PhenoCure Powders and Premolds

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)
Issue date: 6/1/2022 Revision date: 6/1/2022 Version: 1.0 (M)SDS Number: 1346828

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Product name : PhenoCure Powders and Premolds
Product code : 20-3100-080, 20-3100-400, 20-3100-500, 20-3200-080, 20-3200-400, 20-3200-500, 20-3300-080, 20-3300-400, 20-3300-500, 20-3111-501, 20-3112-501, 20-3113-501, 20-10090, 20-3212-501, 20-3213-501, 20-331-501, 20-3313-501

1.2. Recommended use and restrictions on use

Recommended use : Laboratory chemicals
Restrictions on use : None known

1.3. Supplier

Buehler
41 Waukegan Rd
Lake Bluff, IL 60044
T 1-847-295-6500
custserv@buehler.com

1.4. Emergency telephone number

Emergency number : Global Access Code: 334545; Americas" +1 760 476 3962; Middle East/Africa: +1 760 476 3959; Asia Pacific +1 760 476 3960; Europe +1 760 476 3961

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Skin corrosion/irritation, Category 1	H314	Causes severe skin burns and eye damage.
Serious eye damage/eye irritation, Category 1	H318	Causes serious eye damage.
Respiratory sensitisation, Category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitisation, Category 1	H317	May cause an allergic skin reaction.
Carcinogenicity, Category 1A	H350	May cause cancer.
Specific target organ toxicity – Single exposure, Category 1	H370	Causes damage to organs.
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation.
Specific target organ toxicity – Repeated exposure, Category 1	H372	Causes damage to organs through prolonged or repeated exposure.
Health hazard not otherwise classified, category 1		
Combustible Dust		May form combustible dust concentrations in air

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS CA labelling

Hazard pictograms (GHS CA) :

Signal word (GHS CA) : Danger

Hazard statements (GHS CA)	:	May form combustible dust concentrations in air H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 - May cause respiratory irritation. H350 - May cause cancer. H370 - Causes damage to organs. H372 - Causes damage to organs through prolonged or repeated exposure.
Precautionary statements (GHS CA)	:	P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P272 - Contaminated work clothing should not be allowed out of the workplace. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P284 - [In case of inadequate ventilation] wear respiratory protection. P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting P302+P352 - IF ON SKIN: Wash with plenty of water. P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water . P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P311 - IF exposed or concerned: Call a POISON CENTER or doctor. P308+P313 - IF exposed or concerned: Get medical advice/attention. P310 - Immediately call a POISON CENTER or doctor. P312 - Call a POISON CENTER or doctor if you feel unwell. P314 - Get medical advice/attention if you feel unwell. P321 - Specific treatment (see supplemental first aid instruction on this label). P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor. P362+P364 - Take off contaminated clothing and wash it before reuse. P363 - Wash contaminated clothing before reuse. P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS CA)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	wt%	Classification (GHS CA)
wood dust	-	-	0 – 60	Eye Irrit. 2B, H320 Carc. 2, H351 STOT SE 3, H335 Comb. Dust
Graphite	C.I. Pigment Black 10 / C.I. 77265	CAS-No.: 7782-42-5	0 – 40	Carc. 1A, H350 Carc. 2, H351 STOT RE 1, H372 Comb. Dust
Kaolin	CI 77004 / KAOLIN	CAS-No.: 1332-58-7	0 – 40	Carc. 1A, H350 STOT RE 1, H372

Name	Chemical name / Synonyms	Product identifier	wt%	Classification (GHS CA)
Talc (Mg3H2(SiO3)4)	Talc / Magnesium silicate / Talc (containing no asbestos fibers) / Talc (containing no asbestos) / Talc not containing asbestiform fibres / Talc, not containing asbestos / Talc, containing no asbestos fibres / Talc (nonasbestos form) / Talc (non-asbestos form) / Talc, non-fibrous type / Talc, non fibrous / Talc (containing no asbestos fibres) / Non-asbestiform talc / Talc (not containing asbestos) / C.I. 77718 / TALC / Trimagnesium tetrasilicon undecaoxide hydrate / Talc, non-asbestiform / Talc, non-fibrous / Pigment White 26 / Magnesium silicate, hydrous / Talc, not containing mineral fibers (including asbestos) / Asbestiform talc	CAS-No.: 14807-96-6	0 – 20	STOT RE 1, H372 Comb. Dust

Name	Chemical name / Synonyms	Product identifier	wt%	Classification (GHS CA)
1,3,5,7-Tetraazatricyclo[3.3.1.1(3,7)]decane	Duirexol / Urotropine / Preparation AF / Hexamethylenetetramine / Methenamine / METHENAMINE / Hexamine (heterocycle) / Hexamine / 1,3,5,7-Tetraazaadamantane	CAS-No.: 100-97-0	2 – 15	Flam. Sol. 2, H228 Resp. Sens. 1, H334 Skin Sens. 1B, H317 Comb. Dust
Carbon black	C.I. 77266 / C.I. Pigment Black 6 / C.I. Pigment Black 7 / Carbon blacks / Lampblack / CI 77266 / Vegetable carbon / Microjet Black CW / Pigment Black 7 / Coal soot / Coal soots / Channel black / Bonjet Black CW / D and C Black No. 4	CAS-No.: 1333-86-4	0 – 12	Carc. 2, H351 Comb. Dust
Calcium hydroxide	Calcium dihydroxide / Calcium hydroxide (Ca(OH)2) / Hydrated lime / Lime, hydrated / CALCIUM HYDROXIDE / Slaked lime	CAS-No.: 1305-62-0	0 – 10	HHNOC 1 Skin Corr. 1, H314 Eye Dam. 1, H318 STOT SE 3, H335
Phenol	Hydroxybenzene / Monohydroxybenzene / Phenic acid / Benzene, hydroxy- / Carbolic acid / Phenylalcohol	CAS-No.: 108-95-2	< 3.5	HHNOC 1 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 1 (Inhalation), H330 Skin Corr. 1, H314 Eye Dam. 1, H318 STOT SE 1, H370 STOT RE 2, H373

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell. Call a physician immediately.

First-aid measures after skin contact : Call a physician immediately. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Rinse skin with water/shower.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately. Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately. Immediately call a POISON CENTER/doctor.

First-aid measures general : Call a physician immediately.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/effects after skin contact : Burns. May cause an allergic skin reaction. May cause moderate irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : Serious damage to eyes. May cause eye irritation.

Symptoms/effects after ingestion : Burns.

4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Not determined.

5.3. Specific hazards arising from the hazardous product

Fire hazard : May form combustible dust concentrations in air.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : Mechanically recover the product. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Avoid dust formation.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Store in a closed container. Keep cool.

Storage area : Store away from heat.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

1,3,5,7-Tetraazatricyclo[3.3.1.1(3,7)]decane (100-97-0)	
Canada (Manitoba) - Occupational Exposure Limits	
OEL TWA	1 mg/m³ (inhalable fraction and vapor)
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
OEL TWA	1 mg/m³ (inhalable fraction and vapor)
Canada (Nova Scotia) - Occupational Exposure Limits	
OEL TWA	1 mg/m³ (inhalable fraction and vapor)
Canada (Ontario) - Occupational Exposure Limits	
OEL STEL	2 mg/m³
OEL STEL [ppm]	0.35 ppm
Canada (Prince Edward Island) - Occupational Exposure Limits	
OEL TWA	1 mg/m³ (inhalable fraction and vapor)
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	1 mg/m³ (inhalable fraction and vapor)
ACGIH chemical category	Not Classifiable as a Human Carcinogen, dermal sensitizer

Phenol (108-95-2)	
Canada (Alberta) - Occupational Exposure Limits	
OEL TWA	19 mg/m³
OEL TWA [ppm]	5 ppm

Phenol (108-95-2)	
Canada (Quebec) - Occupational Exposure Limits	
VEMP (OEL TWA)	19 mg/m³
VEMP (OEL TWA) [ppm]	5 ppm
Canada (British Columbia) - Occupational Exposure Limits	
OEL TWA [ppm]	5 ppm
Canada (Manitoba) - Occupational Exposure Limits	
OEL TWA [ppm]	5 ppm
Canada (New Brunswick) - Occupational Exposure Limits	
OEL TWA	19 mg/m³
OEL TWA [ppm]	5 ppm
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
OEL TWA [ppm]	5 ppm
Canada (Nova Scotia) - Occupational Exposure Limits	
OEL TWA [ppm]	5 ppm
Canada (Nunavut) - Occupational Exposure Limits	
OEL TWA [ppm]	5 ppm
OEL STEL [ppm]	7.5 ppm
Canada (Northwest Territories) - Occupational Exposure Limits	
OEL TWA [ppm]	5 ppm
OEL STEL [ppm]	7.5 ppm
Canada (Ontario) - Occupational Exposure Limits	
OEL TWA [ppm]	5 ppm
Canada (Prince Edward Island) - Occupational Exposure Limits	
OEL TWA [ppm]	5 ppm
Canada (Saskatchewan) - Occupational Exposure Limits	
OEL TWA [ppm]	5 ppm
OEL STEL [ppm]	7.5 ppm
Canada (Yukon) - Occupational Exposure Limits	
OEL TWA	19 mg/m³
OEL TWA [ppm]	5 ppm
OEL STEL	38 mg/m³
OEL STEL [ppm]	10 ppm
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	5 ppm
ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route, Not Classifiable as a Human Carcinogen

Phenol (108-95-2)	
USA - ACGIH - Biological Exposure Indices	
BEI	250 mg/g creatinine Parameter: Phenol with hydrolysis - Medium: urine - Sampling time: end of shift (background, nonspecific)

Calcium hydroxide (1305-62-0)	
Canada (Alberta) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Canada (Quebec) - Occupational Exposure Limits	
VEMP (OEL TWA)	5 mg/m³
Canada (British Columbia) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Canada (Manitoba) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Canada (New Brunswick) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Canada (Nova Scotia) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Canada (Nunavut) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
OEL STEL	10 mg/m³
Canada (Northwest Territories) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
OEL STEL	10 mg/m³
Canada (Ontario) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Canada (Prince Edward Island) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Canada (Saskatchewan) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
OEL STEL	10 mg/m³
Canada (Yukon) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
OEL STEL	10 mg/m³
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	5 mg/m³

Carbon black (1333-86-4)	
Canada (Alberta) - Occupational Exposure Limits	
OEL TWA	3.5 mg/m³
Canada (Quebec) - Occupational Exposure Limits	
VEMP (OEL TWA)	3.5 mg/m³
Canada (British Columbia) - Occupational Exposure Limits	
OEL TWA	3 mg/m³ (inhalable)
Canada (Manitoba) - Occupational Exposure Limits	
OEL TWA	3 mg/m³ (inhalable particulate matter)
Canada (New Brunswick) - Occupational Exposure Limits	
OEL TWA	3.5 mg/m³
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
OEL TWA	3 mg/m³ (inhalable particulate matter)
Canada (Nova Scotia) - Occupational Exposure Limits	
OEL TWA	3 mg/m³ (inhalable particulate matter)
Canada (Nunavut) - Occupational Exposure Limits	
OEL TWA	3.5 mg/m³
OEL STEL	7 mg/m³
Canada (Northwest Territories) - Occupational Exposure Limits	
OEL TWA	3.5 mg/m³
OEL STEL	7 mg/m³
Canada (Ontario) - Occupational Exposure Limits	
OEL TWA	3 mg/m³ (inhalable)
Canada (Prince Edward Island) - Occupational Exposure Limits	
OEL TWA	3 mg/m³ (inhalable particulate matter)
Canada (Saskatchewan) - Occupational Exposure Limits	
OEL TWA	3.5 mg/m³
OEL STEL	7 mg/m³
Canada (Yukon) - Occupational Exposure Limits	
OEL TWA	3.5 mg/m³
OEL STEL	7 mg/m³
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	3 mg/m³ (inhalable particulate matter)
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans

Graphite (7782-42-5)	
Canada (Alberta) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (all forms except Graphite fibres-respirable)

Graphite (7782-42-5)	
Canada (Quebec) - Occupational Exposure Limits	
VEMP (OEL TWA)	2 mg/m³ (containing no Asbestos and <1% Crystalline silica, except Graphite fibres-respirable dust)
Canada (British Columbia) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (all forms except Graphite fibres-respirable)
Canada (Manitoba) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (all forms except Graphite fibers-respirable particulate matter)
Canada (New Brunswick) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (all forms except graphite fibres)
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (all forms except Graphite fibers-respirable particulate matter)
Canada (Nova Scotia) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (all forms except Graphite fibers-respirable particulate matter)
Canada (Nunavut) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (natural, all forms, except Graphite fibres-respirable fraction)
OEL STEL	4 mg/m³ (natural, all forms, except Graphite fibres-respirable fraction)
Canada (Northwest Territories) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (natural, all forms, except Graphite fibres-respirable fraction)
OEL STEL	4 mg/m³ (natural, all forms, except Graphite fibres-respirable fraction)
Canada (Ontario) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (except Graphite fibres-respirable)
Canada (Prince Edward Island) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (all forms except Graphite fibers-respirable particulate matter)
Canada (Saskatchewan) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (natural, except Graphite fibres-respirable fraction)
OEL STEL	4 mg/m³ (natural, except Graphite fibres-respirable fraction)
Canada (Yukon) - Occupational Exposure Limits	
OEL TWA	20 mppcf 30 mppcf (synthetic) 10 mg/m³ (synthetic)
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	2 mg/m³ (all forms except graphite fibers-respirable particulate matter)

Kaolin (1332-58-7)	
Canada (Alberta) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (respirable)
Canada (Quebec) - Occupational Exposure Limits	
VEMP (OEL TWA)	5 mg/m³ (containing no Asbestos and <1% Crystalline silica-respirable dust)

Kaolin (1332-58-7)	
Canada (British Columbia) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica-respirable particulate)
Canada (Manitoba) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable particulate matter-particulate matter, respirable particulate matter)
Canada (New Brunswick) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable fraction)
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable particulate matter-particulate matter, respirable particulate matter)
Canada (Nova Scotia) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable particulate matter-particulate matter, respirable particulate matter)
Canada (Nunavut) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (respirable fraction)
OEL STEL	4 mg/m³ (respirable fraction)
Canada (Northwest Territories) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (respirable fraction)
OEL STEL	4 mg/m³ (respirable fraction)
Canada (Ontario) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (containing no Asbestos and <1% Crystalline silica-respirable)
Canada (Prince Edward Island) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable particulate matter-particulate matter, respirable particulate matter)
Canada (Saskatchewan) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (respirable fraction)
OEL STEL	4 mg/m³ (respirable fraction)
Canada (Yukon) - Occupational Exposure Limits	
OEL TWA	30 mppcf 10 mg/m³
OEL STEL	20 mg/m³
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	2 mg/m³ (particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter)
ACGIH chemical category	Not Classifiable as a Human Carcinogen

Talc (Mg3H2(SiO3)4) (14807-96-6)	
Canada (Alberta) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (respirable particulate)

Talc (Mg3H2(SiO3)4) (14807-96-6)	
Canada (Quebec) - Occupational Exposure Limits	
VEMP (OEL TWA)	3 mg/m³ (respirable dust)
Canada (British Columbia) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica-respirable particulate)
Canada (Manitoba) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica-particulate matter, respirable particulate matter)
Canada (New Brunswick) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica, respirable fraction)
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica-particulate matter, respirable particulate matter)
Canada (Nova Scotia) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica-particulate matter, respirable particulate matter)
Canada (Nunavut) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (respirable fraction)
Canada (Northwest Territories) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (respirable fraction)
Canada (Ontario) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (containing no Asbestos and <1% Crystalline silica-respirable)
Canada (Prince Edward Island) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica-particulate matter, respirable particulate matter)
Canada (Saskatchewan) - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (respirable fraction)
Canada (Yukon) - Occupational Exposure Limits	
OEL TWA	20 mppcf
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	2 mg/m³ (particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter)
ACGIH chemical category	Not Classifiable as a Human Carcinogen containing no asbestos fibers

wood dust	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	1 mg/m³

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:
Avoid all unnecessary exposure.

Hand protection:
Protective gloves

Eye protection:
Chemical goggles or face shield. Safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):

Other information:
Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Appearance	:	Solid (various forms).
Colour	:	No data available
Odour	:	Phenol
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	No data available
Melting point	:	No data available
Freezing point	:	Not applicable
Boiling point	:	No data available
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Non flammable.
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Solubility	:	No data available
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Viscosity, kinematic	:	Not applicable
Explosive limits	:	Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions : No dangerous reactions known under normal conditions of use.
Conditions to avoid : Avoid dust formation. Heat. No flames, no sparks. Eliminate all sources of ignition.
Incompatible materials : Strong oxidizing agents.
Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hardening time: : No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified.
Acute toxicity (dermal) : Not classified.
Acute toxicity (inhalation) : Not classified.

1,3,5,7-Tetraazatricyclo[3.3.1.1(3,7)]decane (100-97-0)	
LD50 oral rat	> 20000 mg/kg
LD50 dermal rat	> 2000 mg/kg

Phenol (108-95-2)	
LD50 oral rat	340 mg/kg
LD50 dermal rabbit	630 mg/kg
ATE CA (oral)	340 mg/kg bodyweight
ATE CA (Dermal)	630 mg/kg bodyweight
ATE CA (Gases (except aerosol dispensers and lighters))	10 ppmv/4h
ATE CA (vapours)	0.05 mg/l/4h
ATE CA (dust,mist)	0.005 mg/l/4h

Calcium hydroxide (1305-62-0)	
LD50 oral rat	7340 mg/kg
ATE CA (oral)	7340 mg/kg bodyweight

Carbon black (1333-86-4)	
LD50 oral rat	> 15400 mg/kg

Graphite (7782-42-5)	
LC50 Inhalation - Rat	> 2000 mg/m³ (Exposure time: 4 h)

Kaolin (1332-58-7)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg

Skin corrosion/irritation : Causes severe skin burns.

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitization : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified.

Carcinogenicity : May cause cancer.

Reproductive toxicity : Not classified.

STOT-single exposure : Causes damage to organs. May cause respiratory irritation.

Phenol (108-95-2)	
STOT-single exposure	Causes damage to organs.

Calcium hydroxide (1305-62-0)	
STOT-single exposure	May cause respiratory irritation.

wood dust	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

Phenol (108-95-2)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Graphite (7782-42-5)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Kaolin (1332-58-7)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Talc (Mg3H2(SiO3)4) (14807-96-6)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified.

PhenoCure Powders and Premolds	
Viscosity, kinematic	Not applicable

Symptoms/effects after inhalation : May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/effects after skin contact : Burns. May cause an allergic skin reaction. May cause moderate irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : Serious damage to eyes. May cause eye irritation.

Symptoms/effects after ingestion : Burns.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Hazardous to the aquatic environment, short–term (acute) : Not classified.

Hazardous to the aquatic environment, long–term (chronic) : Not classified.

1,3,5,7-Tetraazatricyclo[3.3.1.1(3,7)]decane (100-97-0)	
LC50 - Fish [1]	44600 – 55600 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 - Crustacea [1]	29868 – 43390 mg/l (Exposure time: 48 h - Species: Daphnia magna)

1,3,5,7-Tetraazatricyclo[3.3.1.1(3,7)]decane (100-97-0)	
Partition coefficient n-octanol/water (Log Pow)	-2.18 (at 20 °C (at pH >=7-<=9)

Phenol (108-95-2)	
LC50 - Fish [1]	11.9 – 50.5 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 - Fish [2]	20.5 – 25.6 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 - Crustacea [1]	4.24 – 10.7 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 - Crustacea [2]	10.2 – 15.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 72h - Algae [1]	187 – 279 mg/l (Species: Desmodesmus subspicatus [static])
EC50 96h - Algae [1]	46.42 mg/l (Species: Pseudokirchneriella subcapitata)
EC50 96h - Algae [2]	0.0188 – 0.1044 mg/l (Species: Pseudokirchneriella subcapitata [static])
BCF - Fish [1]	(no significant bioaccumulation)
Partition coefficient n-octanol/water (Log Pow)	1.5

Calcium hydroxide (1305-62-0)	
BCF - Fish [1]	(no bioaccumulation)

Graphite (7782-42-5)	
LC50 - Fish [1]	> 100 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static])

Talc (Mg3H2(SiO3)4) (14807-96-6)	
LC50 - Fish [1]	> 100 g/l (Exposure time: 96 h - Species: Brachydanio rerio [semi-static])
BCF - Fish [1]	(no known bioaccumulation)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

1,3,5,7-Tetraazatricyclo[3.3.1.1(3,7)]decane (100-97-0)	
Partition coefficient n-octanol/water (Log Pow)	-2.18 (at 20 °C (at pH >=7-<=9)

Phenol (108-95-2)	
BCF - Fish [1]	(no significant bioaccumulation)
Partition coefficient n-octanol/water (Log Pow)	1.5

Calcium hydroxide (1305-62-0)	
BCF - Fish [1]	(no bioaccumulation)

Talc (Mg3H2(SiO3)4) (14807-96-6)	
BCF - Fish [1]	(no known bioaccumulation)

12.4. Mobility in soil

1,3,5,7-Tetraazatricyclo[3.3.1.1(3,7)]decane (100-97-0)	
Partition coefficient n-octanol/water (Log Pow)	-2.18 (at 20 °C (at pH >=7-<=9)

Phenol (108-95-2)	
Partition coefficient n-octanol/water (Log Pow)	1.5

12.5. Other adverse effects

Ozone : Not classified.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with TDG / DOT / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (TDG) : Not applicable
Proper Shipping Name (DOT) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

TDG
Transport hazard class(es) (TDG) : Not applicable

DOT
Transport hazard class(es) (DOT) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : Not applicable

IATA
Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (TDG) : Not applicable
Packing group (DOT) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

TDG
No data available

DOT
No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

Phenol-formaldehyde polymer (9003-35-4)

Listed on the Canadian DSL (Domestic Substances List)

1,3,5,7-Tetraazatricyclo[3.3.1.1(3,7)]decane (100-97-0)

Listed on the Canadian DSL (Domestic Substances List)

Phenol (108-95-2)

Listed on the Canadian DSL (Domestic Substances List)

Calcium hydroxide (1305-62-0)

Listed on the Canadian DSL (Domestic Substances List)

Carbon black (1333-86-4)

Listed on the Canadian DSL (Domestic Substances List)

Graphite (7782-42-5)

Listed on the Canadian DSL (Domestic Substances List)

Kaolin (1332-58-7)

Listed on the Canadian DSL (Domestic Substances List)

Mica (12001-26-2)

Listed on the Canadian DSL (Domestic Substances List)

Talc (Mg3H2(SiO3)4) (14807-96-6)

Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

Phenol-formaldehyde polymer (9003-35-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

1,3,5,7-Tetraazatricyclo[3.3.1.1(3,7)]decane (100-97-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Phenol (108-95-2)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Japanese Poisonous and Deleterious Substances Control Law
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Calcium hydroxide (1305-62-0)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Carbon black (1333-86-4)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on ELINCS (European List of Notified Chemical Substances)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Graphite (7782-42-5)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Kaolin (1332-58-7)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Mica (12001-26-2)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Talc (Mg3H2(SiO3)4) (14807-96-6)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)

SECTION 16: Other information

Issue date	:	06/01/2022
Revision date	:	06/01/2022

Full text of H-statements:	
H228	Flammable solid.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H320	Causes eye irritation
H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H350	May cause cancer.
H351	Suspected of causing cancer.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.

Safety Data Sheet (SDS), Canada

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