SAFETY DATA SHEETS

This SDS packet was issued with item:

078468894

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078071435 078071443 078071450 078071484 078071500 078071617 078071625 078077955 078080012 078086822
078086830 078086855 078086871 078086905 078086988 078089814 078089871 078092094 078092334 078095615
078099540 078102410 078102428 078104295 078104337 078105139 078105162 078107014 078109303 078109352
078111278 078116286 078125723 078130060 078132102 078133466 078135987 078141952 078151035 078162604
078162943 078176108 078192254 078194577 078244659 078247147 078247287 078247337 078250765 078301383
078305888 078321043 078321050 078321936 078325167 078326951 078342041 078356511 078356529 078356578
078356883 078359354 078359362 078359545 078359552 078359560 078359578 078359594 078362858 078373709
078397186 078397194 078397202 078397210 078406635 078435632 078442383 078443706 078443805 078443961
078443979 078443987 078443995 078446300 078446581 078447003 078452044 078452721 078454606 078454622
078454648 078454705 078454721 078467654 078467845 078472349 078472570 078475570 078477653 078479026
078480132 078480140 078480157 078480165 078480173 078481702 078482611 078484041 078484058 078484066
078484082 078487363 078488983 078490867 078493370 078493388 078494743 078497651 078498099 078498107
078498495 078498958 078502074 078503694 078503702 078504546 078539832 078543088 078545062 078548187
078551764 078552806 078556194 078556202 078556970 078556988 078556996 078557574 078559848 078560367
078561565 078562870 078562888 078562995 078563003 078563011 078567888 078570242 078570697 078571440
078571457 078571465 078576648 078576655 078576853 078576861 078577671 078579796 078579804 078579812
078579820 078580373 078582829 078583415 078585076 078595356 078595364 078595372 078596505 078604771
078604896 078659859 078659867 078668890 078668908 078668909 078668916 078668940 078669239 078669247
078669254 078669270 078669288 078669296 078669304 078669312 078669320 078669338 078669403 078669411
078669445 078669452 078669460 078669478 078669486 078669494 078669502 078669510 078669528 078669536
078669544 078669551 078670311 078670329 078670501 078670519 078670527 078670535 078670543 078670550
078670568 078670816 078670824 078670832 078670840 078670857 078670865 078670873 078670881 078670899
078670907 078670915 078670923 078670931 078670949 078670956 078672394 078672634 078675436 078675477
078677493 078677501 078677519 078677527 078678196 078680344 078698723 078699855 078702345 078702352
078703279 078708501 078719203 078719211 078719229 078760554 078769992 078795726 078803059 078816694
078817389 078817900 078831429 078844956 078847220 078847238 078855179 078855393 078878565 078879136

078881382 078884556 078885978 078886259 078886994 078887184 078890530 078890548 078890555 078904774
078905552 078905716 078905741 078906567 078906639 078906646 078907419 078907420 078907541 078907884
078908042 078909639 078910235 078914109 078914110 078914111 078914112 078914113 078914114 078915736
078917253 078917471 078918529 078918992 078920158 078920226 078920307 078920394 078920566 078920567
078920568 078926251 078926252 078926317 078926318 078926319 078926320 078926321 078926322 078926323

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

078559517 078907782

March 1, 2017

To whom it may concern:

This letter is to inform you that none of the Vetri-Science Laboratories nutritional supplements require a Material Safety Data Sheet (MSDS). These products are not considered hazardous, nor do they contain any hazardous materials.

Both Vetri-Repel Spray and Vetri-Repel Wipes do have a MSDS. These are topical products for which the MSDS can be provided upon written request.

Please retain this letter for your files.

Sincerely,

Sara Phillips
Vice President, Sales and Marketing,
Domestic Pet Business

SAFETY DATA SHEET

1. Identification

Product identifier **BD Vacutainer® Serum Clot Activator Plus Blood Collection Tube**

Other means of identification

Product code 368660, 365078, 365905, 366668, 367812, 367813, 367814, 367815, 367819, 367820, 368044, 368045, 368050, 368175

Recommended use For blood collection and analysis.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company name BD Diagnostics, PreAnalytical Systems

Address 1 Becton Drive
Franklin Lakes, NJ 07417-1885

Telephone 800-631-0174

Contact person Technical Services

Emergency telephone Chemtrec US 1-800-424-9300 EU 703-527-3887

E-mail pas_tech_services@bd.com

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement This material is not considered hazardous by the OSHA Hazard Communication Standard, OSHA 29 CFR 1910.1200.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash skin with soap and water.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information The product is bound on the wall of the device.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Quartz	14808-60-7	71-74
Oxirane, 2-Methyl-, Polymer with oxirane, Monobutyl ether	9038-95-3	1-5
Octamethylcyclotetrasiloxane	556-67-2	< 0.5
Toluene	108-88-3	< 0.5

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. Components not listed are either non-hazardous or are below reportable limits.

4. First-aid measures

Inhalation	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact	Wash skin with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Flush eyes with water as a precaution. If irritation occurs, get medical assistance.
Ingestion	Rinse mouth. Get medical attention if any discomfort occurs.
Most important symptoms/effects, acute and delayed	This product is not expected to produce adverse effects under normal conditions of use and appropriate personal hygiene.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	No specific first aid measures noted.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	By heating and fire, harmful vapors/gases may be formed.
Special protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.
Fire fighting equipment/instructions	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	Avoid contact with eyes and prolonged skin contact. See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	Collect spillage with shovel, broom or the like and reuse, if possible. Following product recovery, flush area with water. For waste disposal, see Section 13 of the SDS.
Environmental precautions	Environmental manager must be informed of all major spillages.

7. Handling and storage

Precautions for safe handling	Avoid contact with eyes and prolonged skin contact. Observe good laboratory hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry, well-ventilated place. Keep container closed. Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
Toluene (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Toluene (CAS 108-88-3)	TWA	20 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
Toluene (CAS 108-88-3)	STEL	560 mg/m3	
		150 ppm	
	TWA	375 mg/m3	
		100 ppm	

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
Octamethylcyclotetrasiloxane (CAS 556-67-2)	TWA	10 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*

* - For sampling details, please see the source document.

Exposure guidelines No exposure limits noted for ingredient(s).

Appropriate engineering controls No particular ventilation requirements.

Individual protection measures, such as personal protective equipment

Eye/face protection Risk of contact: Wear approved safety goggles.

Skin protection

Hand protection For prolonged or repeated skin contact use suitable protective gloves. Nitrile gloves are recommended. Suitable gloves can be recommended by the glove supplier.

Skin protection

Other No protection is ordinarily required under normal conditions of use.

Respiratory protection Under normal conditions, respirator is not normally required.

Thermal hazards None.

General hygiene considerations 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.

9. Physical and chemical properties

Appearance

Physical state Solid.

Form The product is bound on the wall of the device.

Color Not available.

Odor Not available.

Odor threshold Not applicable.

pH Not applicable.

Melting point/freezing point Not applicable.

Initial boiling point and boiling range Not applicable.

Flash point Not applicable.

Evaporation rate Not applicable.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	Not applicable.
Solubility(ies)	
Solubility (water)	Not applicable.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.
Other information	
Density	Not applicable.
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	None under normal temperatures and pressures.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact	Under normal conditions of intended use, this material does not pose a risk to health.
Eye contact	Under normal conditions of intended use, this material does not pose a risk to health.
Ingestion	Under normal conditions of intended use, this material does not pose a risk to health. However, ingestion is not likely to be a primary route of occupational exposure.
Symptoms related to the physical, chemical and toxicological characteristics	Under normal conditions of intended use, this material does not pose a risk to health.

Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.

Components	Species	Test Results
Octamethylcyclotetrasiloxane (CAS 556-67-2)		
Acute		
Dermal		
LD50	Rat	> 2400 mg/kg
Inhalation		
LC50	Rat	> 36 mg/l, 4 Hours
Oral		
LD50	Rat	> 4800 mg/kg
Toluene (CAS 108-88-3)		
Acute		
Dermal		
LD50	Rabbit	14.1 ml/kg

Components	Species	Test Results
Inhalation		
LC50	Rat	49000 mg/m³, 4 Hours
Oral		
LD50	Rat	5580 mg/kg

Skin corrosion/irritation Due to lack of data the classification is not possible.

Serious eye damage/eye irritation Due to lack of data the classification is not possible.

Respiratory or skin sensitization

Respiratory sensitization Due to lack of data the classification is not possible.

Skin sensitization Due to lack of data the classification is not possible.

Germ cell mutagenicity Due to lack of data the classification is not possible.

Carcinogenicity Dust: May cause cancer by inhalation. Not relevant, due to the form of the product.

IARC Monographs. Overall Evaluation of Carcinogenicity

Quartz (CAS 14808-60-7) 1 Carcinogenic to humans.

NTP Report on Carcinogens

Quartz (CAS 14808-60-7) Known To Be Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Reproductive toxicity Dust: Suspected of damaging fertility or the unborn child. Not relevant, due to the form of the product.

Specific target organ toxicity - single exposure Due to lack of data the classification is not possible.

Specific target organ toxicity - repeated exposure Dust: Causes damage to organs (lung) through prolonged or repeated exposure by inhalation. Not relevant, due to the form of the product.

Aspiration hazard Due to the physical form of the product it is not an aspiration hazard.

Chronic effects None known.

Further information As supplied, the product is expected to pose no immediate health hazard. The product is bound on the wall of the device and with proper use it is unlikely to escape the tube as a hazardous dust.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
Toluene (CAS 108-88-3)			
Aquatic			
Acute			
Crustacea	EC50	Daphnia magna	11.5 mg/l, 48 hours
Fish	LC50	Oncorhynchus kisutch	5.5 mg/l, 96 hours
Chronic			
Crustacea	NOEC	Ceriodaphnia dubia	0.74 mg/l, 7 days
Fish	NOEC	Oncorhynchus kisutch	1.4 mg/l, 40 days

Persistence and degradability No data available.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

Toluene (CAS 108-88-3) 2.73

Mobility in soil No data available.

Other adverse effects Not relevant, due to the form of the product.

13. Disposal considerations

Disposal instructions Dispose in accordance with all applicable regulations. Do not discharge into drains, water courses or onto the ground.

Hazardous waste code Not regulated.

Waste from residues / unused products	Dispose of waste and residues in accordance with local authority requirements.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Octamethylcyclotetrasiloxane (CAS 556-67-2)	One-Time Export Notification only.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Toluene (CAS 108-88-3)	LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Toluene (CAS 108-88-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Toluene (CAS 108-88-3)	6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Toluene (CAS 108-88-3)	35 %WV

DEA Exempt Chemical Mixtures Code Number

Toluene (CAS 108-88-3)	594

US state regulations

US. Massachusetts RTK - Substance List

Quartz (CAS 14808-60-7)
Toluene (CAS 108-88-3)

US. New Jersey Worker and Community Right-to-Know Act

Quartz (CAS 14808-60-7)
Toluene (CAS 108-88-3)

US. Pennsylvania Worker and Community Right-to-Know Law

Quartz (CAS 14808-60-7)
Toluene (CAS 108-88-3)

US. Rhode Island RTK

Toluene (CAS 108-88-3)

US. California Proposition 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Quartz (CAS 14808-60-7)
Toluene (CAS 108-88-3)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies 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).

16. Other information, including date of preparation or last revision

Issue date 17-May-2016

Revision date -

Version # 01

HMIS® ratings
Health: 0
Flammability: 0
Physical hazard: 0

NFPA ratings

List of abbreviations
LD50: Lethal Dose 50%.
LC50: Lethal Concentration 50%.
EC50: Effective Concentration 50%.
NOEC: No observed effect concentration.

References
HSDB® - Hazardous Substances Data Bank
ACGIH: American Conference of Governmental and Industrial Hygienists.
US. IARC Monographs on Occupational Exposures to Chemical Agents
National Toxicology Program (NTP) Report on Carcinogens
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
IARC Monographs. Overall Evaluation of Carcinogenicity

Disclaimer
BD Diagnostics Preanalytical Systems 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.

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SAFETY DATA SHEET

1. Identification

Product identifier

Product No.:	Product name:	Common name(s), synonym(s)
366668	Tube PLN PLC 13x75mm 3.0ml PLBL Red	

Other means of identification

SDS number: 088100003958

Recommended use and restriction on use

Recommended use: Scientific and industrial laboratory use. For In Vitro Diagnostic Use.
Restrictions on use: For External Use Only

Manufacturer/Importer/Supplier/Distributor Information

Manufacturer

Company Name:	BD Diagnostics, Preanalytical Systems
Address:	1 Becton Drive 07417 Franklin Lakes, NJ USA
Telephone:	1 800 631 0174
Fax:	1 201 847 4866
Contact Person:	Technical Services
E-mail:	pas_tech_services@bd.com

Emergency telephone number: ChemTrec 1 800 424 9300

2. Hazard(s) identification

Hazard Classification

Health Hazards

Carcinogenicity — Category 1A

Label Elements

Hazard Symbol:

Signal Word: Danger

Hazard Statement: H350: May cause cancer.

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Precautionary Statements

Prevention: P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P281: Use personal protective equipment as required.

Response: P308+P313: IF exposed or concerned: Get medical advice/attention.

Storage: P405: Store locked up.

Disposal: P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in GHS classification: None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Quartz (SiO_2)		14808-60-7	50 - <100%
Aluminum oxide (Al_2O_3)		1344-28-1	0.1 - <1%
Iron oxide (Fe_2O_3)		1309-37-1	0 - <0.1%
Titanium oxide (TiO_2)		13463-67-7	0 - <0.1%
Benzene, methyl-		108-88-3	0 - <0.1%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

General information: Get medical attention if symptoms occur.

Ingestion: Rinse mouth thoroughly. Seek medical advice.

Inhalation: Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Skin Contact: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if symptoms occur.

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Eye contact: Important! Immediately rinse with water for at least 15 minutes. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Hazards: Low hazard for recommended handling by trained personnel.

Indication of immediate medical attention and special treatment needed

Treatment: Get medical attention if symptoms occur.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Water spray, fog, CO2, dry chemical, or alcohol resistant foam.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: None known.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No unusual fire or explosion hazards noted.

Special protective equipment for fire-fighters: Use fire-extinguishing media appropriate for surrounding materials. Wear self-contained breathing apparatus and protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid contact with spilled material. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Methods and material for containment and cleaning up: Sweep or scoop up and remove. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Environmental Precautions: Do not release into the environment.

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7. Handling and storage

Precautions for safe handling: Wear appropriate personal protective equipment. Low hazard for recommended handling by trained personnel.

Conditions for safe storage, including any incompatibilities: Keep containers tightly closed. Keep the container in a safe place. Keep in a cool, well-ventilated place.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Quartz (SiO2) - Respirable dust.	TWA	0.1 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	0.1 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
Quartz (SiO2)	AN ESL	0.27 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (03 2012)
	ST ESL	14 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (03 2012)
Quartz (SiO2) - Respirable dust.	TWA PEL	0.1 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010)
Quartz (SiO2) - Total dust.	TWA PEL	0.3 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010)
Quartz (SiO2) - Respirable fraction.	TWA	0.025 mg/m3	US. ACGIH Threshold Limit Values (12 2010)
Quartz (SiO2) - Respirable dust.	REL	0.05 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
Quartz (SiO2) - Respirable.	TWA	0.1 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
	TWA	2.4 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
Quartz (SiO2) - Respirable dust.	OSHA_ACT	0.025 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (03 2016)
	TWA	0.05 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) (03 2016)
Quartz (SiO2) - Respirable dust.	PEL	0.05 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (03 2016)
Aluminum oxide (Al2O3) - Total dust.	TWA	10 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Aluminum oxide (Al2O3) - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Aluminum oxide (Al2O3) - Total dust.	TWA	10 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
Aluminum oxide (Al2O3) - Respirable fraction.	TWA	5 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
Aluminum oxide (Al2O3)	AN ESL	5 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (03 2012)
	ST ESL	50 µg/m3	US. Texas. Effects Screening Levels (Texas

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			Commission on Environmental Quality) (03 2012)
Aluminum oxide (Al2O3) - Respirable fraction.	TWA PEL	5 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010)
Aluminum oxide (Al2O3) - Total dust.	TWA PEL	10 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010)
Aluminum oxide (Al2O3) - Respirable fraction.	TWA	1 mg/m3	US. ACGIH Threshold Limit Values (12 2010)
Aluminum oxide (Al2O3) - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Aluminum oxide (Al2O3) - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Aluminum oxide (Al2O3) - Total dust.	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Aluminum oxide (Al2O3) - Respirable fraction.	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Iron oxide (Fe2O3) - Fume.	TWA	10 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	10 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
Iron oxide (Fe2O3)	ST ESL	50 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (12 2010)
	AN ESL	5 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (12 2010)
Iron oxide (Fe2O3) - Fume.	TWA PEL	5 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010)
Iron oxide (Fe2O3) - Respirable fraction.	TWA	5 mg/m3	US. ACGIH Threshold Limit Values (12 2010)
Iron oxide (Fe2O3) - Dust and fume. - as Fe	REL	5 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
Iron oxide (Fe2O3) - Fume.	PEL	10 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Iron oxide (Fe2O3) - Respirable fraction.	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Iron oxide (Fe2O3) - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Iron oxide (Fe2O3) - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Titanium oxide (TiO2) - Respirable fraction.	TWA	1 mg/m3	US. ACGIH Notice of Intended Changes (NIC) to Threshold Limit Values (02 2013)
Titanium oxide (TiO2) - Total dust.	TWA	10 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	10 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
Titanium oxide (TiO2)	ST ESL	50 µg/m3	US. Texas. Effects Screening Levels (Texas

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				Commission on Environmental Quality) (03 2012)
	AN ESL		5 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (03 2012)
	TWA		10 mg/m3	US. ACGIH Threshold Limit Values (12 2010)
Titanium oxide (TiO2) - Total dust.	PEL		15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Benzene, methyl-	STEL	150 ppm	560 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	100 ppm	375 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	150 ppm	580 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	TWA	100 ppm	375 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	ST ESL		640 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011)
	AN ESL		1,200 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011)
	ST ESL		170 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011)
	AN ESL		330 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (12 2010)
	TWA PEL	10 ppm	37 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)
	STEL	150 ppm	560 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010)
	Ceiling	500 ppm		US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010)
	TWA	20 ppm		US. ACGIH Threshold Limit Values (12 2010)
	REL	100 ppm	375 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	STEL	150 ppm	560 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	Ceiling	300 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	MAX. CONC	500 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
	TWA	200 ppm		US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)

Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
Benzene, methyl- (o-Cresol, with hydrolysis: Sampling time: End of shift.)	0.3 mg/g (Creatinine in urine)	ACGIH BEI (03 2013)
Benzene, methyl- (toluene: Sampling time: End of shift.)	0.03 mg/l (Urine)	ACGIH BEI (03 2013)
Benzene, methyl- (toluene: Sampling time: Prior to last shift of work week.)	0.02 mg/l (Blood)	ACGIH BEI (03 2013)

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Appropriate Engineering Controls	Observe good industrial hygiene practices. Low hazard for recommended handling by trained personnel.

Individual protection measures, such as personal protective equipment

General information:	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.
Eye/face protection:	Avoid contact with eyes and prolonged skin contact. Protective gloves and goggles must be used if there is a risk of direct contact or splash.
Skin Protection	
Hand Protection:	Use suitable protective gloves if risk of skin contact.
Other:	No data available.
Respiratory Protection:	No protection is ordinarily required under normal conditions of use and with adequate ventilation.
Hygiene measures:	Observe good industrial hygiene practices.

9. Physical and chemical properties

Appearance

Physical state:	solid
Form:	solid
Color:	White
Odor:	Odorless
Odor threshold:	No data available.
pH:	Not applicable
Melting point/freezing point:	Not applicable
Initial boiling point and boiling range:	Not applicable
Flash Point:	Not applicable
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	No data available.
Solubility(ies)	

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Solubility in water:	Not applicable
Solubility (other):	Not applicable
Partition coefficient (n-octanol/water):	Not applicable
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	Not determined.

10. Stability and reactivity

Reactivity:	Stable under normal temperature conditions and recommended use.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Material is stable under normal conditions.
Conditions to avoid:	None under normal conditions.
Incompatible Materials:	None under normal conditions.
Hazardous Decomposition Products:	Material is stable under normal conditions.

11. Toxicological information

Information on likely routes of exposure

Ingestion:	Due to the small packaging the risk of ingestion is minimal.
Inhalation:	Under normal conditions of intended use, this material is not expected to be an inhalation hazard. Prolonged breathing of high levels of crystalline silica can cause silicosis. Also, airborne crystalline silica is possibly carcinogenic to humans.
Skin Contact:	Due to the small packaging the risk of skin contact is minimal.
Eye contact:	Due to the small packaging the risk of eye contact is minimal.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion:	No specific symptoms noted.
Inhalation:	No specific symptoms noted.
Skin Contact:	Skin irritation is not anticipated when used normally.
Eye contact:	No specific symptoms noted.

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Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral
Product: No data available.

Dermal
Product: No data available.

Inhalation
Product: No data available.

Repeated dose toxicity
Product: No data available.

Specified substance(s):

Aluminum oxide (Al_2O_3)	NOAEL (Rat(Female, Male), Oral, 28 - 53 d): 1,000 mg/kg Oral Read-across from supporting substance (structural analogue or surrogate), Weight of Evidence study LOAEL (Rat(Male), Inhalation): 28 mg/m3 Inhalation Read-across from supporting substance (structural analogue or surrogate), Supporting study NOAEL (Rat(Female, Male), Oral, > 364 d): 322.5 mg/kg Oral Read-across from supporting substance (structural analogue or surrogate), Weight of Evidence study
Iron oxide (Fe_2O_3)	NOAEL (Rat(Male), Inhalation): 10.1 mg/m3 Inhalation Read-across based on grouping of substances (category approach), Key study NOAEL (Rat(Female, Male), Inhalation): 4.7 mg/m3 Inhalation Read-across based on grouping of substances (category approach), Key study
Titanium oxide (TiO_2)	NOAEL (Rat(Female, Male), Inhalation): 5 mg/m3 Inhalation Experimental result, Supporting study LOAEL (Mouse(Female), Inhalation): 47 mg/m3 Inhalation Experimental result, Supporting study LOAEL (Mouse(Female), Inhalation): 10.8 mg/m3 Inhalation Experimental result, Supporting study NOAEL (Hamster, Syrian(Female), Inhalation): 9.9 mg/m3 Inhalation Experimental result, Supporting study NOAEL (Rat(Female), Inhalation): 9.5 mg/m3 Inhalation Experimental result, Supporting study
Benzene, methyl-	LOAEL (Rat(Female, Male), Inhalation): 4,710 mg/m3 Inhalation Experimental result, Key study NOAEL (Rat(Female, Male), Oral, 13 Weeks): 625 mg/kg Oral Experimental result, Key study LOAEL (Rat(Female, Male), Inhalation): 2,261 mg/m3 Inhalation Experimental result, Key study NOAEL (Rat(Female, Male), Inhalation): 2,355 mg/m3 Inhalation Experimental result, Key study

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LOAEL (Rat(Female, Male), Inhalation, 26 Weeks): 1,500 ppm(m) Inhalation Not specified, Not specified

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Aluminum oxide (Al2O3)	in vivo (Rabbit): Not irritant Experimental result, Key study
Iron oxide (Fe2O3)	in vivo (Rabbit): Not irritant Experimental result, Weight of Evidence study in vivo (Rabbit): Not irritant Experimental result, Weight of Evidence study
Titanium oxide (TiO2)	in vivo (Rabbit): Not irritant Experimental result, Supporting study
Benzene, methyl-	in vivo (Rabbit): Irritating Experimental result, Key study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Aluminum oxide (Al2O3)	in vivo (Rabbit, 24 hrs): Not irritating EU in vivo (Rabbit, 24 hrs): The slight erythema was reversible, resolving by 48 hours post administration of the test substance. The scores observed for cunjunctival erythema would not lead to a classification under EU-CLP (Regulation (EC) 1272/2008). EU
Iron oxide (Fe2O3)	in vivo (Rabbit, 1 - 72 hrs): Not irritating
Titanium oxide (TiO2)	in vivo (Rabbit, 1 hrs): Not irritating EU in vivo (Rabbit, 24 hrs): Not irritating EU in vivo (Rabbit, 48 - 72 hrs): Minimal irritant EU in vivo (Rabbit, 24 hrs): Not irritating EU in vivo (Rabbit, 1 hrs): Minimal irritant EU in vivo (Rabbit, 48 - 72 hrs): Not irritating EU in vivo (Rabbit, 24 hrs): Minimal irritant EU in vivo (Rabbit, 24 - 72 hrs): Not irritating EU in vivo (Rabbit, 1 hrs): Not irritating EU in vivo (Rabbit, 24 - 72 hrs): Minimal irritant EU in vivo (Rabbit, 48 - 72 hrs): Not irritating EU
Benzene, methyl-	in vivo (Rabbit, 24 - 72 hrs): Not irritating EU in vivo (Rabbit, 4 d): Irritating AFNOR scale for interpretation of occular irritation

Respiratory or Skin Sensitization

Product: No data available.

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Specified substance(s):

Aluminum oxide (Al2O3)	Skin sensitization:, in vivo (Guinea pig): Non sensitising
Titanium oxide (TiO2)	Skin sensitization:, in vivo/in vitro (Guinea pig): Non sensitising
Benzene, methyl-	Skin sensitization:, in vivo (Guinea pig): Non sensitising

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Quartz (SiO2)	Overall evaluation: 1. Carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens:

Quartz (SiO2)	Known To Be Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

Quartz (SiO2)	Cancer

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

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12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product:	No data available.
Specified substance(s):	
Aluminum oxide (Al2O3)	LC 50 (Pimephales promelas, 96 h): 35 mg/l Experimental result, Weight of Evidence study LC 50 (Oncorhynchus mykiss, 96 h): 14.6 mg/l Experimental result, Weight of Evidence study
Iron oxide (Fe2O3)	LC 50 (Pimephales promelas, 96 h): 14.4 mg/l Experimental result, Supporting study LC 0 (Danio rerio, 96 h): >= 50,000 mg/l Experimental result, Key study LC 50 (Lepomis macrochirus, 96 h): 20 mg/l Experimental result, Supporting study LC 90 (Danio rerio, 96 h): +/- 100,000 mg/l Experimental result, Key study LC 50 (Oncorhynchus mykiss, 96 h): 18.29 mg/l Experimental result, Supporting study
Titanium oxide (TiO2)	LC 50 (Cyprinodon variegatus, 96 h): > 10,000 mg/l Experimental result, Weight of Evidence study LC 50 (Oncorhynchus mykiss, 96 h): > 100 mg/l Experimental result, Weight of Evidence study EC 50 (Danio rerio, 96 h): > 100 mg/l Experimental result, Not specified NOAEL (Oncorhynchus mykiss, 96 h): >= 100 mg/l Experimental result, Weight of Evidence study LC 50 (Cyprinodon variegatus, 96 h): > 240 - < 370 mg/l Experimental result, Not specified
Benzene, methyl-	LC 50 (Oncorhynchus kisutch, 96 h): 5.5 mg/l Experimental result, Key study

Aquatic Invertebrates

Product:	No data available.
Specified substance(s):	
Aluminum oxide (Al2O3)	EC 50 (Ceriodaphnia dubia, 48 h): 1.9 mg/l Experimental result, Weight of Evidence study
Iron oxide (Fe2O3)	EC 50 (Haliotis rubra, 48 h): 5.11 mg/l Experimental result, Supporting study EC 50 (Daphnia magna, 48 h): > 100 mg/l Experimental result, Key study
Titanium oxide (TiO2)	EC 50 (Water flea (Daphnia magna), 48 h): > 1,000 mg/l Intoxication EC 50 (Daphnia magna, 48 h): > 100 mg/l Experimental result, Not specified EC 50 (Daphnia magna, 48 h): > 1,000 mg/l Experimental result, Weight of Evidence study EC 50 (Daphnia magna, 48 h): > 100 mg/l Experimental result, Supporting

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	study EC 50 (Daphnia magna, 48 h): > 1,000 mg/l Experimental result, Weight of Evidence study
Benzene, methyl-	LC 50 (Ceriodaphnia dubia, 2 d): 3.78 mg/l Experimental result, Key study

Chronic hazards to the aquatic environment:

Fish

Product:	No data available.
Specified substance(s):	
Aluminum oxide (Al2O3)	EC 50 (Pimephales promelas, 7 d): 1.861 mg/l Experimental result, Weight of Evidence study EC 50 (Pimephales promelas, 7 d): 1.453 mg/l Experimental result, Weight of Evidence study
Iron oxide (Fe2O3)	NOAEL (Pimephales promelas, 33 d): 1.6 mg/l Experimental result, Supporting study NOAEL (Salvelinus fontinalis, 35 Weeks): 6 mg/l Experimental result, Supporting study NOAEL (Pimephales promelas, 33 d): 1 mg/l Experimental result, Supporting study NOAEL (Pimephales promelas, 12 Months): < 1.5 mg/l Experimental result, Supporting study
Titanium oxide (TiO2)	ED 0 (Phoxinus phoxinus, 30 d): >= 1,000 mg/l Experimental result, Supporting study LC 0 (Coregonus autumnalis migratorius G., 30 d): 3 mg/l Experimental result, Supporting study
Benzene, methyl-	NOAEL (Oncorhynchus kisutch, 40 d): 1.39 mg/l Experimental result, Key study

Aquatic Invertebrates

Product:	No data available.
Specified substance(s):	
Aluminum oxide (Al2O3)	EC 50 (Daphnia magna, 21 d): 1.097 mg/l Experimental result, Weight of Evidence study EC 50 (Ceriodaphnia dubia, 7 d): 2.374 mg/l Experimental result, Weight of Evidence study
Iron oxide (Fe2O3)	NOAEL (Arrenurus manubriator, 15 d): 800 mg/l Experimental result, Supporting study NOAEL (Daphnia magna, 21 d): 2 mg/l Experimental result, Supporting study NOAEL (Daphnia pulex, 21 d): 2.5 mg/l Experimental result, Supporting study EC 50 (Daphnia longispina, 21 d): 4.49 mg/l Experimental result, Supporting study EC 50 (Leptophlebia marginata, 24 d): 50.12 mg/l Experimental result,

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	Supporting study
Titanium oxide (TiO2)	EC 50 (Nitokra spinipes, 13 d): 2.03 mg/l Experimental result, Supporting study EC 50 (Nitokra spinipes, 13 d): 107.4 mg/l Experimental result, Supporting study EC 100 (Daphnia magna, 30 d): 500 mg/l Experimental result, Supporting study LC 100 (Daphnia magna, 18 d): 1,000 mg/l Experimental result, Supporting study
Benzene, methyl-	LOAEL (Ceriodaphnia dubia, 7 d): 2.76 mg/l Experimental result, Key study EC 50 (Ceriodaphnia dubia, 7 d): 3.23 mg/l Experimental result, Key study

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

Benzene, methyl-	74 % Detected in water. Experimental result, Weight of Evidence study 62 % Detected in water. Experimental result, Weight of Evidence study 81 % (5 d) Detected in water. Experimental result, Weight of Evidence study 73 % Detected in water. Experimental result, Weight of Evidence study 100 % (4 d) Detected in water. Not specified, Not specified

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):

Titanium oxide (TiO2)	Cyprinus carpio, Bioconcentration Factor (BCF): 550 Aquatic sediment Experimental result, Supporting study Cyprinus carpio, Bioconcentration Factor (BCF): 74 Aquatic sediment Experimental result, Supporting study Cyprinus carpio, Bioconcentration Factor (BCF): 325 Aquatic sediment Experimental result, Supporting study Oncorhynchus mykiss, Bioconcentration Factor (BCF): 19 - 208 Aquatic sediment Experimental result, Key study Cyprinus carpio, Bioconcentration Factor (BCF): 9 Aquatic sediment Experimental result, Supporting study

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Benzene, methyl-	Leuciscus idus, Bioconcentration Factor (BCF): 90 Aquatic sediment Experimental result, Key study Anguilla japonica, Bioconcentration Factor (BCF): 13.2 Aquatic sediment Not specified, Not specified

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: Not applicable

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Quartz (SiO_2)	No data available.
Aluminum oxide (Al_2O_3)	No data available.
Iron oxide (Fe_2O_3)	No data available.
Titanium oxide (TiO_2)	No data available.
Benzene, methyl-	No data available.

Other adverse effects: No data available.

13. Disposal considerations

Disposal instructions: Dispose of waste and residues in accordance with local authority requirements.

Contaminated Packaging: No data available.

14. Transport information

DOTUN Number:	Not regulated.
UN Proper Shipping Name:	Not regulated.
Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
Packing Group:	Not regulated.
Marine Pollutant:	Not regulated.
Limited quantity	Not regulated.
Excepted quantity	Not regulated.

Special precautions for user: Not regulated.

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IMDG

UN Number:	Not regulated.
UN Proper Shipping Name:	Not regulated.
Transport Hazard Class(es)	
Class:	Not regulated.
Subsidiary risk:	Not regulated.
EmS No.:	Not regulated.
Packing Group:	Not regulated.
Environmental Hazards	
Marine Pollutant:	Not regulated.
Special precautions for user:	Not regulated.

IATA

UN Number:	Not regulated.
Proper Shipping Name:	Not regulated.
Transport Hazard Class(es):	
Class:	Not regulated.
Subsidiary risk:	Not regulated.
Packing Group:	Not regulated.
Environmental Hazards	
Marine pollutant:	Not regulated.
Special precautions for user:	Not regulated.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Chemical Identity	OSHA hazard(s)
Quartz (SiO2)	kidney effects lung effects Cancer immune system effects

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity	Reportable quantity
Benzene, methyl-	1000 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Delayed (Chronic) Health Hazard
Carcinogenicity

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SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

Chemical Identity	Reportable quantity
Benzene, methyl-	1000 lbs.

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
Quartz (SiO2)	10000 lbs
Aluminum oxide (Al2O3)	10000 lbs
Iron oxide (Fe2O3)	10000 lbs
Titanium oxide (TiO2)	10000 lbs
Benzene, methyl-	10000 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

Chemical Identity	Reportable quantity
Benzene, methyl-	Reportable quantity: 1000 lbs.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity
Quartz (SiO2)

US. Massachusetts RTK - Substance List

Chemical Identity
Quartz (SiO2)

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity
Quartz (SiO2)

US. Rhode Island RTK

Chemical Identity
Quartz (SiO2)

16.Other information, including date of preparation or last revision

Issue Date: 10/15/2018

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Revision Information:	
Further Information:	No data available.
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