


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

<b>Product identifier</b>	SiliaFlash® Irregular Silica Gel, P60, 40 - 63 µm, 60 Å
<b>Product code</b>	R12030B
<b>CAS number</b>	7631-86-9 (or 112926-00-8)
<b>EC number</b>	231-545-4
<b>REACH registration number</b>	01-2119379499-16-****
<b>Formula</b>	SiO <sub>2</sub>
<b>Chemical name</b>	Silica-Amorphous, precipitated (other name: Silicon dioxide, Silica gel, Synthetic Amorphous Silica)
<b>Identified uses</b>	Laboratory chemicals, manufacture of substances.
<b>U.N. Number</b>	Not applicable.
<b>U.N. Dangerous goods class</b>	Non-Regulated material.
<b>Supplier's details</b>	Silicycle Inc. 2500, Parc-Technologique Blvd, Quebec City, QC, Canada G1P 4S6 Tel: 418-874-0054 Fax: 418-874-0355 <a href="mailto:info@silicycle.com">info@silicycle.com</a> <a href="http://www.silicycle.com">www.silicycle.com</a>
<b>Emergency telephone number</b> Telephone / Hours of operation	CANUTEC: +1-613-996-6666 or *666 (cellular), 1-888-226-8832 24 hours/day, 7 days/week.

### SECTION 2: Hazards identification

<b>EMERGENCY OVERVIEW</b> Warning: Exposure can be irritating to eyes, respiratory system and skin. Harmful by inhalation/ingestion. It's non-flammable solid.	
<b>US DOT symbols</b>	Non-Regulated.
<b>WHMIS symbols</b>	Not Controlled.
<b>European and GHS Hazard symbols</b>	
<b>Signal word</b>	<b>Warning</b> , hazard pictogram: GHS07.
<b>GHS Hazard Classification(s) / 29 CFR §1910.1200</b>	
<b>Hazard statements</b>	
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
<b>Precautionary statements</b>	
<b>Prevention</b>	<ul style="list-style-type: none"> <li>P280 - Wear protective gloves. Wear eye or face protection.</li> <li>P271 - Use only outdoors or in a well-ventilated area.</li> <li>P261 - Avoid breathing dust.</li> <li>P270 - Do not eat, drink or smoke when using this product.</li> <li>P264 - Wash hands thoroughly after handling.</li> </ul>
<b>Response</b>	<ul style="list-style-type: none"> <li>P304 + P340 + P312 - IF INHALED: Remove victim to fresh air. Call a POISON CENTER or physician if you feel unwell.</li> <li>P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.</li> <li>P302 + P352 + P362-2 + P363 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing.</li> <li>P332 + P313 - If skin irritation occurs: Get medical attention.</li> <li>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P337 + P313 - If eye irritation persists: Get medical attention.</li> </ul>
<b>Storage</b>	P405 - Store locked up.
<b>Disposal</b>	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Hazard Symbol(s)</b>	[Xi] Irritant.
<b>Risk Phrases</b>	R36/37/38: Irritating to eyes, respiratory system and skin.
<b>Safety Phrases</b>	S9: Keep container in a ventilated area. S22: Do not breath dust. S24/25: Avoid contact with skin and eyes.

### SECTION 3: Composition/information on ingredients

Product/ingredient name	CAS #	EINECS #	ICSC #	WT %
Silica-Amorphous, precipitated	7631-86-9	231-545-4	Not Listed.	~100%

- Any concentration shown as a range is to protect confidentiality or is due to batch variation.
- There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.
- Occupational exposure limits, if available, are listed in Section 8.
- Exposure limits: TWA (mg/m<sup>3</sup>) = 6

### SECTION 4: First aid measures

#### Description of necessary first aid measures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if necessary.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position.
Skin contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes.
Ingestion	Wash out mouth with water. Don't induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

#### Most important symptoms/effects, acute and delayed

Eye contact	Cause serious eye irritation.
Inhalation	May cause respiratory irritation.
Skin contact	Cause skin irritation.
Ingestion	Harmful if swallowed. Irritating to mouth, throat and stomach.

#### Over-exposure signs/symptoms

Eye contact	Adverse symptoms may include the following: pain or irritating watering redness.
Inhalation	Adverse symptoms may include the following: respiratory tract irritation coughing.
Skin contact	Adverse symptoms may include the following: Irritation redness.
Ingestion	No known significant effects or critical hazards.

#### Indication of any immediate medical attention and special treatment needed

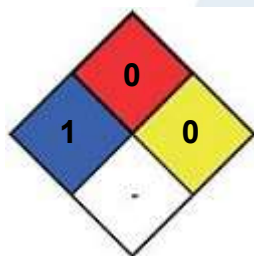
Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	No specific treatment.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

### SECTION 5: Firefighting measures

#### Extinguishing media

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire. (Carbon dioxide, foam, dry chemical, halon or water spray).
Specific hazard arising from the chemical	No specific fire or explosion hazard.
Hazardous thermal decomposition products	No specific data.
Special protective actions for Fire fighters	No special measures are required.
Special protective equipment for Fire fighters	Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode.


#### NFPA RATING SYSTEM



#### Hazard scale

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Severe
*	Chronic hazard

#### Specific Hazard

OXI	Oxidizer
ACID	Acid
ALK	Alkali
COR	Corrosive
W	Use no water
	Radiation hazard
-	None

#### HMIS RATING SYSTEM

1	HEALTH
0	FLAMMABILITY
0	PHYSICAL HAZARD
F	PERSONAL PROTECTION

#### Protective Equipment Index

A	Safety glasses
B	Safety glasses + Gloves
c	Safety glasses + Gloves + Protective apron
D	Face shield + Gloves + Protective apron
E	Safety glasses + Gloves + Dust respirator
F	Safety glasses + Gloves + Protective apron + Dust respirator
G	Safety glasses + Gloves + Vapor respirator
H	Splash goggles + Gloves + Protective apron + Vapor respirator
I	Safety glasses + Gloves + Dust respirator + Vapor respirator
J	Splash goggles + Gloves + Protective apron + Dust respirator + Vapor respirator
K	Airline mask/hood + Gloves + Full suit + Boots
X	Ask your supervisor for special handling instructions

### SECTION 6: Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing dust. Put on appropriate personal protective equipment.
For emergency responders	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For Non-emergency personnel".
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drain and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

#### Methods and materials for containment and cleaning up

Small spill	Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, watercourses, basements and confined areas. Vacuum or sweep up materials and place in a designated, labelled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

### SECTION 7: Handling and storage

#### Precautions for safe handling

Protective measures	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers.

### SECTION 8: Exposure controls/personal protection

#### Control parameters

Chemical name	CAS #	ACGIH TWA	OSHA TWA
Silica-Amorphous, precipitated	7631-86-9	10 (mg/m <sup>3</sup> )	6 (mg/m <sup>3</sup> )
Appropriate engineering controls	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.		
Environmental exposure controls	In some case, dust collection filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.		

#### Individual protection measures

Hygiene measures	Ensure that eyewash stations and safety showers are close to the workstation location. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.
Eye/face protection	Safety eyewear should be used when there is a likelihood of exposure. Recommended: If operating conditions cause high dust concentrations to be produced, use dust goggles.

#### Skin protection

Hand protection	Use gloves appropriate for work or task being performed. Recommended: Natural rubber (latex).
Body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Lab coat.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Not required under normal conditions of uses. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Ensure an MSHA/NIOSH-approved respirator or equivalent is used.

### SECTION 9: Physical and chemical properties

Physical state	Solid (powder).
Color	White.
Melting point/freezing point	1710°C
Initial boiling point and boiling range	2230°C
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative (g/L)	580
Solubility(ies)	Insoluble.

### SECTION 10: Stability and reactivity

<b>Reactivity</b>	Product is stable.
<b>Chemical stability</b>	The product is stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	Avoid moisture and contact with incompatible materials.
<b>Incompatible materials</b>	Strong base, Hydrogen fluoride (HF).
<b>Hazardous decomposition products</b>	No data available.

### SECTION 11: Toxicological information

<b>Information on toxicological effects</b>	
Information on the likely routes of exposure	Routes of entry anticipated: Oral, Dermal and Inhalation.
<b>Potential acute health effects</b>	
Inhalation	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
Ingestion	Harmful if swallowed. Irritating to mouth, throat and stomach.
Skin contact	Causes skin irritation by dehydration.
Eye contact	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	
Inhalation	Adverse symptoms may include the following: respiratory tract irritation coughing.
Ingestion	No known significant effects or critical hazards.
Skin contact	Adverse symptoms may include the following: irritation, redness.
Eye contact	Adverse symptoms may include the following: irritation redness.
<b>Delayed and immediate effects and also chronic effects from short and long-term exposure</b>	
<b>Short term exposure</b>	
Potential immediate effects	Not available.
Potential delayed effects	Not available.
<b>Long term exposure</b>	
Potential immediate effects	Not available.
Potential delayed effects	Not available.
<b>Potential chronic health effects</b>	
General	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.
Numerical measures of toxicity	Acute oral (LD50): > 15000 mg/kg [Rat]. Acute dermal (LD50): >2000 mg/kg [Rabbit]. Acute toxicity dust (LC50): >2,2 mg/l 1 hour [Rat]



### SECTION 12: Ecological information

<b>Toxicity and aquatic life</b>	Ecotoxicity in water (LC50): 440 mg/l 72 hours [Algae], 5000 mg/l 96 hours [Fish], 7600 mg/l 48 hours [Daphnia]
<b>Persistence and degradability</b>	Not available.
<b>Bio accumulative potential</b>	Not available.
<b>Effect of material on plants or animals</b>	
Soil/water partition coefficient (K <sub>oc</sub> )	Not available.
Other adverse effects	No known significant effects or critical hazards.

### SECTION 13: Disposal considerations

<b>Methods of disposal</b>	The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste products residue should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional and local authority requirements.
<b>Hazardous waste</b>	Within the present knowledge of the supplier, this product is regarded as not hazardous waste.
<b>Packaging</b>	
Methods of disposal	The generation of waste should be avoided or minimized wherever possible. Waste when packaging should be recycled. Incineration or landfill should only be considered. Recycling is not feasible.
Special precautions	This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spill material and runoff and contact with soil, waters, drains and sewers.

### SECTION 14: Transport information

	ADR/RID	ADN/ADNR	IMDG	IATA	DOT
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	Not dangerous good	Not dangerous good	Not dangerous good	Not dangerous good	Not dangerous good
<b>Transport hazard class(es)</b>	-	-	-	-	-
<b>Packing group</b>	-	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.	No.

PG\*: Packing group; Exemption to the above classification may apply.

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code.

### SECTION 15: Regulatory information

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

##### U.S. Federal regulations

United States inventory (TSCA 8b)	Silica gel (silica), CAS no 7631-86-9 is listed.
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	This substance is not listed.
Clean Air Act Section 602 Class I Substances	This substance is not listed.
Clean Air Act Section 602 Class II Substances	This substance is not listed.
DEA List I Chemicals (Precursor Chemicals)	This substance is not listed.

##### SARA 302/304

Composition/information on ingredients	No products were found.
SARA 304 RQ	Not applicable.

##### SARA 311/312

Classification	Immediate (acute) health hazard
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##### SARA 313

	No products were found.
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##### State Regulations

Massachusetts	This substance is not listed.
Ney York	This substance is not listed.
New Jersey	CAS no 112926-00-8 is listed in the New Jersey Right to Know Hazardous Substance List.
Pennsylvania	CAS no 7631-86-9 is listed in Chapter 323. Hazardous Substance List but not as an Environmental Hazard neither as a Special Hazardous Substance.
California Prop. 65	This substance is not listed.

##### Canada (Canadian lists)

Canadian NPRI	This substance is not listed.
CEPA Toxic substances	This substance is not listed.
Canada Inventory	This substance is not listed.

##### European Economic community information

	This substance is not classified in the Annex I of Directive 67/548/EEC.
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##### International lists (National inventory)

China	Listed on National Inventory.
Australia	Listed on AICS.
Japan	Not listed on Occupational Safety and Health Act, Japan Listed on Chemical Substance Law, Japan; ID no: H27-A-040/C-111A P
New Zealand	Not determined.
Philippines	Not determined.
Taiwan	Not determined.

#### 15.2 Chemical Safety Assessment

For this product an assessment was not carried out.

### SECTION 16: Other information

<b>Date of issue (yyyy/mm/dd):</b>	2018/07/11
<b>Version:</b>	1.1
<b>Description of Modification:</b>	Section 1: Added REACH registration number Section 16: Added Exposure Scenario

**Notice to reader:**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

#### Exposure Scenario 1 (Industrial use)

##### 1. Industrial use Reagent for analysis, (Chemical production)

#### Sectors of end-use

SU 3	Industrial uses: Uses of substances as such or in preparations at industrial sites
SU 9	Manufacture of fine chemicals
SU10	Formulation [mixing] of preparations and/ or re-packaging (excluding alloys)

#### Chemical product category

PC19	Removed from PC list and relocated in the technical function list (Table R.12- 15)24.
PC21	Laboratory chemicals

#### Process categories

PROC 1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
PROC 2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC 3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC 4	Chemical production where opportunity for exposure arises
PROC 5	Mixing or blending in batch processes
PROC 8a	Transfer of substance or mixture (charging and discharging) at non- dedicated facilities 26
PROC 8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities26
PROC 9	Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
PROC 10	Roller application or brushing
PROC 15	Use as laboratory reagent

#### Environmental Release Categories

ERC 1	Manufacture of the substance
ERC 2	Formulation into mixture
ERC 4	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
ERC 6a	Use of intermediate
ERC 6b	Use of reactive processing aid at industrial site (no inclusion into or onto article)

##### 2. Contributing scenarios: Operational conditions and risk management measures



<b>Exposure Scenario 2 (Professional use)</b>	
<b>1. Industrial use Reagent for analysis, (Chemical production)</b>	
<b>Sectors of end-use</b>	
SU 22	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
<b>Chemical product category</b>	
PC21	Laboratory chemicals
<b>Process categories</b>	
PROC 15	Use as laboratory reagent
<b>Environmental Release Categories</b>	
ERC 2	Formulation into mixture
ERC 6a	Use of intermediate
ERC 6b	Use of reactive processing aid at industrial site (no inclusion into or onto article)
<b>2. Contributing scenarios: Operational conditions and risk management measures</b>	