

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 15/04/2019 Revision date: 23/07/2021 Supersedes version of: 15/04/2019 Version: 2.0

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

1.1. Product identifier

| | |
|---------------|---------------------------------------------------------------|
| Product form | : Substance |
| Trade name | : PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15 |
| EC-No. | : 603-442-8 |
| CAS-No. | : 93763-70-3 |
| Product group | : Trade product |

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

1.2.1. Relevant identified uses

| | |
|----------------------------------|--------------------------------------------|
| Main use category | : Professional use |
| Industrial/Professional use spec | : For professional users only |
| Use of the substance/mixture | : Perlites. Filter aid of musts and wines. |
| Use of the substance/mixture | : For œnological use |

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

LAFFORT FRANCE SAS
P.O. Box CS 61611
33072 BORDEAUX CEDEX
FRANCE
T +33 (0)5 56 86 53 04 - F +33 (0)5 56 86 30 50
info@laffort.com - www.laffort.com

Distributor

LAFFORT CHILE
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ESPAÑA
T 0034943344068 - F 0034943344281
info@laffort.com - www.laffort.com

1.4. Emergency telephone number

| Country | Organisation/Company | Address | Emergency number | Comment |
|-----------|-----------------------------------------------------------------------|--------------------------------------|------------------|---------|
| Australia | NSW Poisons Information Centre The Children's Hospital at Westmead | Locked Bag 4001 NSW 2145 Westmead | 13 11 26 | |

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Country | Organisation/Company | Address | Emergency number | Comment |
|----------------|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------------------------|
| Canada | Ontario Poison Centre (OPC) | The Hospital for Sick Children 555 University Avenue ON M5G 1X8 Toronto | 1-800-268-9017 (416) 813-5900 | |
| Canada | BC Drug and Poison Information Centre (DPIC) | 655 West 12th Avenue BC V5Z 4R4 Vancouver | 1-800-567-8911 (604) 682-5050 | |
| China | National Poison Control Center | Chinese Center for Disease Control and Prevention Nanwei road, No.29 100050 Beijing | +86 10 831 32 046 | |
| Croatia | Centar za kontrolu otrovanja Institut za medicinska istraživanja i medicinu rada | Ksaverska Cesta 2 p.p. 291 10000 Zagreb | +385 1 234 8342 | Information available 24/7 in Croatian and English |
| Czech Republic | Toxikologické informační středisko Klinika pracovního lékařství VFN a 1. LF UK | Na Bojišti 1 120 00 Praha 2 | +420 224 919 293 +420 224 915 402 | |
| Denmark | Giftlinjen | Bispebjerg Bakke 23 Opgang 20 C 2400 København NV | +45 82 12 12 12 | |
| Georgia | National Toxicology Information Advisory Center | Tbilisi State Medical University Department of Toxicology - 7 Asatiani St. 380 077 Tbilisi | +995 99 533320 | |
| Greece | Poisons Information Centre Children's Hospital P&A Kyriakou | 11762 Athens | +30 2 10 779 3777 | |
| Hungary | Országos Kémiai Biztonsági Intézet Egészségügyi Toxikológiai Tájékoztató Szolgálat | Nagyvárad tér 2. 1437 Budapest, Pf. 839 1097 Budapest | +36 80 20 11 99 | |
| Israel | Israel Poison Information Center Rambam Health Care Campus | 6 Ha' Aliya Street 31096 Haifa | +972 4 854 1900 | |
| Japan | Japan Poison Information Center | Tsukuba Medical Center 1-1-1 Amakubo 305-0005 Tsukuba City, Ibaraki | +81-29-856-3566 +81-72-727-2499 | |
| Jordan | National Drug & Poison Information Center of Jordan | | 0798506755 00962-6-5353444 | |
| Kazakhstan | Republican Toxicology Center | Tole-bi 93 480083 Almaty | +7 3272 925 868 | |
| Malta | Medicines & Poisons Info Office | Mater Dei Hospital MSD Msida | +356 2545 6504 | |
| New Zealand | National Poisons Centre | Dunedin School of Medicine, University of Otago PO Box 913 9054 Dunedin | 0800 764 766 +56 2 2 247 3600 | |
| Poland | National Poisons Information Centre The Nofer Institute of Occupational Medicine (Łódź) | ul. Teresy 8 P.O. BOX 199 90950 Łódź | +48 42 63 14 724 | |
| Romania | Department of Clinical Toxicology Spitalul de Urgenta Floreasca | Calea Floreasca Bucuresti | +40 21 230 8000 | |
| Russia | Информационно-консультативный центр по токсикологии (RTIAC) Министерство здравоохранения Российской Федерации | 3 Сухареvская Площадь Блок 7 129090 г. Москва | +7 495 628 1687 (только на русском) | |

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Country | Organisation/Company | Address | Emergency number | Comment |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|--------------------------------------------------------------------------------------------------|
| Serbia | Nacionalni centar za kontrolu trovanja - VMA | Crnotravska 17 11000 Beograd | +381 11 360 84 40 | |
| Slovenia | Center za klinično toksikologijo in farmakologijo Interna klinika, UKCL | Zaloška 7 1000 Ljubljana | +386 522 52 83 | |
| South Africa | Tygerberg Poison Information Centre | Division of Clinical Pharmacology Faculty of Medicine and Health Sciences Stellenbosch University - PO Box 241 8 000 Cape Town | 0861 555 777 +56 2 2 247 3600 | |
| Sweden | Giftinformationscentralen | Solna Strandväg 21 171 54 Solna | 112 – begär Giftinformation | |
| Turkey | Ulusal Zehir Merkezi (UZEM) Refik Saydam Hıfzısıhha Merkezi Başkanlığı | Cemal Gürsel Cd. No: 18 Sıhhiye Çankaya 06590 Ankara | 114 | Information is provided to public and medical personnel on poisoning incidents via 114. |
| United Kingdom | National Poisons Information Service (Belfast Centre) Royal Victoria Hospital | Grosvenor Road BT12 6BA Belfast | 0344 892 0111 | |
| United Kingdom | National Poisons Information Service (Birmingham Centre) City Hospital | Dudley Road B18 7QH Birmingham | 0344 892 0111 | |
| United Kingdom | National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Llandough Hospital | Penarth CF64 2XX Cardiff | 0344 892 0111 | |
| United Kingdom | National Poisons Information Service Edinburgh Royal Infirmary of Edinburgh | Little France Crescent EH16 4SA Edinburgh | 0344 892 0111 | |
| United Kingdom | Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust | Avonley Road SE14 5ER London | +44 20 7188 7188 | |
| United Kingdom | National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit | Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle | 0344 892 0111 | |
| United States of America | American Association of Poison Control Centers | 515 King St., Suite 510 VA 22314 Alexandria | 1-800-222-1222 +56 2 2 247 3600 | |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

This product does not meet the criteria for classification as hazardous as defined in the Regulation EC 1272/2008. Depending on the type of handling and use (e.g. grinding, drying), airborne respirable crystalline silica may be generated. Prolonged and/or massive inhalation of respirable crystalline silica dust may cause lung fibrosis, commonly referred to as silicosis.

Principal symptoms of silicosis are cough and breathlessness. Occupational exposure to respirable crystalline silica dust should be monitored and controlled. Presents no particular risk to the environment, provided the disposal requirements (see section 13) and national or local regulations are complied with.

2.2. Label elements

According to EC directives or the corresponding national regulations there is no labelling obligation for this product.

No labelling applicable

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

2.3. Other hazards

Other hazards which do not result in classification : Presents no particular risk to the environment, provided the disposal requirements (see section 13) and national or local regulations are complied with. Handle carefully. Avoid dust formation.

Other information : The product does not meet the PBT and vPvB classification criteria.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Substance type : Mono-constituent
Name : Perlites LAFFORT
CAS-No. : 93763-70-3
EC-No. : 603-442-8

| Name | Product identifier | % |
|--------------------|------------------------------------------|-----|
| Perlite (expanded) | CAS-No.: 93763-70-3 EC-No.: 603-442-8 | 100 |

Comments : This product contains less than 1% fine fraction of quartz.
Quartz: CAS-No.: 14808-60-7 EC No.: 238-878-4
This is a UVCB substance. This product does not contain any SVHC substances at levels greater than 0.1 % by weight.

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice and that precautions are taken to avoid the inhalation of dust. If symptoms persist call a doctor.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If symptoms persist, call a physician.
First-aid measures after skin contact : After contact with skin, wash immediately and thoroughly with water and soap. Apply emollient cream. If symptoms persist, call a physician.
First-aid measures after eye contact : In case of eye contact, immediately rinse with clean water for 10-15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Do not give anything to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects : More detailed information: See section 11.
Symptoms/effects after inhalation : Long-term exposure at high concentration may cause : Irritation: may cause irritation to the respiratory system.
Symptoms/effects after skin contact : None under normal conditions. Repeated or prolonged skin contact may cause dermatitis and defatting.
Symptoms/effects after eye contact : Dust from this product may cause eye irritation.
Symptoms/effects after ingestion : None under normal conditions. In high concentrations : Gastrointestinal complaints.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Materials that will not burn. If there is a fire close by, use suitable extinguishing agents. carbon dioxide (CO2), powder, alcohol-resistant foam, water spray.

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Unsuitable extinguishing media : Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Non combustible. In case of fire and/or explosion do not breathe fumes.
Explosion hazard : Avoid raising powdered material due to explosion hazard.
Hazardous decomposition products in case of fire : Materials that will not burn. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Prevent fire fighting water from entering the environment.
Protection during firefighting : No special protection required.
Other information : Do not contaminate ground and surface water. Dispose in a safe manner in accordance with local/ national regulations. If spilled, may cause the floor to be slippery.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Do not handle until all safety precautions have been read and understood. Evacuate personnel to a safe area.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. Do not touch or walk on the spilled product. Avoid contact with skin and eyes.
Measures in case of dust release : Avoid dust formation.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Do not flush into surface water or sewer system. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Dust deposited may be vacuum cleaned or the area hosed down with water. Mechanically recover the product. Avoid raising powdered materials into airborne dust. Contain leaking substance, pump over in suitable containers. Clean contaminated surfaces with an excess of water. Shovel into suitable and closed container for disposal. If spilled, may cause the floor to be slippery.
Other information : Dispose of materials or solid residues at an authorized site. Do not allow to enter drains or water courses.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : If spilled, may cause the floor to be slippery.
Precautions for safe handling : Avoid dust formation. Ensure good ventilation of the work station. Local exhaust is recommended where dust may occur. Where excessive dust may result, use approved respiratory protection equipment. Avoid contact with skin and eyes. Wear recommended personal protective equipment. Store tightly closed in a dry and cool place.
Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep only in the original container.
Storage conditions : Store tightly closed in a dry and cool place. Keep in a well-ventilated room. Store away from heat/moisture. Keep out of direct sunlight. Keep container tightly closed to prevent moisture pick-up. Handle all packages and containers carefully to minimise spills.
Incompatible products : None to our knowledge.
Incompatible materials : None to our knowledge.

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

7.3. Specific end use(s)

For oenological use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

| PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15 (93763-70-3) | |
|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EU - Indicative Occupational Exposure Limit (IOEL) | |
| Local name | Silica crystalline (Quartz) |
| Remark | (Year of adoption 2003) |
| Quartz (respirable dust) | 0.1 mg/m ³ |
| Dust, inorganic (inhalable dust) | 5 mg/m ³ |
| Regulatory reference | SCOEL Recommendations |
| France - Occupational Exposure Limits | |
| Local name | Silice (poussières alvéolaires de quartz) |
| VME (OEL TWA) | 0,1 mg/m ³ |
| Remark | Valeurs réglementaires contraignantes |
| Regulatory reference | Article R4412-149 du Code du travail (réf.: INRS ED 984, 2016; Décret n° 2019-1487; Décret n° 2020-1546; Décret n° 2021-434) |
| Spain - Occupational Exposure Limits | |
| Local name | Silice Cristalina: Cristobalita |
| VLA-ED (OEL TWA) [1] | 0,1 mg/m ³ Fracción respirable 0,05 mg/m ³ Fracción respirable. Entrada en vigor en enero de 2022 |
| Remark | v (Agente cancerígeno con valor límite vinculante recogido en el anexo III del Real Decreto 665/1997 y en sus modificaciones posteriores), d (Véase UNE EN 481: Atmósferas en los puestos de trabajo. Definición de las fracciones por el tamaño de las partículas para la medición de aerosoles), y (Reclasificado, por la International Agency for Research on Cancer (IARC) de grupo 2A (probablemente carcinogénico en humanos) a grupo 1 (carcinogénico en humanos)). |
| Regulatory reference | Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT |
| Perlite (expanded) (93763-70-3) | |
| EU - Indicative Occupational Exposure Limit (IOEL) | |
| Local name | Silica crystalline (Quartz) |
| Remark | (Year of adoption 2003) |
| Quartz (respirable dust) | 0.1 mg/m ³ |
| Dust, inorganic (inhalable dust) | 5 mg/m ³ |
| Regulatory reference | SCOEL Recommendations |
| France - Occupational Exposure Limits | |
| Local name | Silice (poussières alvéolaires de quartz) |
| VME (OEL TWA) | 0,1 mg/m ³ |
| Remark | Valeurs réglementaires contraignantes |
| Regulatory reference | Article R4412-149 du Code du travail (réf.: INRS ED 984, 2016; Décret n° 2019-1487; Décret n° 2020-1546; Décret n° 2021-434) |

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| | |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Perlite (expanded) (93763-70-3) | |
| Spain - Occupational Exposure Limits | |
| Local name | Sílice Cristalina: Cristobalita |
| VLA-ED (OEL TWA) [1] | 0,1 mg/m³ Fracción respirable 0,05 mg/m³ Fracción respirable. Entrada en vigor en enero de 2022 |
| Remark | v (Agente cancerígeno con valor límite vinculante recogido en el anexo III del Real Decreto 665/1997 y en sus modificaciones posteriores), d (Véase UNE EN 481: Atmósferas en los puestos de trabajo. Definición de las fracciones por el tamaño de las partículas para la medición de aerosoles), y (Reclasificado, por la International Agency for Research on Cancer (IARC) de grupo 2A (probablemente carcinogénico en humanos) a grupo 1 (carcinogénico en humanos)). |
| Regulatory reference | Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT |

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Additional information

: :

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Avoid dust formation. Avoid raising powdered materials into airborne dust. Carry out operations in the open/under local exhaust/ventilation or with respiratory protection. Ensure the ventilation system is regularly maintained and tested. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Remove contaminated clothing.

8.2.2. Personal protection equipment

Personal protective equipment:

Refer to protective measures listed in Sections 7 and 8.

8.2.2.1. Eye and face protection

Eye protection:

No special eye protection equipment recommended under normal conditions of use. Where excessive dust may result, wear goggles. Use splash goggles when eye contact due to splashing is possible

| Eye protection | | | |
|-----------------------------|----------------------|-----------------|----------|
| Type | Field of application | Characteristics | Standard |
| Safety glasses, Face shield | Dust | | EN 166 |

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing. Long sleeved protective clothing

| Skin and body protection | |
|----------------------------------------|----------|
| Type | Standard |
| Chemically resistant protective gloves | EN 374 |

Hand protection:

In case of contact with the skin : Wear protective gloves.

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Hand protection | | | | | |
|----------------------------------------|-----------------------------------------|------------|----------------|-------------|------------|
| Type | Material | Permeation | Thickness (mm) | Penetration | Standard |
| Chemically resistant protective gloves | Polyvinylchloride (PVC), Natural rubber | | | | EN ISO 374 |

Other skin protection

Materials for protective clothing:

No special protection required. Wear suitable protective clothing. Long sleeved protective clothing. Antistatic clothing. EN 340. EN 1149. Rinse hands well after use or, especially in case of delicate skin, wear gloves

8.2.2.3. Respiratory protection

Respiratory protection:

Perform risk assessment prior to use. Use engineering controls to keep exposures below the OEL or DNEL. Where excessive dust may result, use approved respiratory protection equipment. Wear suitable respiratory equipment in case of insufficient ventilation. Appropriate dust or mist respirator should be used if airborne particles are generated when handling this material. EN 149. Wear a half mask respirator with type P2L filter or better. Users of breathing apparatus must be trained

| Respiratory protection | | | |
|------------------------|-------------|-----------|----------|
| Device | Filter type | Condition | Standard |
| Dust mask | Type P2 | | |

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Do not allow into drains or water courses. Avoid release to the environment. Avoid discharge to atmosphere.

Consumer exposure controls:

The substance is not classified for human health hazards or for environment effects and it is not PBT or vPvB so that no exposure assessment or risk characterisation is required. For tasks where the intervention of workers is required, the substance must be handled in accordance with good industrial hygiene and safety procedures. Do not exceed the occupational exposure limits (OEL).

Other Information:

Do not eat, drink or smoke during work. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Repeated or prolonged skin contact may cause dermatitis and defatting. Apply emollient cream.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|-----------------------------|----------------------------------------------|
| Physical state | : Solid |
| Colour | : White to off-white. |
| Appearance | : Powder. Granulate. |
| Odour | : odourless. |
| Odour threshold | : Not applicable. |
| | Not applicable. |
| Melting point | : > 1200 °C A1 / EU |
| Freezing point | : Not available |
| Boiling point | : Not applicable. |
| Flammability | : Not classified as flammable by EC criteria |
| | Non flammable. |
| Explosive properties | : Not explosive. |
| Oxidising properties | : Non oxidizing. Not oxidising. |
| Explosive limits | : Not applicable |
| Lower explosive limit (LEL) | : Not applicable |
| Upper explosive limit (UEL) | : Not applicable |
| Flash point | : Not applicable. |
| Auto-ignition temperature | : Not self-igniting |
| Decomposition temperature | : Not applicable. |
| pH | : Not available |

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| | |
|-------------------------------------------------|-------------------------------|
| pH solution | : 6 – 8 10% |
| Viscosity, kinematic | : Not applicable. |
| Viscosity, dynamic | : Not applicable. |
| Solubility | : insoluble in water. |
| Partition coefficient n-octanol/water (Log Kow) | : Not applicable. |
| Partition coefficient n-octanol/water (Log Pow) | : Not applicable. |
| Vapour pressure | : Not applicable. |
| Vapour pressure at 50 °C | : Not applicable. |
| Density | : Not available |
| Relative density | : 2,2 – 2,4 (OECD 109 method) |
| Relative vapour density at 20 °C | : Not applicable. |
| Particle size | : Not available |
| Particle size distribution | : Not available |
| Particle shape | : Not available |
| Particle aspect ratio | : Not available |
| Particle aggregation state | : Not available |
| Particle agglomeration state | : Not available |
| Particle specific surface area | : Not available |
| Particle dustiness | : Not available |

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Moisture.

10.5. Incompatible materials

None to our knowledge.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

| | |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acute toxicity (oral) | : No harmful effects expected in amounts likely to be ingested by accident. No acute or long term effects were seen in animal studies following oral exposure. (Based on available data, the classification criteria are not met) |
| Acute toxicity (dermal) | : No acute effects were seen in an animal study following acute dermal exposure. . Repeated or prolonged skin contact may cause dermatitis and defatting (Based on available data, the classification criteria are not met) |
| Acute toxicity (inhalation) | : May cause irritation to the respiratory tract (Based on available data, the classification criteria are not met) |

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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| PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15 (93763-70-3) | |
| LD50 oral rat | > 10000 mg/kg (OECD 420 method) |
| Perlite (expanded) (93763-70-3) | |
| LD50 oral rat | > 10000 mg/kg (OECD 420 method) |
| Skin corrosion/irritation | : Repeated or prolonged skin contact may cause dermatitis and defatting (Based on available data, the classification criteria are not met) |
| Serious eye damage/irritation | : May be slightly irritating to skin and eyes (Based on available data, the classification criteria are not met) |
| Respiratory or skin sensitisation | : Did not cause sensitisation. No sensitizing reaction was observed for guinea pigs. (OECD 429 method) (Based on available data, the classification criteria are not met) |
| Germ cell mutagenicity | : Mutagenicity tests are negative. (OECD 471 method). (OECD 473 method). (OECD 476 method) (Based on available data, the classification criteria are not met) |
| Carcinogenicity | : Not classified (Based on available data, the classification criteria are not met) |
| Reproductive toxicity | : Not classified (Based on available data, the classification criteria are not met) |
| STOT-single exposure | : Not classified (Based on available data, the classification criteria are not met) |
| STOT-repeated exposure | : Prolonged and/or massive exposure to respirable crystalline silica-containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica. In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However it pointed out that not all industrial circumstances, nor all crystalline silica types, were to be incriminated. (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In 2009, in the Monographs 100 series, IARC confirmed its classification of Silica Dust, Crystalline, in the form of Quartz and Cristobalite (IARC Monographs, Volume 100C, 2012). In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003). So there is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis. Worker protection against silicosis should be assured by respecting the existing regulatory occupational exposure limits and implementing additional risk management measures where required. Health & Safety Executive: Detailed reviews of the scientific evidence on the health effects of crystalline silica have been published by HSE (Health and Safety Executive, UK) in the Hazard Assessment Documents EH75/4 (2002) and EH75/5 (2003). The HSE points out on its website that "Workers exposed to fine dust containing quartz are at risk of developing a chronic and possibly severely disabling lung disease known as "silicosis". In addition to silicosis, there is now evidence that heavy and prolonged workplace exposure to dust containing crystalline silica can lead to an increased risk of lung cancer. The evidence suggests that an increased risk of lung cancer is likely to occur only in those workers who have developed silicosis. (Based on available data, the classification criteria are not met) |
| Aspiration hazard | : Not classified (Based on available data, the classification criteria are not met) |
| PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15 (93763-70-3) | |
| Viscosity, kinematic | Not applicable. |

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

| | |
|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ecology - general | : Ecological problems are not known or expected under normal use. High concentration in water may cause long-term adverse effects in the aquatic environment. |
| Hazardous to the aquatic environment, short-term (acute) | : Not classified (Based on available data, the classification criteria are not met) |
| Hazardous to the aquatic environment, long-term (chronic) | : Not classified (Based on available data, the classification criteria are not met) |

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.2. Persistence and degradability

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15 (93763-70-3)

| | |
|-------------------------------|--------------------|
| Persistence and degradability | Not biodegradable. |
|-------------------------------|--------------------|

Perlite (expanded) (93763-70-3)

| | |
|-------------------------------|--------------------|
| Persistence and degradability | Not biodegradable. |
|-------------------------------|--------------------|

12.3. Bioaccumulative potential

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15 (93763-70-3)

| | |
|-------------------------------------------------|-----------------|
| Partition coefficient n-octanol/water (Log Pow) | Not applicable. |
|-------------------------------------------------|-----------------|

| | |
|-------------------------------------------------|-----------------|
| Partition coefficient n-octanol/water (Log Kow) | Not applicable. |
|-------------------------------------------------|-----------------|

| | |
|---------------------------|---------------------------------|
| Bioaccumulative potential | Not potentially bioaccumulable. |
|---------------------------|---------------------------------|

Perlite (expanded) (93763-70-3)

| | |
|-------------------------------------------------|-----------------|
| Partition coefficient n-octanol/water (Log Pow) | Not applicable. |
|-------------------------------------------------|-----------------|

| | |
|-------------------------------------------------|-----------------|
| Partition coefficient n-octanol/water (Log Kow) | Not applicable. |
|-------------------------------------------------|-----------------|

| | |
|---------------------------|---------------------------------|
| Bioaccumulative potential | Not potentially bioaccumulable. |
|---------------------------|---------------------------------|

12.4. Mobility in soil

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15 (93763-70-3)

| | |
|----------------|---------------------|
| Ecology - soil | Insoluble in water. |
|----------------|---------------------|

Perlite (expanded) (93763-70-3)

| | |
|----------------|---------------------|
| Ecology - soil | Insoluble in water. |
|----------------|---------------------|

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Other adverse effects : No other effects known, Do not allow to enter drains or water courses

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Regional legislation (waste) | : Disposal must be done according to official regulations. |
| Waste treatment methods | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| Sewage disposal recommendations | : Do not flush into surface water or sewer system. |
| Product/Packaging disposal recommendations | : Empty remaining contents. Dispose of contents/container in accordance with licensed collector's sorting instructions. |

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

| | |
|---------------|------------------|
| UN-No. (ADR) | : Not applicable |
| UN-No. (IMDG) | : Not applicable |

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

UN-No. (IATA) : Not applicable
UN-No. (ADN) : Not applicable
UN-No. (RID) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

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

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

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

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

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

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

Inland waterway transport
Not applicable

Rail transport
Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15 is not on the REACH Candidate List

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15 is not on the REACH Annex XIV List

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15 is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15 is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

15.1.2. National regulations

Germany

Water hazard class (WGK) : Not classified according to Regulation Governing Systems for Handling Substances Hazardous to Waters (AwSV)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : The substance is not listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

Switzerland

Storage class (LK) : NG - Non-hazardous

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

| Indication of changes | | | |
|-----------------------|-----------------------------------------------------------------|----------|----------|
| Section | Changed item | Change | Comments |
| | Symptoms/effects after inhalation | Modified | |
| 1.1 | EC-No. | Added | |
| 2.1 | Adverse physicochemical, human health and environmental effects | Added | |
| 4.1 | First-aid measures general | Added | |
| 4.2 | Symptoms/effects after ingestion | Modified | |
| 4.2 | Symptoms/effects after eye contact | Added | |
| 5.2 | Fire hazard | Added | |
| 6.1 | General measures | Added | |
| 6.2 | Environmental precautions | Modified | |
| 6.3 | Methods for cleaning up | Modified | |
| 7.1 | Hygiene measures | Modified | |
| 7.1 | Additional hazards when processed | Added | |
| 7.2 | Heat and ignition sources | Removed | |
| 7.2 | Storage conditions | Modified | |
| 7.2 | Incompatible materials | Added | |
| 7.2 | Incompatible products | Added | |

PERL® 2 - PERL® 4 - PERL® 6 - PERL® 8 - PERL® 10 - PERL® 15

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Indication of changes | | | |
|-----------------------|------------------------------|----------|----------|
| Section | Changed item | Change | Comments |
| 7.2 | Storage conditions | Modified | |
| 8.2 | Other information | Modified | |
| 8.2 | Eye protection | Modified | |
| 8.2 | Consumer exposure controls | Added | |
| 11.1 | Reason for no classification | Modified | |
| 12.4 | Ecology - soil | Added | |
| 12.6 | Other adverse effects | Added | |
| 13 | Regional legislation (waste) | Added | |
| 13 | Regional legislation (waste) | Added | |

Other information

: Workers must be informed of the presence of crystalline silica and trained in the proper use and handling of this product as required under applicable regulations.

A multi-sectoral social dialogue agreement on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it was signed on 25 April 2006. This autonomous agreement, which receives the European Commission's financial support, is based on a Good Practices Guide. The requirements of the Agreement came into force on 25 October 2006. The Agreement was published in the Official Journal of the European Union (2006/C 279/02). The text of the Agreement and its annexes, including the Good Practices Guide, are available from <http://www.nepsi.eu> and provide useful information and guidance for the handling of products containing respirable crystalline silica. Literature references are available on request from EUROSIL, the European Association of Industrial Silica Producers.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.