According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

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SECTION 1: Identification

Product identifier

Product name: Dillie Koppanyi A Product code: DK5731SS

Recommended use of the product and restriction on use

Relevant identified uses: Laboratory chemicals Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer: United States AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 1-717-632-1291

Emergency telephone number: Canada ChemTel: (24-hour) +1(800)255-3924 +1(813)248-0585 (International)

SECTION 2: Hazard(s) identification

GHS classification:

Flammable liquids, category 2 Skin sensitization, category 1 Respiratory sensitization, category 1 Acute toxicity (oral), category 3 Acute toxicity (dermal), category 3 Acute toxicity (inhalation), category 3 Specific target organ toxicity - single exposure, category 1 Carcinogenicity, category 1B Germ cell mutagenicity, category 2 Reproductive toxicity, category 1B Chronic aquatic hazard, category 3

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H225 Highly flammable liquid and vapor H317 May cause an allergic skin reaction

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H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
H301 Toxic if swallowed
H311 Toxic in contact with skin
H331 Toxic if inhaled
H370 Causes damage to organs
H350 May cause cancer
H341 Suspected of causing genetic defects
H360 May damage fertility or the unborn child
H412 Harmful to aquatic life with long lasting effects
Precautionary statements:
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking
P233 Keep container tightly closed
P240 Ground/bond container and receiving equipment
P241 Use explosion-proof electrical/ventilating/light/equipment
P242 Use only non-sparking tools
P243 Take precautionary measures against static discharge
P280 Wear protective gloves/protective clothing/eye protection/face protection
P272 Contaminated work clothing should not be allowed out of the workplace
P285 In case of inadequate ventilation wear respiratory protection
P264 Wash skin thoroughly after handling
P270 Do not eat, drink or smoke when using this product
P271 Use only outdoors or in a well-ventilated area
P260 Do not breathe dust/fume/gas/mist/vapors/spray
P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P273 Avoid release to the environment
P303+P361+P353 If on skin (or hair): Immediately remove/take off all contaminated clothing. Rinse skin
with water/shower
P370+P378 In case of fire: Use agents recommended in section 5 for extinction
P321 Specific treatment (see supplemental first aid instructions on this label).
P363 Wash contaminated clothing before reuse
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention
P301+P330+P312 IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel
unwell.
P302+P352+P312 If on skin: Wash with soap and water. Call a poison center or doctor/physician if you fee
unwell D204 - D240 - D211 If inholds, Domovo victim to frach bir and keep at rest in a position comfortable for
P304+P340+P311 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for
breathing. Call a poison center or doctor/physician P307+P311 If exposed: Call a poison center or doctor/physician
P405 Store locked up
P403 Store locked up P403+P233 Store in a well ventilated place. Keep container tightly closed
P501 Dispose of contents and container as instructed in Section 13
·
Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 6147-53-1	Cobalt Acetate Tetrahydrate	<2.5

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CAS number: 64-19-7	Acetic Acid	<1
CAS number: 67-56-1	Methanol	>50

Additional Information: None

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway Get medical advice/attention if you feel unwell Move exposed individual to fresh air Call a POISON CONTROL CENTER or seek medical attention

After skin contact:

Rinse affected area with soap and water If symptoms develop or persist, seek medical attention Immediately remove all contaminated clothing Wash affected area with soap and water Seek medical attention if symptoms develop or persist Call a POISON CONTROL CENTER or seek medical attention if you feel unwell

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes Remove contact lenses, if present and easy to do Continue rinsing Get medical advice/attention If symptoms develop or persist, seek medical attention

After swallowing:

Rinse mouth and then drink plenty of water Do not induce vomiting Get medical advice/attention if you feel unwell Immediately call a POISON CONTROL CENTER or seek medical attention Rinse mouth thoroughly Seek medical attention if irritation, discomfort, or vomiting persists

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

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SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition Use dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors Vapors can flow to distant ignition sources and flashback Liquid is volatile and may generate an explosive atmosphere

Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing Refer to Section 8

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

Heating causes a rise in pressure, risk of bursting and combustion Shut off sources of ignition Carbon monoxide and carbon dioxide may form upon combustion Avoid inhaling gases, fumes, dust, mist, vapor and aerosols Avoid contact with skin, eyes and clothing

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation Ensure air handling systems are operational Wear protective eye wear, gloves and clothing Beware of vapors accumulating to form explosive concentrations Vapors can accumulate in low areas

Environmental precautions:

Should not be released into the environment Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders) Dispose of contents / container in accordance with local regulations Wear protective eye wear, gloves and clothing

Use spark-proof tools and explosion-proof equipment

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances. Avoid breathing mist or vapor. Use only with adequate ventilation.

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Use only non-sparking tools.

Take precautionary measures against electrostatic discharges.

Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

- Store away from foodstuffs.
- Keep container tightly sealed.

Keep away from all ignition sources: open flames, hot surfaces, direct sunlight, spark sources.

Store locked up.

Use appropriate containment to avoid environmental contamination.

Protect from freezing and physical damage.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Cobalt Acetate Tetrahydrate	6147-53-1	ACGIH TLV: 0.02 mg/m3 as Co
	Methanol	67-56-1	ACGIH TLV STEL 250 ppm [skin]
	Methanol	67-56-1	ACGIH TLV TWA 200 ppm [skin]
	Acetic Acid	64-19-7	ACGIH TLV TWA 10 ppm
	Acetic Acid	64-19-7	ACGIH TLV STEL 15 ppm
United States (OSHA)	Methanol	67-56-1	OSHA PEL TWA 200 ppm
	Methanol	67-56-1	OSHA PEL TWA 260 mg/m ³
	Acetic Acid	64-19-7	OSHA PEL TWA 10 ppm
	Acetic Acid	64-19-7	OSHA PEL TWA 25 mg/m ³
NIOSH	Methanol	67-56-1	NIOSH REL TWA 200 ppm [skin]
	Methanol	67-56-1	NIOSH REL TWA 260 mg/m ³ [skin]
	Methanol	67-56-1	NIOSH REL ST 250 ppm [skin]
	Methanol	67-56-1	NIOSH REL ST 325 mg/m ³ [skin]
	Acetic Acid	64-19-7	NIOSH REL TWA 10 ppm
	Acetic Acid	64-19-7	NIOSH REL TWA 25 mg/m ³
	Acetic Acid	64-19-7	NIOSH REL ST 15 ppm
	Acetic Acid	64-19-7	NIOSH REL ST 37 mg/m ³

Occupational Exposure limit values:

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Use explosion-proof ventilation equipment.

Personal protection equipment

Eye and face protection:

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Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

General hygienic measures:

Wash hands before breaks and at the end of work. Avoid contact with skin, eyes and clothing. Perform routine housekeeping. Wash contaminated clothing before reusing.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Clear, pink liquid
Odor	Alcohol
Odor threshold	Not determined or not available.
рН	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	Not determined or not available.
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Flammable
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	Not determined or not available.
Solubilities	Miscible in water.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

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Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

Excess heat, ignition source or flames.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Toxic if swallowed Toxic in contact with skin Toxic if inhaled

Product data: No data available.

Substance data:

Name	Route	Result
Cobalt Acetate Tetrahydrate	oral	LD50 Oral - rat - 708 mg/kg

Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
Acetic Acid	Causes severe skin burns and eye damage.

Serious eye damage/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Respiratory or skin sensitization

Assessment: May cause an allergic skin reaction May cause allergy or asthma symptoms or breathing difficulties if inhaled

Product data: No data available.

Substance data:

Name	Result	
Cobalt Acetate Tetrahydrate	Skin sensitisation - Result : May cause sensitisation by skin contact	
	May cause allergy or asthma symptoms or breathing difficulties if inhaled	

Carcinogenicity

Assessment: May cause cancer

Product data: No data available.

Substance data:

Name	Species	Result
Cobalt Acetate Tetrahydrate	Suspected of causing cancer	

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

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Assessment: Suspected of causing genetic defects

Product data: No data available.

Substance data:

Name	Result
Cobalt Acetate Tetrahydrate	Suspected of causing genetic defects

Reproductive toxicity

Assessment: May damage fertility or the unborn child

Product data: No data available.

Substance data:

Name	Result
Cobalt Acetate Tetrahydrate	Suspected of damaging fertility or the unborn child

Specific target organ toxicity (single exposure)

Assessment: Causes damage to organs

Product data: No data available.

Substance data:

Name	Result
Methanol	Causes damage to the optic nerve and central nervous system.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available.

Other information: No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Chronic (long-term) toxicity

Product data: No data available. **Substance data:** No data available.

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

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Product data: No data available. Substance data: No data available. Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	UN1992
UN proper shipping name	Flammable Liquid, Toxic, N.O.S. Methanol, Cobalt Acetate Tetrahydrate
UN transport hazard class(es)	3 (6.1)
Packing group	Ш
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	UN1992	
UN proper shipping name	N proper shipping name Flammable Liquid, Toxic, N.O.S. Methanol, Cobalt Acetate Tetrahydrate Tetrahydrate	
UN transport hazard class(es)	3 (6.1)	runner to the second seco
Packing group		
Environmental hazards	None	
Special precautions for user	None	

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN1992	
UN proper shipping name	Flammable Liquid, Toxic, N.O.S. Methanol, Cobalt Acetate Tetrahydrate	
UN transport hazard class(es)	3 (6.1)	
Packing group	Ш	
Environmental hazards	None	
Special precautions for user	None	

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	
Bulk Name	None

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Ship type	None
Pollution category	None

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

6147-53-1		Not Listed
67-56-1	Methanol	Listed
64-19-7	Acetic Acid	Listed

Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 311/312 hazards:

Acute	Chronic	Fire	Pressure	Reactive
No	No	No	No	No

SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals:

	67-56-1	Methanol		Listed
CERCLA:				
	67-56-1	Methanol	Listed	5000
	6 4 4 6 7			

64-19-7	Acetic Acid	Listed	5000
67-56-1	Methanol	Listed	5000

RCRA:

	67-56-1	Methanol	Listed	
Sec	tion 112(r) of the	Clean Air Act (CAA): Not determined.		

Massachusetts Right to Know:

6147-53-1	Cobalt Acetate Tetrahydrate	Not Listed
64-19-7	Acetic Acid	Listed
67-56-1	Methanol	Listed

New Jersey Right to Know:

6147-53-1	Cobalt Acetate Tetrahydrate	Not Listed
64-19-7	Acetic Acid	Not Listed
67-56-1	Methanol	Listed

New York Right to Know:

_	67-56-1		Listed
	67 56 1	Mathanal	ام محمد ا
	64-19-7	Acetic Acid	Listed
	6147-53-1		Not Listed

Pennsylvania Right to Know:

6147-53-1	Cobalt Acetate Tetrahydrate	Not
		Listed

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64-19-7	Acetic Acid	Not Listed
67-56-1	Methanol	Listed

California Proposition 65:

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

07-50-1 Mechanol		Methanol	
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SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 3-3-0 HMIS: 3-3-0 Initial preparation date: 12.19.2016 Revision date: 12.08.2017

End of Safety Data Sheet