

required pursuant to Hazardous Product Regulations 2015

Lo-Vel 2023 N0023

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SECTION 1: Identification

Product name: Lo-Vel 2023 Product code: N0023

Other means of identification:

Product type:

Not available.

Powder.

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

Product use: Industrial applications.

Use of the

Additive

substance/mixture: Uses advised against:

Not applicable

Manufacturer: QEMETICA US Silica LLC

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Customer Service: 1-800-243-6745

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E-mail address for the person responsible for the safety data sheet:

sds@qemetica.com

Emergency telephone number

Washington DC: +1 703-741-5970 (Chemtrec Emergency number,

CCN1020385)

SECTION 2: Hazards identification

Classification of the COMBUSTIBLE DUSTS - Category 1

substance or mixture: GHS label elements:

Signal word:

Warning

Hazard statements: May form combustible dust concentrations in air.

Precautionary statements

Prevention: Not applicable.
Response: Not applicable.
Storage: Not applicable.
Disposal: Not applicable.

Supplemental label Keep container tightly closed. Keep away from heat,

elements: sparks, open flames and hot surfaces. - No smoking.

Prevent dust accumulation. Emits toxic fumes when

heated.

Percentage of the mixture consisting of ingredient(s) of

unknown acute toxicity: 8%



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(dermal), 8% (inhalation).

Other hazards which do

not result in classification:

None known.

SECTION 3: Composition/information on ingredients

Substance/mixture Mixture
Product name: Lo-Vel 2023
Other means of identification: Not available.

CAS number/other identifier

Ingredient	Synonyms	%	CAS
name		(w/w)	number
Silica, amorphous, precipitated and gel	Silica gel, precipitated, crystalline- free; Silica gel, precipitated, crystalline free; Amorphous synthetic silica gel; Synthetic amorphous silica, precipitated; Synthetic, crystalline free, silica gel; Silica, amorphous, highly dispersed; Silica, amorphous, precipitated and gel.; Silica Amorphous, gel; Silica, Amorphous - Precipitated and gel; Precipitated Silica; Silica gel	80 - 100*	112926-00-8
Polypropylene Wax		5 - 10*	Not available.

Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

Contains no detectable crystalline silica (detection limit <0.1% by weight). SUB codes represent substances without registered CAS Numbers.

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.

SECTION 4: First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Description of necessary first aid measures

Eye contact: Protect the non-irritated eye, remove contact lenses. Rinse the contaminated eyes carefully with water for 10-15



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minutes. Avoid strong streams of water – the risk of damaging the cornea. After rinsing put on an aseptic – sterile

dressing and seek immediate medical advice.

Inhalation: Remove to fresh air. Keep person warm and at rest. If not

breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained

personnel.

Skin contact: Remove contaminated clothing and shoes. Wash skin

thoroughly with soap and water or use recognized skin

cleanser. Do NOT use solvents or thinners.

Ingestion: If swallowed, seek medical advice immediately and show the

packing or label. Keep person warm and at rest. Do NOT

induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact: Exposure to airborne concentrations above statutory or

recommended exposure limits may cause irritation of the

eyes.

Inhalation: Exposure to airborne concentrations above statutory or

recommended exposure limits may cause irritation of the

nose, throat and lungs.

Skin contact: No known significant effects or critical hazards. **Ingestion:** No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

irritation redness

Inhalation: Adverse symptoms may include the following:

respiratory tract irritation

coughing

Skin contact: No specific data. **Ingestion:** No specific data.

<u>Indication of immediate medical attention and special treatment needed, if necessary</u>

Notes to physician:

Treat symptomatically. Contact poison treatment specialist

immediately if large quantities have been ingested or inhaled.

Specific treatment: No specific treatment

Protection of first-No action shall be taken involving any personal risk or without

aiders: suitable training.

See toxicological information (Section 11)

SECTION 5: Fire-fighting measures

Extinguishing media

Suitable

extinguishingmedia: Use dry chemical powder.

Unsuitable extinguishing

media:

Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.



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Specific hazards arising from the chemical:

May form explosible dust-air mixture if dispersed. When transferring material into flammable solvents, use proper grounding to avoid electrical sparks.

Hazardous thermal decomposition products: Special protective actions for fire-fighters:

Decomposition products may include the following materials: carbon oxide/oxides.

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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.

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. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. 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 nonemergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains 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. Use spark-proof tools and

explosion-proof equipment. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose

of via a licensed waste disposal contractor.

Large spill: Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind.

explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled 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.

Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal

protective equipment.



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See Section 13 for additional waste treatment information.

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. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. 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. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Special precautions:

Advice on general occupational hygiene:

When transferring material into flammable solvents, use

proper grounding to avoid electrical sparks.

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

Do not store below the following temperature: -30°C (-22°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from moisture, direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. 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. Use appropriate containment to avoid environmental contamination.

SECTION 8: Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits	
Silica, amorphous, precipitated and gel	CA British Columbia Provincial (Canada, 8/2023) TWA 8 hours: 1.5 mg/m³. Form: Respirable.	

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TWA 8 hours: 4 mg/m³. Form: Total.

CA Quebec Provincial (Canada, 7/2023)

TWAEV 8 hours: 6 mg/m³. Form:

Respirable dust.

CA Saskatchewan Provincial
(Canada, 7/2013)

STEL 15 minutes: 20 mg/m³.

TWA 8 hours: 10 mg/m³.

Polypropylene Wax

None.

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures:

Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls:

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures:

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. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection:

Safety glasses with side shields.

Skin protection:

Hand protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection: Personal protective equipment for the body should be



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> selected based on the task being performed and the risks involved and should be approved by a specialist before

handling this product.

Appropriate footwear and any additional skin protection Other 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: 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. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is

necessary.

SECTION 9: Physical and chemical properties

Appearance:

Solid. Physical state: Color: White. Odor: Odorless. Odor threshold: Not available.

5 to 9 pH:

Not available. Melting point: Boiling point: Not available. Flash point: Not applicable. Auto-ignition Not applicable. temperature:

Decomposition

Not available. temperature: Not available. Flammability:

Lower and upper

explosive (flammable)

limits: Not available. Evaporation rate:

Vapor pressure: Not available. Vapor density: Not applicable. Relative density: Not available. Solubility(ies):

Media Result Soluble cold water

Water Solubility at room

temperature:

 $0.02 \, g/l$

Not applicable.

Partition coefficient:

Not applicable noctanol/water: Viscosity Not applicable



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SECTION 10: Stability and reactivity

Reactivity

No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

The product is stable.

Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

High temperature (>800 C) treatment (calcining). Avoid alteration of product properties before use. Calcining (which may result in crystalline formation) or mixing with additives may alter toxicological properties.

Refer to protective measures listed in sections 7 and 8.

Incompatible materials

Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

Hazardous decomposition products

Depending on conditions, decomposition products may include the following materials: carbon oxide/oxides

SECTION 11: Toxicological information

Information on toxicological effects

Acute Toxicity:

Addition 10 Attention 1				
Product/ingredient	Result	Species	Dose	Exposure
name				
Silica, amorphous,	LD50 Dermal	Rabbit	>5000 mg/kg	-
precipitated and gel	LD50 Oral	Rat	>5000 mg/kg	-

Conclusion/Summary: There are no data available on the mixture itself.

Irritation/Corrosion:

Conclusion/Summary

<u>Skin</u>: There are no data available on the mixture itself. Mixture ingredients are not classified in hazard class skin irritation, therefore classification criteria are not met.

<u>Eyes</u>: There are no data available on the mixture itself. Mixture ingredients are not classified in hazard class eye irritation, therefore classification criteria are not met.

<u>Respiratory</u>: There are no data available on the mixture itself. Mixture ingredients are not classified in hazard class respiratory irritation, therefore classification criteria are not met.

Sensitization:

Conclusion/Summary

<u>Skin</u>: There are no data available on the mixture itself. Mixture ingredients are not classified in hazard class skin sensitization, therefore classification criteria are not met. <u>Respiratory</u>: There are no data available on the mixture itself. Mixture ingredients are not classified in hazard class respiratory sensitization, therefore classification criteria are not met.



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Mutagenicity:

Conclusion/Summary: Mixture ingredients are not classified in hazard class mutagenicity, therefore classification criteria are not met.

Carcinogenicity:

Conclusion/Summary: Mixture ingredients are not classified in hazard class carcinogenicity, therefore classification criteria are not met.

Classification

<u></u>				
Product/ingredient name	<u>OSHA</u>	IARC	NTP	
Silica, amorphous, precipitated	-	3	-	
and				
gel				

IARC: 1, 2A, 2B, 3, 4

NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen

OSHA: +

Not listed/not regulated: -

Reproductive Toxicity:

Conclusion/Summary: Mixture ingredients are not classified in hazard class reproductive toxicity, therefore classification criteria are not met.

Teratogenicity:

Conclusion/Summary: Mixture ingredients are not classified in hazard class teratogenicity, therefore classification criteria are not met.

Specific target organ toxicity (single exposure):

Not available.

Specific target organ toxicity (repeated exposure):

Not available.

Target organs: Contains material which may cause damage to the following organs: upper respiratory tract, eyes, however changes are reversible.

Aspiration hazard:

Not available

Information on the likely routes of exposure

Potential acute health effects

Eye contact: Exposure to airborne concentrations above statutory or

recommended exposure limits may cause irritation of the

eyes.

Inhalation: Exposure to airborne concentrations above statutory or

recommended exposure limits may cause irritation of the

nose, throat and lungs.

Skin contact: No known significant effects or critical hazards Ingestion: No known significant effects or critical hazards

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

irritation redness

Inhalation: Adverse symptoms may include the following:

respiratory tract irritation

coughing

Skin contact: No specific data. Ingestion: No specific data.



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Delayed and immediate effects and also chronic effects from short and long term exposure

Conclusion/Summary:

There are no data available on the mixture itself. An epidemiological study was conducted which included 165 precipitated silica workers who had been exposed an average time span of 8.6 years. Of these 165 workers, 44 had been exposed for an average of 18 years. No adverse effects were noted in complete medical examinations (including chest roentgenograms) of these workers. Pulmonary function decrements were correlated only with smoking and age but not with the degree or duration of dust exposures. Laboratory studies have also been conducted in small animals via inhalation of levels of precipitated silica dust of up to 126 mg/cu.m. per periods from six months to two years. Although precipitated silica was temporarily deposited in the animals ' lungs, most of the deposited material was cleared soon after the dust exposure ended. The results of all studies performed by, or known to, Qemetica indicate a very low order of pulmonary activity for synthetic precipitated silicas. Qemetica recommends that persons with breathing problems or lung disease should not work in dusty areas unless a physician approves and certifies their fitness to wear respiratory protection. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from shortterm and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Short term exposure

Potential immediate

See section 4.

effects: Potential delayed

See section 4.

effects:

Potential chronic health effects

General:

Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. An epidemiological study was conducted which included 165 precipitated silica workers who had been exposed an average time span of 8.6 years. Of these 165 workers, 44 had been exposed for an average of 18 years. No adverse effects were noted in complete medical examinations (including chest roentgenograms) of these workers.

Pulmonary function decrements were correlated only with smoking and age but not with the degree or duration of dust exposures. Laboratory studies have also been conducted in small animals via inhalation of levels of precipitated silica dust of up to 126 mg/cu.m. per periods from six months to two years. Although precipitated silica was temporarily deposited



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in the animals' lungs, most of the deposited material was cleared soon after the dust exposure ended. The results of all studies performed by, or known to, Qemetica indicate a very low order of pulmonary activity for synthetic precipitated silicas. Qemetica recommends that persons with breathing problems or lung disease should not work in dusty areas unless a physician approves and certifies their fitness to wear

respiratory protection.

Carcinogenicity: No known significant effects or critical hazards. Mutagenicity: No known significant effects or critical hazards. Reproductive Toxicity: No known significant effects or critical hazards.

SECTION 12: Ecological information

Toxicity

Product/ingredient	Result	Species	Exposure
name			
Silica, amorphous, precipitated and gel	NOEC >1000 ppm	Daphnia - <i>Daphnia</i> <i>magna</i>	24 hours
	Acute NOEC >10000 ppm Fresh water	Fish	96 hours Static
	Acute NOEC >10000 ppm	Fish - <i>Brachydanio</i> rerio	4 days Static

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Silica, amorphous,	-	-	Not readily
precipitated and gel			

Bioaccumulative potential

Product/ingredient	Log _{Pow}	BCF	Potential
name			
Silica, amorphous,	-	0	Low
precipitated and gel			

Mobility in soil

Soil/water partition coefficient (K_{OC}): Not available.

Other adverse effects (such as hazardous to the ozone layer)

The substance does not contribute to ozone layer depletion.

SECTION 13: Disposal considerations

Disposal methods:

The generation of waste should be avoided or minimized wherever possible. 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 local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with

fully compliant with the requirements of all authorities with



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jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

SECTION 14: Transport information

	TDG	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class (es)	-	-	-
Packing group	-	-	1
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information:

TDG: None identified. **IMDG:** None identified. **IATA:** None identified.

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

Not applicable.

to IMO instruments:

SECTION 15: Regulatory information

National Inventory List

Canada inventory (DSL) All components are listed or exempted.



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SECTION 16: Other information

Please refer to Section 2 of this document for GHS hazard classifications. The customer is responsible for determining the QEMETICA code for this material.

Date of previous

07.05.2025

issue

Organization that

prepared

EHS

the SDS:

Key to abbreviations: ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and

Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of

Pollution From Ships, 1973 as modified by the Protocol of 1978.

("Marpol" = marine pollution)

N/A = Not availableSGG = Segregation Group UN = United Nations

Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by Qemetica, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.