1. IDENTIFICATION

1.1 Product Identifiers
Product Name: Test Site #17,18,19
Alternative names: Majority Silicon dioxide, Quartz, Crystalline silica.
Product Number: 435-17EA, C435-17, 435-18EA, C435-18, 435-19EA, C435-19

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses: For laboratory and educational use only

1.3 Details of the supplier of the safety data sheet
Company: LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA
Telephone: +1 800 381 8003.
Fax: +1 631 820 8268.

1.4 Emergency telephone number: Emergency number: CHEMTREC 1 800 424-9300

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
GHS classification
Carcinogenicity, Lungs (Category 1A), H350
Specific Target Organ Toxicity, Repeated Exposure, Lungs (Category 1), H372

2.2 Label elements, including precautionary statements
Signal word: Danger
Pictogram:
Hazards statements: H350 - May cause cancer, H372– Causes damage to organs, (lungs) through prolonged or repeated exposure.
Precautionary statements: P264 - Wash exposed skin thoroughly after handling, P280 - Wear protective gloves, eye protection.

2.3 Hazards not otherwise classified: None

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: Not applicable
3.2 Mixture

Chemical Name	Product identifier	%	GHS-US classification
Quartz (Silicon dioxide)	CAS# 14808-60-7	98-99%	Carcinogenicity 1A, Lungs, H350; STOT RE 1, H372
Proprietary Ingredient 1	Trade Secret	1-2%	Not classified

3.3 Chemicals where a trade secret is claimed: Any concentration shown as a range is to protect confidentiality, or is it due to batch variation.

4. FIRST AID MEASURE

4.1 Description of the first aid measure:

INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get medical attention if necessary.
INHALATION: Remove to fresh air. Get medical attention if necessary.
EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if necessary.
SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing. Get medical attention if necessary.
4.2 Most important symptoms and effects, both acute and delayed: Refer to section 11.

4.3 Indication of any immediate medical attention and special treatment needed: No additional information available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media:
Suitable extinguishing media: Use TriClass, dry chemical extinguisher for surrounding fires.
5.2 Special hazard arising from the substance or mixture: Not applicable.
5.3 Advice for firefighters: Use self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.
6.2 Emergency procedures: Restrict unprotected personnel from the area.
6.3 Methods and material used for containment and cleanup procedure: Recover for use if not contaminated. Sweep up or vacuum and place in a suitable container for a proper disposal. Wash spill area with soap and water.

7. HANDLING AND STORAGE

7.1 Precaution for safe handling: Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Avoid breathing dust. Use with an adequate ventilation. Wash hands thoroughly after handling.

7.2 Storage: Store in closed container in a dry area. Avoid moisture.

7.3 incompatibility: Refer to section 10.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: ACGIH: TWA: 0.025 mg/m³ (respirable dust)
8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.
Respiratory protection: Non should be needed if normal laboratory handling at room temperature.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid.
Appearance: Tan.
Odor: No odor
pH: Neutral
Vapor Pressure (mm Hg): Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: N/A
Flash point: N/A
Autoignition: N/A

Boiling point: 2230°C (4046°F)
Melting point: 1710°C (3110°F)
Freezing point: Not available
Decomposition temp: Not available
Solubility: Not available
Specific gravity (H_2O = 1): ≈ 2.65g/cc
Percent volatile (%): N/A
Molecular formula: SiO_2
Molecular weight: 60.09

10. STABILITY AND REACTIVITY

Chemical Stability: Stable
Conditions to Avoid: Incompatible materials.
Incompatibilities: Contact with powerful oxidizing agents such as fluorine, chlorine trifluoride and oxygen difluoride may cause fires.
Hazardous decomposition: Silica will dissolve in hydrofluoric acid and produce the corrosive gas silicon tetrafluoride.
Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute effects: Eyes: Dust and granules may cause eye mechanical irritation. Skin: Not expected to cause irritation. Inhalation: Inhalation of the dust may cause coughing, sneezing, sore throat, nasal congestion and shortness of breath. Pre existing respiratory conditions may be affected by dust. Ingestion: Not expected to cause acute reaction.
Chronic effects: Prolonged inhalation of respirable crystalline silica may cause lung disease, silicosis, lung cancer
Crystalline silica is a basic component of soil, sand, granite, and many other minerals. Quartz is the most common form of crystalline silica. Cristobalite and tridymite are two other forms of crystalline silica. All three forms may become respirable size particles when workers chip, cut, drill, or grind objects that contain crystalline silica. Crystalline silica is a cancer suspect in humans from occupational sources and in manufacturing environments under prolonged exposure.
Toxicological data
Acute oral toxicity ORAL LD_{50}: >22,500mg/kg
Acute vapor toxicity IHL-LC_{50}: Not available
DERMAL LD_{50}: Not available

Carcinogenicity: IARC concluded that crystalline silica in the form of quartz or crystobalite dust is carcinogenic to humans (Group 1)

⚠ California prop 65: This product can expose you to chemicals crystalline silica which is known to The State of California to cause cancer. For more Information go to www.P65Warnings.ca.gov

12. ECOLOGICAL INFORMATION

Not available.

13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

14. TRANSPORT INFORMATION

UN number: N/A
Shipping name: N/A
Hazard Class: N/A
Packing group: N/A
Exceptions: Ltd Qty. N/A

15. REGULATORY INFORMATION

TSCA-listed, EINECS-listed (238-878-4).

16. OTHER INFORMATION

Disclaimer:

The Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. LAB-AIDS® makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration , investigation and verification. The data should not be confused with local, state, federal regulations, or insurance mandates, and CONSTITUTE NO WARRANTY. Any use of these data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling , storage, use and disposal of the product(s) described are beyond LAB-AIDS, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

LAB-AIDS
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SAFETY DATA SHEET
Version: SDS_463.01.01
Revision Date: May 20, 2020

1. IDENTIFICATION

1.1 Product Identifiers
Product Name: Test Site #20,21,22,24
Alternative names: Majority Silicon dioxide, Quartz, Crystalline silica.
Product Number: 435-20EA, C435-20, 435-21EA, C435-21, 435-22EA, C435-22, 435-24EA, C435-24.

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses: For laboratory and educational use only

1.3 Details of the supplier of the safety data sheet
Company: LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA
Telephone: +1 800 381 8003.
Fax: +1 631 820 8268.

1.4 Emergency telephone number: Emergency number: CHEMTREC 1 800 424-9300

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
GHS classification
Carcinogenicity, Lungs (Category 1A), H350
Specific Target Organ Toxicity, Repeated Exposure, Lungs (Category 1), H372


Pictogram:

2.2 Label elements, including precautionary statements
Signal word: Danger
Hazards statements: H350 - May cause cancer, H372– Causes damage to organs, (lungs) through prolonged or repeated exposure.
Precautionary statements: P264 - Wash exposed skin thoroughly after handling, P280 - Wear protective gloves, eye protection.

2.3 Hazards not otherwise classified: May cause eye irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: Not applicable
3.2 Mixture

Chemical Name	Product identifier	%	GHS-US classification
Quartz (Silicon dioxide)	CAS# 14808-60-7	98-99%	Carcinogenicity 1A, Lungs H350; STOT RE 1, H372
Proprietary Ingredient 1	Trade Secret	1-2%	Eye Irrit. 2A, H319

3.3 Chemicals where a trade secret is claimed: Any concentration shown as a range is to protect confidentiality, or is it due to batch variation.

4. FIRST AID MEASURE

4.1 Description of the first aid measure:
INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get medical attention if necessary.
INHALATION: Remove to fresh air. Get medical attention if necessary.
EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if necessary.
SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing. Get medical attention if necessary.
4.2 Most important symptoms and effects, both acute and delayed: Refer to section 11.

4.3 Indication of any immediate medical attention and special treatment needed: No additional information available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media:
Suitable extinguishing media: Use TriClass, dry chemical extinguisher for surrounding fires.
5.2 Special hazard arising from the substance or mixture: Not applicable.
5.3 Advice for firefighters: Use self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.
6.2 Emergency procedures: Restrict unprotected personnel from the area.
6.3 Methods and material used for containment and cleanup procedure: Recover for use if not contaminated. Sweep up or vacuum and place in a suitable container for a proper disposal. Wash spill area with soap and water.

7. HANDLING AND STORAGE

7.1 Precaution for safe handling: Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Avoid breathing dust. Use with an adequate ventilation. Wash hands thoroughly after handling.

7.2 Storage: Store in closed container in a dry area. Avoid moisture.

7.3 incompatibility: Refer to section 10.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: ACGIH: TWA: 0.025 mg/m³ (respirable dust)
8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.
Respiratory protection: Non should be needed if normal laboratory handling at room temperature.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid.
Appearance: Tan.
Odor: No odor
pH: Alkaline
Vapor Pressure (mm Hg): Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: N/A
Flash point: N/A
Autoignition: N/A

Boiling point: 2230°C (4046°F)
Melting point: 1710°C (3110°F)
Freezing point: Not available
Decomposition temp: Not available
Solubility: Not available
Specific gravity (H_2O = 1): ≈ 2.65g/cc
Percent volatile (%): N/A
Molecular formula: SiO_2
Molecular weight: 60.09

10. STABILITY AND REACTIVITY

Chemical Stability: Stable
Conditions to Avoid: Incompatible materials.
Incompatibilities: Contact with powerful oxidizing agents such as fluorine, chlorine trifluoride and oxygen difluoride may cause fires.
Hazardous decomposition: Silica will dissolve in hydrofluoric acid and produce the corrosive gas silicon tetrafluoride.
Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute effects: Eyes: Dust and granules may cause eye mechanical irritation. Proprietary ingredient may cause mild chemical eye irritation. Skin: Not expected to cause irritation. Inhalation: Inhalation of the dust may cause coughing, sneezing, sore throat, nasal congestion and shortness of breath. Pre existing respiratory conditions may be affected by dust. Ingestion: Not expected to cause acute reaction.
Chronic effects: Prolonged inhalation of respirable crystalline silica may cause lung disease, silicosis, lung cancer
Crystalline silica is a basic component of soil, sand, granite, and many other minerals. Quartz is the most common form of crystalline silica. Cristobalite and tridymite are two other forms of crystalline silica. All three forms may become respirable size particles when workers chip, cut, drill, or grind objects that contain crystalline silica. Crystalline silica is a cancer suspect in humans from occupational sources and in manufacturing environments under prolonged exposure.
Toxicological data
Acute oral toxicity ORAL LD_{50}: >22,500mg/kg
Acute vapor toxicity IHL-LC_{50}: Not available
DERMAL LD_{50}: Not available

Carcinogenicity: IARC concluded that crystalline silica in the form of quartz or crystobalite dust is carcinogenic to humans (Group 1)

⚠ California prop 65: This product can expose you to chemicals crystalline silica which is known to The State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

12. ECOLOGICAL INFORMATION

Not available.

13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

14. TRANSPORT INFORMATION

UN number: N/A
Shipping name: N/A
Hazard Class: N/A
Packing group: N/A
Exceptions: Ltd Qty. N/A

15. REGULATORY INFORMATION

TSCA-listed, EINECS-listed (238-878-4).

16. OTHER INFORMATION

Disclaimer:

The Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. LAB-AIDS® makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration , investigation and verification. The data should not be confused with local, state, federal regulations, or insurance mandates, and CONSTITUTE NO WARRANTY. Any use of these data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling , storage, use and disposal of the product(s) described are beyond LAB-AIDS, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

1. IDENTIFICATION

1.1 Product Identifiers
Product Name: Test Site #16
Alternative names: Majority Silicon dioxide, Quartz, Crystalline silica.
Product Number: 435-16EA, C435-16.

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses: For laboratory and educational use only

1.3 Details of the supplier of the safety data sheet
Company: LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA
Telephone: +1 800 381 8003.
Fax: +1 631 820 8268.

1.4 Emergency telephone number: Emergency number: CHEMTREC 1 800 424-9300

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
GHS classification
Carcinogenicity, Lungs (Category 1A), H350
Specific Target Organ Toxicity, Repeated Exposure, Lungs (Category 1), H372
Eye Irrit. (Category 2A), H319

2.2 Label elements, including precautionary statements
Signal word: Danger
Pictogram:
Hazards statements: H350 - May cause cancer, H372– Causes damage to organs, (lungs) through prolonged or repeated exposure. H319 - Causes eye irritation.
Precautionary statements: P264 - Wash exposed skin thoroughly after handling, P280 - Wear protective gloves, eye protection.
2.3 Hazards not otherwise classified: None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: Not applicable
3.2 Mixture

Chemical Name	Product identifier	%	GHS-US classification
Quartz (Silicon dioxide)	CAS# 14808-60-7	90-95%	Carcinogenicity 1A, Lungs H350; STOT RE 1, H372
Proprietary Ingredient 1	Trade Secret	5-10%	Eye Irrit. 2A, H319

3.3 Chemicals where a trade secret is claimed: Any concentration shown as a range is to protect confidentiality, or is it due to batch variation.

4. FIRST AID MEASURE

4.1 Description of the first aid measure:
INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get medical attention if necessary.
INHALATION: Remove to fresh air. Get medical attention if necessary.
EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if necessary.
SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing. Get medical attention if necessary.
4.2 Most important symptoms and effects, both acute and delayed: Refer to section 11.

4.3 Indication of any immediate medical attention and special treatment needed: No additional information available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media:
Suitable extinguishing media: Use TriClass, dry chemical extinguisher for surrounding fires.
5.2 Special hazard arising from the substance or mixture: Not applicable.
5.3 Advice for firefighters: Use self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.
6.2 Emergency procedures: Restrict unprotected personnel from the area.
6.3 Methods and material used for containment and cleanup procedure: Recover for use if not contaminated. Sweep up or vacuum and place in a suitable container for a proper disposal. Wash spill area with soap and water.

7. HANDLING AND STORAGE

7.1 Precaution for safe handling: Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Avoid breathing dust. Use with an adequate ventilation. Wash hands thoroughly after handling.

7.2 Storage: Store in closed container in a dry area. Avoid moisture.

7.3 incompatibility: Refer to section 10.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: ACGIH: TWA: 0.025 mg/m³ (respirable dust)
8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.
Respiratory protection: Non should be needed if normal laboratory handling at room temperature.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid.
Appearance: Tan.
Odor: No odor
pH: Acidic
Vapor Pressure (mm Hg): Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: N/A
Flash point: N/A
Autoignition: N/A

Boiling point: 2230°C (4046°F)
Melting point: 1710°C (3110°F)
Freezing point: Not available
Decomposition temp: Not available
Solubility: Not available
Specific gravity (H_2O = 1): ≈ 2.65g/cc
Percent volatile (%): N/A
Molecular formula: SiO_2
Molecular weight: 60.09

10. STABILITY AND REACTIVITY

Chemical Stability: Stable
Conditions to Avoid: Incompatible materials.
Incompatibilities: Contact with powerful oxidizing agents such as fluorine, chlorine trifluoride and oxygen difluoride may cause fires.
Hazardous decomposition: Silica will dissolve in hydrofluoric acid and produce the corrosive gas silicon tetrafluoride.
Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute effects: Eyes: Dust and granules may cause eye mechanical irritation, Proprietary ingredient causes chemical eye irritation. Skin: Not expected to cause irritation. Inhalation: Inhalation of the dust may cause coughing, sneezing, sore throat, nasal congestion and shortness of breath. Pre existing respiratory conditions may be affected by dust. Ingestion: Not expected to cause acute reaction.
Chronic effects: Prolonged inhalation of respirable crystalline silica may cause lung disease, silicosis, lung cancer
Crystalline silica is a basic component of soil, sand, granite, and many other minerals. Quartz is the most common form of crystalline silica. Cristobalite and tridymite are two other forms of crystalline silica. All three forms may become respirable size particles when workers chip, cut, drill, or grind objects that contain crystalline silica. Crystalline silica is a cancer suspect in humans from occupational sources and in manufacturing environments under prolonged exposure.
Toxicological data
Acute oral toxicity ORAL LD_{50}: >22,500mg/kg
Acute vapor toxicity IHL-LC_{50}: Not available
DERMAL LD_{50}: Not available
Carcinogenicity: IARC concluded that crystalline silica in the form of quartz or crystobalite dust is carcinogenic to humans (Group 1)
⚠ California prop 65: This product can expose you to chemicals crystalline silica which is known to The State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

12. ECOLOGICAL INFORMATION

Not available.

13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

14. TRANSPORT INFORMATION

UN number: N/A
Shipping name: N/A
Hazard Class: N/A
Packing group: N/A
Exceptions: Ltd Qty. N/A

15. REGULATORY INFORMATION

TSCA-listed, EINECS-listed (238-878-4). DSCL (EEC) R36-irritating to eyes.

16. OTHER INFORMATION

Disclaimer:

The Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. LAB-AIDS® makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration , investigation and verification. The data should not be confused with local, state, federal regulations, or insurance mandates, and CONSTITUTE NO WARRANTY. Any use of these data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling , storage, use and disposal of the product(s) described are beyond LAB-AIDS, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

LAB-AIDS
Experiencing Science

SAFETY DATA SHEET
Version: SDS_023.02.01
Revision Date: August 2, 2019

1. IDENTIFICATION

1.1 Product Identifiers

Product Name: Molybdenum Test Solution
Alternative names: Universal Indicator alcohol based solution.
Product Number: 435-25(xx), C435-2(xx).

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

Identified uses: For laboratory and educational use only

1.3 Details of the supplier of the safety data sheet

Company: LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA
Telephone: +1 800 381 8003.
Fax: +1 631 820 8268

1.4 Emergency telephone number

Emergency number: CHEMTREC 1 800 424-9300

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS classification

Flam. Liq. (Category 2), H225; Oral Tox. (Category 5) H303
Eye Irrit. (Category 2A) H319; Carcinogenicity (Category 2), H351
Specific Target Organ Toxicity, Single Exposure, Oral (Category 3), H336

2.2 Label elements, including precautionary statements

Signal word: Danger
Pictogram:

Hazards statements: H225 - Highly flammable liquid and vapor, H336– May cause drowsiness or dizziness, H303-May be harmful if swallowed, H351-Suspected of causing cancer; H319-Causes serious eye irritation,

Precautionary statements: P210 - Keep away from heat, hot surfaces, open flames, sparks, P280 - Wear protective gloves, eye protection
P301+P312+330-IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

2.3 Hazards not otherwise classified: none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: Not applicable

3.2 Mixture:

Chemical Name	Product identifier	%	GHS-US classification
Water	CAS 7732-18-5	76.7%	Not classified
Ethyl alcohol	CAS# 64-17-5	20.9%	Flam. Liq. 2, H225; STOT SE 3; H336
Methanol	CAS# 67-56-1	1.2%	Flam. Liq. 2, H225; Acute Tox. 3, H301+H302+H303
Ethyl Acetate	CAS# 141-78-6	0.9%	Flam. Liq. 2, H225; Skin Irrit. 2, H315; Eye Irrit. 2A, H319
Methyl isobutyl ketone	CAS# 108-10-1	0.2%	Flam. Liq. 2, H225; Eye Irrit. 2A, H319
Universal Indicator Mixture	CAS# N/A	0.1%	STOT SE 3; H336

3.3 Chemicals where a trade secret is claimed: Universal indicator

4. FIRST AID MEASURE

4.1 Description of the first aid measure:

INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get immediate medical attention.
INHALATION: Remove to fresh air. Get medical attention if necessary.
EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if necessary.
SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing. Get medical attention if irritation develops.
4.2 Most important symptoms and effects, both acute and delayed: Refer to section 11.

4.3 Indication of any immediate medical attention and special treatment needed: No additional information available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media: Flammable liquid.
Suitable extinguishing media: Use water spray, alcohol-resistant foam, or TriClass, dry chemical extinguisher.
5.2 Special hazard arising from the substance or mixture: Vapor spreads at floor level. Flash back possible over considerable distance.
5.3 Advice for firefighters: Use self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.
6.2 Emergency procedures: Restrict unprotected personnel from the area.
6.3 Methods and material used for containment and cleanup procedure: Contain the spill with an inert absorbent material and deposit in a sealed container. For small spill use paper towel. Dry material place in trash. Ventilate and wash spill area with soap and water.

7. HANDLING AND STORAGE

7.1 Precaution for safe handling: Read label on container before using. Keep away from heat, sparks and flame. Vapor forms from this product and may travel, or be moved by air currents and ignited by pilot lights, static discharges , flames, sparks, heaters or other ignition sources. Ensure all equipment is electrically grounded before beginning transfer operations.
Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Avoid breathing vapor. Use hood or with adequate ventilation. Wash hands thoroughly after handling.
7.2 Storage: Flammable cabinet. Keep container in cool, well-ventilated area.

7.3 incompatibility: Refer to section 10.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: ACGIH: TWA: 400ppm (Ethyl Acetate); **USA OSHA:** TWA: 200ppm (Methanol); **ACGIH:** TWA: 1000ppm (Ethanol).

8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.
Respiratory protection: Non should be needed if normal laboratory handling at room temperature.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid.
Appearance: Green or red orange.
Odor: Strong alcohol odor
pH: Not available
Vapor Pressure (mm Hg): 66.661hPa
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: Not available
Flash point: 13 °C (55 °F)
Autoignition: ca. 400 °C, 752 °F; ASTM D 2155

Flammability: Explosion limits: Lower: 3.3% **Upper:** 19.0%
Boiling point: 74-80 °C (165.2-176 ° F)
Melting point: -114°C (-173° F)
Freezing point: Not available
Decomposition temp: Not available
Solubility: Miscible in water and many organic solvents
Specific gravity (H_2O = 1): 0.79 g/cm3 @ 15.5 °C, 60 °F
Percent volatile (%): Not available
Molecular formula: Mixture
Molecular weight: Mixture

10. STABILITY AND REACTIVITY

Chemical Stability: Stable
Conditions to Avoid: High temperatures, sparks open flames and incompatible materials.
Incompatibilities: Strong oxidizing agents, acids, peroxides, acid chlorides, acid anhydrides, alkali metals, ammonia.
Hazardous decomposition: N/A
Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute effects: Eye: Causes eye irritation. Skin: May cause mild skin irritation. May be absorbed through skin. Inhalation: Inhalation of high concentration may affect CNS characterized by headache, dizziness, confusion, and loss of coordination. Ingestion: May be harmful if swallowed. Ingested doses will produce nausea, dizziness and headache. May affect behavior, brain, CNS.

Toxicological data:
ORAL LD_{50}: 2000mg/kg [Rat] (Ethanol)
VAPOR LC_{50}: >20 mg/l [Mouse] 4h (Ethanol)
DERMAL LD_{50}: >2000mg/kg [Rabbit] (Ethanol)

ORAL LD_{50}Methyl alcohol: >50-300 mg/kg [Rat].
VAPOR LC_{50}Methyl alcohol: >2-10 mg/l [Rat].
DERMAL LD_{50}Methyl alcohol: >200-1000 mg/kg [Rabbit]

ORAL LD_{50}: >2000mg/kg [Rat] (Ethyl Acetate)
VAPOR LC_{50}: Not available
DERMAL LD_{50}: >2000mg/kg [Rabbit] (Ethyl Acetate)

ORAL LD_{50}MIBK: >2000 mg/kg [Rat].
VAPOR LC_{50}MIBK: >10-20 mg/l 4h [Rat].
DERMAL LD_{50}MIBK: >2000 mg/kg [Rabbit]

Carcinogenicity:

⚠ California prop 65: This product can expose you to chemicals Methanol, Methyl isobutyl ketone, phenolphthalein which is known to The State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

12. ECOLOGICAL INFORMATION

LC50 (Pimephales promelas (fathead minnow)) 96 hours: > 100 mg/l; flow-through test Test substance: Ethanol;
LC50 (Pimephales promelas (fathead minnow)) 96 hours: 29,400 mg/l Test substance: Methanol;
LC50 (Pimephales promelas (fathead minnow)) 96 hours: > 100 mg/l; semi-static test Test substance: Ethyl Acetate;
LC50 (Danio rerio (zebra fish)) 96 hours: > 100 mg/l; static test, Test substance MIBK

13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

14. TRANSPORT INFORMATION

UN number: 1987
NA: N/A
Shipping name: ALCOHOLS, NOS
Hazard Class: 3
Packing group: PG II
Exceptions: Lty Qty ≤1L

15. REGULATORY INFORMATION

TSCA-listed, EINECS-listed (200-578-6) ethanol, (200-659-6) methanol, (205-500-5) Ethyl Acetate, (203-550-1) MIBK. WHMIS (Canada): Class B, Division 2: Flammable liquid. Class D, Division 2, Subdivision A: Very toxic material. Class D, Division 2, Subdivision B: Toxic material.

16. OTHER INFORMATION

Disclaimer:

The Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. LAB-AIDS® makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration , investigation and verification. The data should not be confused with local, state, federal regulations, or insurance mandates, and CONSTITUTE NO WARRANTY. Any use of these data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling , storage, use and disposal of the product(s) described are beyond LAB-AIDS, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

LAB-AIDS
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SAFETY DATA SHEET
Version: SDS_001.10.02
Revision Date: November 20, 2018

1. IDENTIFICATION

1.1 Product Identifiers
Product Name: Test Site 1-15;23
Alternative names: Majority Silicon dioxide, Quartz, Crystalline silica.
Product Number: 435-1EA—435-15EA, 435-23EA, C435-1—435-15, C435-23.

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses: For laboratory and educational use only

1.3 Details of the supplier of the safety data sheet
Company: LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA
Telephone: +1 800 381 8003.
Fax: +1 631 820 8268.

1.4 Emergency telephone number: Emergency number: CHEMTREC 1 800 424-9300

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
GHS classification
Carcinogenicity, Lungs (Category 1A), H350
Specific Target Organ Toxicity, Repeated Exposure, Lungs (Category 1), H372

2.2 Label elements, including precautionary statements
Signal word: Danger
Pictogram: 
Hazards statements: H350 - May cause cancer, H372– Causes damage to organs, (lungs) through prolonged or repeated exposure.
Precautionary statements: P264 - Wash exposed skin thoroughly after handling, P280 - Wear protective gloves, eye protection, P285 - In case of inadequate ventilation wear respiratory protection.

2.3 Hazards not otherwise classified: None

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance: Not applicable
3.2 Mixture

Chemical Name	Product identifier	%	GHS-US classification
Quartz (Silicon dioxide)	CAS# 14808-60-7	95-99.9%	Carcinogenicity 1A, Lungs H350; STOT RE 1, H372

3.3 Chemicals where a trade secret is claimed: Any concentration shown as a range is to protect confidentiality, or is it due to batch variation.

4. FIRST AID MEASURE

4.1 Description of the first aid measure:
INGESTION: First aid is not generally required. Never give anything by mouth to unconscious person. Rinse mouth and get a conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get medical attention if necessary.
INHALATION: Remove to fresh air. Get medical attention if necessary.
EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if irritation develops.
SKIN CONTACT: First Aid is not required. Flush thoroughly with mild soap and water if needed. Remove contaminated clothing. Get medical attention if necessary.
4.2 Most important symptoms and effects, both acute and delayed: Refer to section 11.
4.3 Indication of any immediate medical attention and special treatment needed: Immediate medical attention is nor required.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media:
Suitable extinguishing media: Use TriClass, dry chemical extinguisher for surrounding fires.
5.2 Special hazard arising from the substance or mixture: Not applicable.
5.3 Advice for firefighters: Not required.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.
6.2 Emergency procedures: Restrict unprotected personnel from the area. Avoid generating airborne dust during clean-up.
6.3 Methods and material used for containment and cleanup procedure: Recover for use if not contaminated. Sweep up or vacuum and place in a suitable container for a proper disposal. Do not use compressed air to clean spilled sand or ground silica. Wash spill area with soap and water.

7. HANDLING AND STORAGE

7.1 Precaution for safe handling: Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Avoid breathing dust. Use with an adequate ventilation. Wash hands thoroughly after handling.

7.2 Storage: Store in closed container in a dry area. Avoid moisture.

7.3 incompatibility: Refer to section 10.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: ACGIH: TWA: 0.025 mg/m³ (respirable dust)
8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.
Respiratory protection: Non should be needed if normal laboratory handling at room temperature.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid.
Appearance: Red-pink, tan , black crystals or granules.
Odor: No odor
pH: Neutral
Vapor Pressure (mm Hg): Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: N/A
Flash point: N/A
Autoignition: N/A

Boiling point: 2230°C (4046°F)
Melting point: 1710°C (3110°F)
Freezing point: Not available
Decomposition temp: Not available
Solubility: Not available
Specific gravity (H_2O = 1): ≈ 2.65g/cc
Percent volatile (%): N/A
Molecular formula: SiO_2
Molecular weight: 60.09

10. STABILITY AND REACTIVITY

Chemical Stability: Stable
Conditions to Avoid: Incompatible materials.
Incompatibilities: Powerful oxidizing agents such as fluorine, chlorine trifluoride, oxygen difluoride, hydrofluoric acid.
Hazardous decomposition: Silica will dissolve in hydrofluoric acid and produce the corrosive gas silicon tetrafluoride.
Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute effects: Eyes: Dust and granules may cause eye mechanical irritation. Skin: Not expected to cause irritation. Inhalation: Inhalation of the dust may cause coughing, sneezing, sore throat, nasal congestion and shortness of breath. Pre existing respiratory conditions may be affected by dust. Ingestion: Not expected to cause acute reaction.
Chronic effects: Prolonged inhalation of respirable crystalline silica may cause lung disease, silicosis, lung cancer
Crystalline silica is a basic component of soil, sand, granite, and many other minerals. Quartz is the most common form of crystalline silica. Cristobalite and tridymite are two other forms of crystalline silica. All three forms may become respirable size particles when workers chip, cut, drill, or grind objects that contain crystalline silica. Crystalline silica is a cancer suspect in humans from occupational sources and in manufacturing environments under prolonged exposure.
Toxicological data
Acute oral toxicity ORAL LD_{50}: >22,500mg/kg
Acute vapor toxicity IHL-LC_{50}: Not available
DERMAL LD_{50}: Not available

Carcinogenicity: IARC concluded that crystalline silica in the form of quartz or crystobalite dust is carcinogenic to humans (Group 1)
⚠ California prop 65: This product can expose you to chemicals crystalline silica which is known to The State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

12. ECOLOGICAL INFORMATION

Not known to have adverse consequences on environment.

13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

14. TRANSPORT INFORMATION

UN number: N/A
Shipping name: N/A
Hazard Class: N/A
Packing group: N/A
Exceptions: Ltd Qty. N/A

15. REGULATORY INFORMATION

TSCA-listed, EINECS-listed (238-878-4).

16. OTHER INFORMATION

Disclaimer:

The Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. LAB-AIDS® makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration , investigation and verification. The data should not be confused with local, state, federal regulations, or insurance mandates, and CONSTITUTE NO WARRANTY. Any use of these data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling , storage, use and disposal of the product(s) described are beyond LAB-AIDS, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).