SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2020/878

PQZ-230

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : PQZ-230
Registration number REACH : Not applicable (mixture)
Product type REACH : Mixture

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

1.2.1 Relevant identified uses

Filler

1.2.2 Uses advised against

No uses advised against known

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

Novatio*
Industrielaan 5B
B-2250 Olen
☎ +32 14 25 76 40
🖷 +32 14 22 02 66
info@novatio.be
*NOVATIO is a registered trademark of Novatech International N.V.

Manufacturer of the product

Novatech International N.V.
Industrielaan 5B
B-2250 Olen
☎ +32 14 85 97 37
🖷 +32 14 85 97 38
info@novatech.be

1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch) :
+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
STOT RE	category 1	H372: Causes damage to organs through prolonged or repeated exposure.

2.2. Label elements

Contains: Quartz (SiO2).

Signal word Danger

H-statements

H372 Causes damage to organs through prolonged or repeated exposure.

P-statements

P261 Avoid breathing dust.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P314 Get medical advice/attention if you feel unwell.

2.3. Other hazards

No other hazards known

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to CLP	Note	Remark	M-factors and ATE
quartz (SiO2)	14808-60-7 238-878-4	80% <C<100%		(2)	Constituent	
Quartz (SiO2)	14808-60-7 238-878-4	10%<C<20%	STOT RE 1; H372	(1)(2)	Constituent	

(1) For H- and EUH-statements in full: see heading 16
(2) Substance with a Community workplace exposure limit

SECTION 4: First aid measures

4.1. Description of first aid measures

General:
Observe (own) safety. If possible, approach victim and check vital functions. In case of injury and/or intoxication, call the European emergency number 112. Treat symptoms starting with most life-threatening injuries and disorders. Keep victim under observation, possibility of delayed symptoms.

After inhalation:
Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.

After skin contact:
If possible, wipe up/dry remove chemical. Then rinse/shower immediately with (lukewarm) water. If irritation persists, consult a doctor/medical service.

After eye contact:
Rinse immediately with (lukewarm) water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.

After ingestion:
Rinse mouth with water. If you feel unwell, consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

4.2. Most important symptoms and effects, both acute and delayed

4.2.1 Acute symptoms

After inhalation:
No effects known.

After skin contact:
No effects known.

After eye contact:
No effects known.

After ingestion:
No effects known.

4.2.2 Delayed symptoms
No effects known.

4.3. Indication of any immediate medical attention and special treatment needed

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media:
Adapt extinguishing media to the environment for surrounding fires.

5.1.2 Unsuitable extinguishing media:
Not applicable.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

5.3.1 Instructions:
No specific fire-fighting instructions required.

5.3.2 Special protective equipment for fire-fighters:
Gloves (EN 374). Protective clothing (EN 14605 or EN 13034). Dust cloud production: self-contained breathing apparatus (EN 136 + EN 137). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Prevent dust cloud formation, e.g. by wetting. No naked flames.

6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Protective clothing (EN 14605 or EN 13034). Dust cloud production: self-contained breathing apparatus (EN 136 + EN 137).

Suitable protective clothing

See heading 8.2

6.2. Environmental precautions

Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray.

6.3. Methods and material for containment and cleaning up

Stop dust cloud by humidifying. Scoop solid spill into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

6.4. Reference to other sections

See heading 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1. Precautions for safe handling

Avoid raising dust. Keep away from naked flames/heat. Observe very strict hygiene - avoid contact. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Meet the legal requirements. Store in a dry area.

7.2.2 Keep away from:

Heat sources.

7.2.3 Suitable packaging material:

No data available

7.2.4 Non suitable packaging material:

No data available

7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

EU

Respirable crystalline silica dust	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	0.1 mg/m³ (2)

(2): Respirable fraction

Belgium

Silices cristallines : quartz (poussières alvéolaires)	Time-weighted average exposure limit 8 h	0.1 mg/m³

The Netherlands

Respirabel kristallijn silicastof - kwarts	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	0.075 mg/m³

France

Silices cristallines quartz, fraction alvéolaire	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	0.1 mg/m³

UK

Silica, respirable crystalline (respirable fraction)	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	0.1 mg/m³

USA (TLV-ACGIH)

Silica, crystalline - alfa-quartz and cristobalite	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	0.025 mg/m³ (R)

(R): Respirable fraction

b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

Product name	Test	Number
Crystalline Silica	OSHA	ID 142
Quartz (silica, crystalline, by XRD)	NIOSH	7500
quartz	NIOSH	7601
quartz	NIOSH	7602
Silica, Crystalline, Respirable	NIOSH	7500
Silica, Crystalline	NIOSH	7601
Silica, Crystalline	NIOSH	7602
Silica, Quartz in Coal Dust (Silica in coal mine dust)	NIOSH	7603

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 Threshold values

If applicable and available it will be listed below.

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Avoid raising dust. Keep away from naked flames/heat. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

Observe very strict hygiene - avoid contact. Do not eat, drink or smoke during work.

a) Respiratory protection:

Dust production: dust mask with filter type P3. High dust production: self-contained breathing apparatus (EN 136 + EN 137).

b) Hand protection:

Protective gloves against chemicals (EN 374).

c) Eye protection:

Safety glasses (EN 166). In case of dust production: protective goggles (EN 166).

d) Skin protection:

Protective clothing (EN 14605 or EN 13034).

8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Solid
Odour	Odourless
Odour threshold	No data available in the literature
Colour	White
Particle size	No data available in the literature
Explosion limits	Not applicable
Flammability	Not classified as flammable
Log Kow	Not applicable (mixture)
Dynamic viscosity	Not applicable (solid)
Kinematic viscosity	Not applicable (solid)
Melting point	1710 °C
Boiling point	No data available in the literature
Relative vapour density	Not applicable (solid)
Vapour pressure	Not applicable (solid)
Solubility	Water ; miscible
Relative density	2.62 ; 20 °C
Absolute density	2650 kg/m³ ; 20 °C
Decomposition temperature	No data available in the literature
Auto-ignition temperature	Not applicable
Flash point	Not applicable (solid)
pH	No data available in the literature

9.2. Other information

Evaporation rate	No data available in the literature
Explosive properties	Not classified
Oxidising properties	Not classified

SECTION 10: Stability and reactivity

10.1. Reactivity
No data available.

10.2. Chemical stability
No data available.

10.3. Possibility of hazardous reactions
No data available.

10.4. Conditions to avoid
Precautionary measures
Avoid raising dust. Keep away from naked flames/heat.

10.5. Incompatible materials
No data available.

10.6. Hazardous decomposition products
No data available.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
11.1.1 Test results

Acute toxicity

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No (test)data on the mixture available

Judgement is based on the relevant ingredients

Conclusion

Not classified for acute toxicity

Corrosion/irritation

PQZ-230

No (test)data on the mixture available

Judgement is based on the relevant ingredients

quartz (SiO2)

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Slightly irritating					Literature study	
Skin	Not irritating					Literature study	

Conclusion

Not classified as irritating to the respiratory system

Not classified as irritating to the skin

Not classified as irritating to the eyes

Respiratory or skin sensitisation

PQZ-230

No (test)data on the mixture available

Judgement is based on the relevant ingredients

Conclusion

Not classified as sensitizing for inhalation

Not classified as sensitizing for skin

Specific target organ toxicity

PQZ-230

No (test)data on the mixture available

Classification is based on the relevant ingredients

Quartz (SiO2)

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Inhalation			STOT RE cat.1					Literature study

Conclusion

Causes damage to organs through prolonged or repeated exposure.

Mutagenicity (in vitro)

PQZ-230

No (test)data on the mixture available

Judgement is based on the relevant ingredients

Mutagenicity (in vivo)

PQZ-230

No (test)data on the mixture available

Judgement is based on the relevant ingredients

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

PQZ-230

No (test)data on the mixture available

Judgement is based on the relevant ingredients

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

PQZ-230

No (test)data on the mixture available

Judgement is based on the relevant ingredients

Conclusion

Not classified for reprotoxic or developmental toxicity

Toxicity other effects

PQZ-230

No (test)data on the mixture available

Chronic effects from short and long-term exposure

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No effects known.

11.2. Information on other hazards

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

PQZ-230

No (test)data on the mixture available

Judgement of the mixture is based on the relevant ingredients

Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

12.2. Persistence and degradability

Water

Biodegradability: not applicable

12.3. Bioaccumulative potential

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Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

quartz (SiO2)

Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available			

Quartz (SiO2)

Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available in the literature			

Conclusion

No test data of component(s) available

12.4. Mobility in soil

No (test)data on mobility of the component(s) available

12.5. Results of PBT and vPvB assessment

The criteria of PBT and vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006 do not apply to inorganic substances.

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties

12.7. Other adverse effects

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Greenhouse gases

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1. Waste treatment methods

13.1.1 Provisions relating to waste

European Union

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997. The waste code must be assigned by the user, preferably in consultation with the (environmental) authorities concerned.

13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Should not be landfilled with household waste. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

13.1.3 Packaging/Container

European Union

Waste material code packaging (Directive 2008/98/EC).
15 01 10* (packaging containing residues of or contaminated by dangerous substances).

SECTION 14: Transport information

Road (ADR), Rail (RID), Inland waterways (ADN), Sea (IMDG/IMSBC), Air (ICAO-TI/IATA-DGR)

14.1. UN number

Transport	Not subject

14.2. UN proper shipping name

14.3. Transport hazard class(es)

Hazard identification number	
Class	
Classification code	

14.4. Packing group

Packing group	
Labels	

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	
Limited quantities	

14.7. Maritime transport in bulk according to IMO instruments

Annex II of MARPOL 73/78	Not applicable

SECTION 15: Regulatory information

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

European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
	Not applicable (inorganic)

National legislation Belgium

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No data available

quartz (SiO2)

Additional classification	Silices cristallines : quartz (poussières alvéolaires); C; La mention “C” signifie que l’agent en question relève du champ d’application de l’arrêté royal du 2 décembre 1993 concernant la protection des travailleurs contre les risques liés à l’exposition à des agents cancérigènes et mutagènes et reprotoxiques au travail.

Quartz (SiO2)

Additional classification	Silices cristallines : quartz (poussières alvéolaires); C; La mention “C” signifie que l’agent en question relève du champ d’application de l’arrêté royal du 2 décembre 1993 concernant la protection des travailleurs contre les risques liés à l’exposition à des agents cancérigènes et mutagènes et reprotoxiques au travail.

National legislation The Netherlands

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Waterbezwaarlijkheid	B (5); Algemene Beoordelingsmethodiek (ABM)

quartz (SiO2)

SZW - Lijst van kankerverwekkende stoffen	silica (respirabel stof, kristallijn); Listed in SZW-list of carcinogenic substances

Quartz (SiO2)

SZW - Lijst van kankerverwekkende stoffen	silica (respirabel stof, kristallijn); Listed in SZW-list of carcinogenic substances

National legislation France

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No data available

National legislation Germany

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WGK	nwg; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017

Quartz (SiO2)

TA-Luft	5.2.1

National legislation United Kingdom

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No data available

quartz (SiO2)

Carcinogen	Silica, respirable crystalline (respirable fraction); Carc

Quartz (SiO2)

Carcinogen	Silica, respirable crystalline (respirable fraction); Carc

Other relevant data

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No data available

quartz (SiO2)

IARC - classification	1; Silica dust, crystalline, in the form of quartz or cristobalite
TLV - Carcinogen	Silica, crystalline - alfa-quartz and cristobalite; A2

Quartz (SiO2)

IARC - classification	1; Silica dust, crystalline, in the form of quartz or cristobalite
TLV - Carcinogen	Silica, crystalline - alfa-quartz and cristobalite; A2

15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

SECTION 16: Other information

Full text of any H- and EUH-statements referred to under heading 3:

H372 Causes damage to organs through prolonged or repeated exposure if inhaled.
H372 Causes damage to organs through prolonged or repeated exposure.

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers

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