable (the test compound would polymerize immediately on contact with water or moisture in soil.
12.5	**Results of PBT and vPvB assessment:**	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
12.6	**Other adverse effects:**	No data available.

Section 13. Disposal Considerations

13.1	**Waste Disposal Method:**	PRODUCT DISPOSAL Cured Adhesive: Dispose of as water insoluble non-toxic solid chemical in authorized landfill or incinerate under controlled conditions. Dispose of in accordance with local and national regulations. Polymerize by adding slowly to water (10:1) Contribution of this product to waste is very insignificant in comparison to article in which it is used. - DISPOSAL OF UNLEANED PACKAGES After use, tubes, cartons, and bottles containing residual product should be disposed of as chemically contaminate waste in an authorized legal landfill site or incinerated. Disposal must be made according to official regulations. - WASTE IDENTIFICATION : waste and sealants containing organic solvents and other dangerous substances.
	European Waste Catelog No.	080409

Section 14. Transport Information

14.1 LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not regulated as a hazardous material.
DOT Hazard Class:
UN/NA Number:

14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Not regulated as a hazardous material.
UN Number:
Hazard Class:

14.2 MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Not regulated as a hazardous material.
UN Number: **Packing Group:**
Hazard Class:

14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Liquid, (Cyanoacrylate ester)
Not regulated as a hazardous material.
Inner and outer packaging should meet requirements of Packing Instruction 906 when transported by Passenger or Cargo Aircraft
-

UN Number:
Packing Group:
Hazard Class:
IATA Classification: 9

Section 15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
7085-85-0	2-Propenoic acid, 2-cyano-, ethyl ester	No	No	Yes-Cat. N106 (100%)

EPA SARA Title III Section 313 Toxic Release Inventory.
This product contains a toxic chemical or chemicals subject to the reporting requirements of EPCRA Section 313 (40 CFR Section 372).

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

[ ] Yes [X] No Explosive
[ ] Yes [X] No Flammable (gases, aerosols, liquid, or solid)
[ ] Yes [X] No Oxidizer (liquid, solid or gas)
[ ] Yes [X] No Self-reactive
[ ] Yes [X] No Pyrophoric (liquid or solid)
[ ] Yes [X] No Pyrophoric gas
[ ] Yes [X] No Self-heating
[ ] Yes [X] No Organic peroxide
[ ] Yes [X] No Corrosive to metal
[ ] Yes [X] No Gas under pressure (compressed gas)
[ ] Yes [X] No In contact with water emits flammable gas
[ ] Yes [X] No Combustible Dust
[ ] Yes [X] No (Physical) Hazard Not Otherwise Classified (HNOC)

[ ] Yes [X] No Acute toxicity (any route of exposure)
[X] Yes [ ] No Skin Corrosion or Irritation
[X] Yes [ ] No Serious eye damage or eye irritation
[ ] Yes [X] No Respiratory or Skin Sensitization
[ ] Yes [X] No Germ cell mutagenicity
[ ] Yes [X] No Carcinogenicity
[ ] Yes [X] No Reproductive toxicity
[X] Yes [ ] No Specific target organ toxicity (single or repeated exposure)
[ ] Yes [X] No Aspiration Hazard
[ ] Yes [X] No Simple Asphyxiant
[ ] Yes [X] No (Health) Hazard Not Otherwise Classified (HNOC)

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
7085-85-0	2-Propenoic acid, 2-cyano-, ethyl ester	TSCA: Yes - Inventory: Active/Exempt, 8A PAIR, 8D TERM; CA PROP.65: No

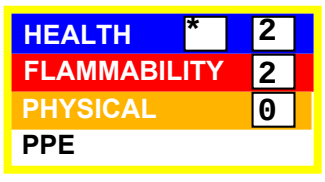
CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
7085-85-0	2-Propenoic acid, 2-cyano-, ethyl ester	REACH: Yes - 01-2119527766-29: Full, (P)

Section 16. Other Information

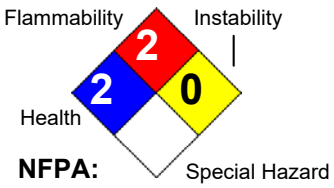
Revision Date: 06/23/2022

Hazard Rating System:

HMIS:



NFPA:



Additional Information About This Product: No data available.

Company Policy or Disclaimer: The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new

made-up material.