SAFETY DATA SHEET



1. Identification

Product identifier VARIFLO® QD

Other means of identification

CAS number 9000-30-0
Recommended use Not available.
Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name CETCO, an MTI Company 2870 Forbs Avenue Hoffman Estates, IL 60192

United States

Telephone General Information 800 527-9948

Website http://www.cetco.com/

E-mail safetydata@mineralstech.com

Emergency phone number Emergency 1.866.519.4752/1 760 476 3962

Supplier Not available.

2. Hazard identification

Physical hazards Not classified.

Health hazards Sensitization, respiratory Category 1

Environmental hazards Not classified.

Label elements



Signal word Danger

Hazard statement May form combustible dust concentrations in air. May cause allergy or asthma symptoms or

breathing difficulties if inhaled.

Precautionary statement

Prevention Keep out of reach of children. Read label before use. Avoid breathing dust. Wear respiratory

protection.

Response If medical advice is needed, have product container or label at hand. IF INHALED: Remove

person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call

a POISON CENTER/doctor.

Storage Store away from incompatible materials.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards None known.

Supplemental information 100% of the substance consists of component(s) of unknown acute dermal toxicity. 100% of the

substance consists of component(s) of unknown acute inhalation toxicity. 100% of the substance consists of component(s) of unknown acute hazards to the aquatic environment. 100% of the substance consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
GUAR GUM		9000-30-0	100

Material name: VARIFLO® QD SDS CANADA

4610 Version #: 12 Revision date: 23-July-2021 Issue date: 28-August-2018

DSD: Directive 67/548/EEC CLP: Regulation No. 1272/2008.

#: This substance has been assigned Community workplace exposure limit(s).

PBT: persistent, bioaccumulative and toxic substance. vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. *Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Composition comments Occupational Exposure Limits for constituents are listed in Section 8.

4. First-aid measures

Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

> Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If experiencing respiratory symptoms: Call a

poison center or doctor/physician.

Wash off with soap and water. Get medical attention if irritation develops and persists. Skin contact

Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists. Eye contact

Ingestion Rinse mouth thoroughly. If ingestion of a large amount does occur, call a poison control center immediately. Do not induce vomiting without advice from poison control center. If vomiting occurs,

keep head low so that stomach content doesn't get into the lungs.

Dusts may irritate the respiratory tract, skin and eyes. Difficulty in breathing.

Most important symptoms/effects, acute and

delaved

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

Indication of immediate medical attention and special treatment needed

General information

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Dry chemical, CO2, water spray or regular foam.

During fire, gases hazardous to health may be formed.

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Fire fighting equipment/instructions Move containers from fire area if you can do it without risk. Move containers from fire area if you can do so without risk. Material can be slippery when wet...

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions. protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. Material can be slippery when wet.

Methods and materials for containment and cleaning up Stop leak if you can do so without risk. Minimize dust generation and accumulation. Avoid the generation of dusts during clean-up. Collect dust using a vacuum cleaner equipped with HEPA filter. Sweep up or gather material and place in appropriate container for disposal.

Large Spills: Wet down with water and dike for later disposal. After removal flush contaminated area thoroughly with water. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. For waste disposal, see section 13 of the SDS.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Do not flush into surface water or sanitary sewer system.

7. Handling and storage

Precautions for safe handling

Minimize dust generation and accumulation. Take measures to prevent the build up of electrostatic charge. Provide appropriate exhaust ventilation at places where dust is formed. Avoid breathing dust. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Material can be slippery when wet. Refer to NFPA Pamphlet No. 654, "Prevention of Fire and Dust Explosions in the Chemical, Dye, Pharmaceutical, and Plastics Industries."

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Guard against dust accumulation of this material. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

Constituents	ccupational Health & Safety Code, Schedu Type	Value	Form
INERT OR NUISANCE DUSTS (CAS SEQ250)	TWA	3 mg/m3	Respirable particles.
		10 mg/m3	Total particulate.
Canada. British Columbia Safety Regulation 296/97,	OELs. (Occupational Exposure Limits for	r Chemical Substances, C	ccupational Health and
Constituents	Type	Value	Form
INERT OR NUISANCE DUSTS (CAS SEQ250)	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Total dust.
Canada. Ontario OELs. (C	Control of Exposure to Biological or Chemi	ical Agents) Value	Form
	Туре		
INERT OR NUISANCE DUSTS (CAS SEQ250)	TWA	3 mg/m3	Respirable fraction.
,		10 mg/m3	Inhalable fraction.
•	Ministry of Labor - Regulation respecting o	occupational health and s	
Constituents	Туре	Value	Form
INERT OR NUISANCE DUSTS (CAS SEQ250)	TWA	10 mg/m3	Total dust.
	ELs (Occupational Health and Safety Reg	· · · · · · · · · · · · · · · · · · ·	_
Constituents	Туре	Value	Form
INERT OR NUISANCE DUSTS (CAS SEQ250)	15 minute	6 mg/m3	Respirable fraction.
		20 mg/m3	Inhalable fraction.
	8 hour	3 mg/m3	Respirable fraction.
			Inhalable fraction.
		10 mg/m3	milatable maetiem.
logical limit values	No biological exposure limits noted for the	· ·	imalable fraction.
logical limit values propriate engineering atrols	No biological exposure limits noted for the If engineering measures are not sufficient OEL, suitable respiratory protection must Ventilation rates should be matched to continuous ventilation, or other engineering exposure limits. If exposure limits have racceptable level. If material is ground, cut use appropriate local exhaust ventilation limits.	ne ingredient(s). Int to maintain concentration is be worn. Good general veronditions. If applicable, use controls to maintain airborn to been established, maint ut, or used in any operation	s of dust particulates below to entilation should be used. process enclosures, local ne levels below recommende ain airborne levels to an which may generate dusts,
propriate engineering atrols	If engineering measures are not sufficier OEL, suitable respiratory protection mus Ventilation rates should be matched to c exhaust ventilation, or other engineering exposure limits. If exposure limits have r acceptable level. If material is ground, cu use appropriate local exhaust ventilation limits. es, such as personal protective equipment	ne ingredient(s). Int to maintain concentration is be worn. Good general veronditions. If applicable, use a controls to maintain airborn not been established, maint ut, or used in any operation into keep exposures below the	s of dust particulates below tentilation should be used. process enclosures, local ne levels below recommende ain airborne levels to an which may generate dusts, he recommended exposure
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oropriate engineering atrols ividual protection measure Eye/face protection	If engineering measures are not sufficier OEL, suitable respiratory protection mus Ventilation rates should be matched to c exhaust ventilation, or other engineering exposure limits. If exposure limits have r acceptable level. If material is ground, cu use appropriate local exhaust ventilation limits. es, such as personal protective equipment Applicable for industrial settings only. Ch	ne ingredient(s). Int to maintain concentration of the worn. Good general version ditions. If applicable, use a controls to maintain airborn not been established, maint ut, or used in any operation to keep exposures below the memical respirator with organical respirator with or	s of dust particulates below to entilation should be used. It process enclosures, local ne levels below recommende ain airborne levels to an which may generate dusts, he recommended exposure nic vapor cartridge, full

Respiratory protection Applicable for industrial settings only. Use a NIOSH/MSHA approved respirator if there is a risk of

exposure to dust/fume at levels exceeding the exposure limits. Chemical respirator with organic

vapor cartridge, full facepiece, dust and mist filter.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Odor threshold

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Use good industrial hygiene practices in handling this material.

9. Physical and chemical properties

Appearance Powder.
Physical state Solid.
Form Powder.
Color Off-white.
Odor Bean-like

pH 5.5 - 6.1 A 1% solution may reach a pH of 5.5 - 6.1 and tend to become more acidic on standing.

Melting point/freezing point Initial boiling point and boiling

Not available. Not available.

Not available.

range

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

Not available.

(%)

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Explosive properties Not explosive.

Molecular formula UNKNOWN

Oxidizing properties Not oxidizing.

10. Stability and reactivity

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

Chemical stability Stable at normal conditions.

Possibility of hazardous

reactions

Will not occur.

Conditions to avoid Exposure to moisture. Heat, flames and sparks. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular

products weight hydrocarbons.

Wolght Hydrodarbond

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause allergy or asthma symptoms or breathing difficulties if inhaled. Dust may irritate

respiratory system.

Skin contact Dust or powder may irritate the skin.

Eye contact Dust may irritate the eyes.

Ingestion May cause discomfort if swallowed. Expected to be a low ingestion hazard. However, ingestion is

not likely to be a primary route of occupational exposure.

Symptoms related to the physical, chemical and toxicological characteristics

Dusts may irritate the respiratory tract, skin and eyes. Difficulty in breathing. Exposure may cause

temporary irritation, redness, or discomfort.

Information on toxicological effects

Acute toxicity Not known.

Product Species Test Results

GUAR GUM (CAS 9000-30-0)

<u>Acute</u>

Oral

LD50 Mouse 8100 mg/kg

Rabbit 7 g/kg

Rat 6770 mg/kg

Skin corrosion/irritation

Serious eye damage/eye irritation

е

Prolonged skin contact may cause temporary irritation. Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization May cause allergy or asthma symptoms or breathing difficulties if inhaled. Not a respiratory

sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available for this product.

Carcinogenicity Not listed by ACGIH, IARC, NIOSH, NTP OR OSHA.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

Further information This product has no known adverse effect on human health.

12. Ecological information

Ecotoxicity No data available for this product.

Product Species Test Results

GUAR GUM (CAS 9000-30-0)

Aquatic

Crustacea EC50 Daphnia 50, 48 Hours

Acute

Fish LC50 Rainbow trout, donaldson trout 218 mg/l, 96 hours

(Oncorhynchus mykiss)

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow

this material to drain into sewers/water supplies. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

TDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to

Not applicable.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR. This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

The product does not need to be labelled in accordance with EC directives or respective national

laws.

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical	Yes

Country(s) or region Inventory name On inventory (yes/no)* Europe European List of Notified Chemical Substances (ELINCS) Inventory of Existing and New Chemical Substances (ENCS) Japan Yes Korea Existing Chemicals List (ECL) Yes New Zealand New Zealand Inventory Yes **Philippines** Philippine Inventory of Chemicals and Chemical Substances Yes

(PICCS)

Taiwan Chemical Substance Inventory (TCSI)

United States & Puerto Rico

Toxic Substances Control Act (TSCA) Inventory

Yes

16. Other information

Issue date28-August-2018Revision date23-July-2021

Version # 12

Further information This safety datasheet only contains information relating to safety and does not replace any product

information or product specification.

References ACGIH

EPA: AQUIRE database

NLM: Hazardous Substances Data Base

US. IARC Monographs on Occupational Exposures to Chemical Agents

Disclaimer CETCO, an MTI Company cannot anticipate all conditions under which this information and its

product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the

suitability and completeness of such information for each particular use.

Third party materials: Insofar as materials not manufactured or supplied by this manufacturer are used in conjunction with, or instead of this product, it is the responsibility of the customer to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of this product in conjunction with materials from another supplier.

Revision informationThis document has undergone significant changes and should be reviewed in its entirety.

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).