according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



SECTION 1: Identification

1.1. Identification of the substance/mixture

Product form	: Substance
Product name	: Click-&-Go [®] Plus 647 Imaging Kit
Kit component	: AZDye 647 Azide Plus (Component A)
Product code	: CCT-1320

1.2. Identified uses of the substance or mixture

Identified Uses

: Laboratory chemicals, manufacture of substances

1.3. Company/undertaking identification

Manufacturer

Vector Laboratories, Inc. 8341 E. Gelding Drive Scottsdale, AZ 85260 T: (480) 584-3340 customerservice@vectorlabs.com

1.4. Emergency telephone number

Emergency number

: US only (800) 227-6666 or outside of the US +1 (650) 697-3600 (7:15 AM - 5:00 PM PST)

SECTION 2: Hazard(s) identification	
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2.1. Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2. GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3. Hazards not otherwise classified (HNOC) or not covered by GHS

Not a hazardous substance or mixture.

SECTION 3: Composition/Information on ingredients

3.1. Substances

Name	Product identifier	%
AZDye 647 Azide Plus (Component A)	CAS-No.: N/A	N/A

The specific chemical component identities and/or the exact component percentages of this material may be withheld as trade secrets. This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1). Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/ inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents.

3.2. Mixtures

Not applicable

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



SECTION 4: First-aid measures

4.1. Description of first aid measures

If inhaled	: Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
In case of skin contact	: Rinse with plenty of water. Immediate medical attention is not required.
In case of eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
If swallowed	 Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

4.2. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

4.3. Most important symptoms and effects, both acute and delayed

Not Applicable

4.4. Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Water spray. Carbon dioxide (CO2). Foam. Dry chemical.

5.2. Advice from firefighters

Standard procedure for chemical fires.

5.3. Further information

No data available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment. See Section 8 for more detail.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

See Section 8 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Always wear recommended Personal Protective Equipment. No special handling advices are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place.

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



7.3. Specific end use(s)

For research use only.

SECTION 8: Exposure controls/personal protection		
8.1. Control parameters		
AZDye 647 Azide Plus (Compo	nent A)	
No additional information available		
8.2. Appropriate engineering co	ntrols	
Exposure Limits Engineering measures	Contains no substances with occupational exposure limit valuesEnsure adequate ventilation, especially in confined areas	
8.3. Individual protection measu	ures/ Personal protective equipment	
Respiratory protection:		
In case of insufficient ventilation wear	respirators and components tested and approved under appropriate government standards	
Hand protection:		
Wear suitable gloves. Glove material:	Compatible chemical-resistant gloves	
Eye/Face protection:		
Wear tight sealing safety goggles		
Skin/Body Protection:		
Wear suitable protective clothing		
Hygiene measures:		
Handle in accordance with good indu	strial hygiene and safety practice	
Control of Environmental exposure		
No special environmental precautions	required	

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	: Solid
Color	: No data available
Odor	: No data available
Odor threshold	: No data available
pH	: Not Applicable
Melting / Freezing points	: °C and °F Mixture has not been tested
Initial boiling point & boiling range	: °C and °F Mixture has not been tested
Flash point	: °C and °F Mixture has not been tested
Evaporation rate	: No data available

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according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023

: No data available

No data available
No data available
No data available
No data available
No data available
No data available
No data available
No data available
No data available

Mixture has not been testedMixture has not been testedMixture has not been tested



Flammability (solid, gas)
Explosive limits
Vapor pressure
Relative density
Water solubility
Partition coefficient: n-octanol/water
Auto-ignition temperature
Decomposition temperature
Viscosity
Explosive properties
Oxidizing properties

9.2. Other safety information

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

None known

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

Hazardous reaction has not been reported

10.4. Conditions to avoid

No information available

10.5. Incompatible materials

No dangerous reaction known under conditions of normal use

10.6. Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: No data available
Irritation	: No data available
Corrosivity	: No data available
Sensitization	: No data available
STOT - Single Exposure	: No data available
STOT - Repeated Exposure	: No data available
Carcinogenicity	: No data available
Mutagenicity	: No data available
Reproductive toxicity	: No data available
Aspiration hazard	: No data available
Viscosity, kinematic	: No data available

SECTION 12: Ecological information

12.1. Toxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



12.2. Persistence and degradability

No information available

12.3. Bioaccumulative potential

No information available

12.4. Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB

12.5. Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods

: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations.

UN number	:	Not applicable
UN proper shipping name	:	Not applicable
Transport hazard class(es)	:	Not applicable
Packing group	:	Not applicable
Environmental hazards	:	Not applicable
Special precautions for user	:	Not applicable
Transport in bulk according to Annex II of MARPOL	:	Not applicable
73/78 and the IBC Code		

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

 AZDye 647 Azide Plus (Component A)
 CAS-No. N/A
 N/A

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



15.2. SARA 313 Components

This product is not regulated by SARA

15.3. Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs

15.4. California Proposition 65

This product does not contain any Proposition 65 chemicals.

15.5. WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products

Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16: Other information

16.1. References

ECHA: http://echa.europa.eu/

TOXNET: http://toxnet.nlm.nih.gov/

eChemPortal: http://www.echemportal.org/

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



SECTION 1: Identification

1.1. Identification of the substance/mixture

Product form	
Product name	
Kit component	
Product code	

: Substance

- : Click-&-Go® Plus 647 Imaging Kit
- : Reaction Buffer (Component B)
- : CCT-1320

1.2. Identified uses of the substance or mixture

Identified Uses

: Laboratory chemicals, manufacture of substances

1.3. Company/undertaking identification

Manufacturer

Vector Laboratories, Inc. 8341 E. Gelding Drive Scottsdale, AZ 85260 T: (480) 584-3340 customerservice@vectorlabs.com

1.4. Emergency telephone number

Emergency number

: US only (800) 227-6666 or outside of the US +1 (650) 697-3600 (7:15 AM - 5:00 PM PST)

2.1. Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2. GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3. Hazards not otherwise classified (HNOC) or not covered by GHS

Not a hazardous substance or mixture.

SECTION 3: Composition/Information on ingredients

3.1. Substances

Name	Product identifier	%
Reaction Buffer (Component B)	CAS-No.: N/A	N/A

The specific chemical component identities and/or the exact component percentages of this material may be withheld as trade secrets. This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1). Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, mutagen, and reproductive

toxicant, respiratory tract and skin sensitizers in addition to oral/ inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents.

3.2. Mixtures

Not applicable

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



SECTION 4: First-aid measures

4.1. Description of first aid measures

If inhaled	: Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
In case of skin contact	: Rinse with plenty of water. Immediate medical attention is not required.
In case of eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
If swallowed	 Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

4.2. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

4.3. Most important symptoms and effects, both acute and delayed

Not Applicable

4.4. Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Water spray. Carbon dioxide (CO2). Foam. Dry chemical.

5.2. Advice from firefighters

Standard procedure for chemical fires.

5.3. Further information

No data available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment. See Section 8 for more detail.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

See Section 8 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Always wear recommended Personal Protective Equipment. No special handling advices are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place.

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



7.3. Specific end use(s)

For research use only.

SECTION 8: Exposure controls/personal protection		
8.1. Control parameters		
Reaction Buffer (Component B)		
No additional information available		
8.2. Appropriate engineering co	ntrols	
Exposure Limits	: Contains no substances with occupational exposure limit values	
Engineering measures	: Ensure adequate ventilation, especially in confined areas	
8.3. Individual protection measu	ires/ Personal protective equipment	
Respiratory protection:		
In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards		
Hand protection:		
Wear suitable gloves. Glove material:	Compatible chemical-resistant gloves	
Eye/Face protection:		
Wear tight sealing safety goggles		
Skin/Body Protection:		
Wear suitable protective clothing		
Hygiene measures:		
Handle in accordance with good industrial hygiene and safety practice		
Control of Environmental exposure	:	
No special environmental precautions		

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	: Solid
Color	: No data available
Odor	: No data available
Odor threshold	: No data available
pH	: Not Applicable
Melting / Freezing points	: °C and °F Mixture has not been tested
Initial boiling point & boiling range	: °C and °F Mixture has not been tested
Flash point	: °C and °F Mixture has not been tested
Evaporation rate	: No data available

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023

: No data available

No data available
No data available
No data available
No data available
No data available
No data available
No data available

Mixture has not been tested
Mixture has not been tested
Mixture has not been tested
DMSO, DMF, DCM, THF, Chloroform



Flammability (solid, gas)
Explosive limits
Vapor pressure
Relative density
Water solubility
Partition coefficient: n-octanol/water
Auto-ignition temperature
Decomposition temperature
Viscosity
Explosive properties
Oxidizing properties

9.2. Other safety information

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

None known

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

Hazardous reaction has not been reported

10.4. Conditions to avoid

No information available

10.5. Incompatible materials

No dangerous reaction known under conditions of normal use

10.6. Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: No data available
Irritation	: No data available
Corrosivity	: No data available
Sensitization	: No data available
STOT - Single Exposure	: No data available
STOT - Repeated Exposure	: No data available
Carcinogenicity	: No data available
Mutagenicity	: No data available
Reproductive toxicity	: No data available
Aspiration hazard	: No data available
Viscosity, kinematic	: No data available

SECTION 12: Ecological information

12.1. Toxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



12.2. Persistence and degradability

No information available

12.3. Bioaccumulative potential

No information available

12.4. Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB

12.5. Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods

: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations.

UN number	:	Not applicable
UN proper shipping name	:	Not applicable
Transport hazard class(es)	:	Not applicable
Packing group	:	Not applicable
Environmental hazards		Not applicable
Special precautions for user		Not applicable
Transport in bulk according to Annex II of MARPOL		Not applicable
73/78 and the IBC Code		

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Reaction Buffer (Component B)	CAS-No. N/A
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according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



15.2. SARA 313 Components

This product is not regulated by SARA

15.3. Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs

15.4. California Proposition 65

This product does not contain any Proposition 65 chemicals.

15.5. WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products

Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16: Other information

16.1. References

ECHA: http://echa.europa.eu/

TOXNET: <u>http://toxnet.nlm.nih.gov/</u>

eChemPortal: http://www.echemportal.org/

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



SECTION 1: Identification

1.1. Identification of the substance/mixture

Product form
Product name
Kit component
Synonym
Product code

: Substance

- : Click-&-Go[®] Plus 647 Imaging Kit Copper Catalyst (Component C)
- : Copper Catalyst (Component C) : Cupric Sulfate Anhydrous: Cupric
 - Cupric Sulfate Anhydrous; Cupric Sulfate; Copper Monosulfate
- : CCT-1320

1.2. Identified uses of the substance or mixture

Identified Uses

: Laboratory chemicals, manufacture of substances

1.3. Company/undertaking identification

Manufacturer

Vector Laboratories, Inc. 8341 E. Gelding Drive Scottsdale, AZ 85260 T: (480) 584-3340 customerservice@vectorlabs.com

1.4. Emergency telephone number

Emergency number

: US only (800) 227-6666 or outside of the US +1 (650) 697-3600 (7:15 AM - 5:00 PM PST)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute oral toxicity : Category 4

- Skin Corrosion/irritation : Category 2
- Serious Eye Damage/Eye Irritation : Category 2

2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS-US):

GHS07 GHS09

Signal word (GHS-US): Warning

Hazard statements (GHS-US):

H302 - Harmful if swallowed

H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US) :

P264 - Wash exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P273 - Avoid release to the environment

P311 - Call a POISON CENTER or doctor/physician

P330 - If swallowed, rinse mouth

P391 - Collect spillage

P501 - Dispose of contents/container to comply with local, state and federal regulations

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



2.3. Hazards not otherwise classified (HNOC) or not covered by GHS

None

SECTION 3: Composition/Information on ingredients

3.1. Substances

Name	Product identifier	%
Copper Catalyst (Component C)	CAS-No.: 7758-99-8	N/A

The specific chemical component identities and/or the exact component percentages of this material may be withheld as trade secrets.

This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1). Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/ inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents.

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures	

4.1. Description of first aid measures

If inhaled	: Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
In case of skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
In case of eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Obtain medical attention if pain, blinking or redness persists.
If swallowed	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POSION CENTER or physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Swallowing a small amount of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Water spray. Carbon dioxide (CO2). Foam. Dry chemical.

5.2. Advice from firefighters

Standard procedure for chemical fires.

5.3. Further information

No data available

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment. See Section 8 for more detail.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

See Section 8 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Always wear recommended Personal Protective Equipment. No special handling advices are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

For research use only.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Copper Catalyst (Component C)	
No additional information available		
8.2. Appropriate engineering co	ntrols	
Exposure Limits	: Contains no substances with occupational exposure limit values	
Engineering measures	: Ensure adequate ventilation, especially in confined areas	
8.3. Individual protection measu	ires/ Personal protective equipment	
Respiratory protection:		
In case of insufficient ventilation wear	respirators and components tested and approved under appropriate government standards	
Hand protection:		
Wear suitable gloves. Glove material: Compatible chemical-resistant gloves		
Eye/Face protection:		
Wear tight sealing safety goggles		
Skin/Body Protection:		
Wear suitable protective clothing		
Hygiene measures:		
Handle in accordance with good indus	strial hygiene and safety practice	

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



Control of Environmental exposure:

No special environmental precautions required

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	: Liquid
Color	: No data available
Odor	: No data available
Odor threshold	: No data available
рН	: Not Applicable
Melting / Freezing points	: °C and °F Mixture has not been tested
Initial boiling point & boiling range	: °C and °F Mixture has not been tested
Flash point	: °C and °F Mixture has not been tested
Evaporation rate	: No data available
Flammability (solid, gas)	: Non-flammable
Explosive limits	: Mixture has not been tested
Vapor pressure	: Mixture has not been tested
Relative density	: Mixture has not been tested
Water solubility	: Soluble in water
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other safety information

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

None known

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

Hazardous reaction has not been reported

10.4. Conditions to avoid

Extremely high or low temperatures

10.5. Incompatible materials

Strong reducing agents. Strong bases.

10.6. Hazardous decomposition products

Sulfur compounds. Copper.

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure Acute Toxicity	: Skin and eye contact : Oral; Harmful if swallowed
11.2. Principal Routes of Exposure	
Irritation	: No data available
Corrosivity	: No data available
Sensitization	: No data available
STOT - Single Exposure	: No data available
STOT - Repeated Exposure	: No data available
Carcinogenicity	: No data available
Mutagenicity	: No data available
Reproductive toxicity	: No data available
Aspiration hazard	: No data available

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

No information available

12.3. Bioaccumulative potential

No information available

12.4. Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB

12.5. Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods

: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. IATA / ADR / DOT-US / IMDG

UN3082 Environmentally hazardous substances, liquid, n.o.s. (Copper Sulfate), 9, III

UN number	: UN3082
UN proper shipping name	: Environmentally hazardous substance, liquid n.o.s. Copper sulfate
Transport hazard class(es)	: 9- Class 9- Miscellaneous hazardous material 49 CFR 173.140
Packing group	: III – Minor danger
Environmental hazards	: Dangerous to the environment

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



CAS-No. 7758-99-8

Special precautions for user	:	Not applicable
Transport in bulk according to Annex II of MARPOL	:	Not applicable
73/78 and the IBC Code		

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Copper Catalyst	(Component C)
-----------------	---------------

15.2. SARA 313 Components

This product is not regulated by SARA

15.3. Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs

15.4. California Proposition 65

This product does not contain any Proposition 65 chemicals.

15.5. WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products

Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16: Other information

16.1. Other Information

Revision date: 12/21/2018

Other information: None.

Full text of H-phrases: see section 16:

H301	Toxic if swallowed
H302	Harmful if swallowed
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

NFPA health hazard

: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard

NFPA reactivity

- O Materials that will not burn under typical dire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
- : 0 Material that in themselves are normally stable, even under fire conditions. For research use only. Not intended for human or animal diagnostic or therapeutic uses.

Custom_SDS_USA_VECTOR





The information provided in this Safety Data Sheet is from available published sources and is believed to be accurate to the best of our knowledge at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text



SECTION 1: Identification

1.1. Identification of the substance/mixture

Product form	: Substance
Product name	: Click-&-Go [®] Plus 647 Imaging Kit
Kit component	: Reducing Agent (Component D)
Synonym	: (+)-Sodium L-ascorbate, Vitamin C sodium salt
Product code	: CCT-1320
1.2. Identified uses of the substance o	r mixture
Identified Uses	: Laboratory chemicals, manufacture of substances
1.3. Company/undertaking identification	on
Manufacturer	
Vector Laboratories, Inc.	
8341 E. Gelding Drive	
Scottsdale, AZ 85260	
T: (480) 584-3340	
customerservice@vectorlabs.com	
1.4. Emergency telephone number	
Emergency number	: US only (800) 227-6666 or outside of the US +1 (650) 697-3600 (7:15 AM - 5:00 PM PST)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2. GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3. Hazards not otherwise classified (HNOC) or not covered by GHS

Not a hazardous substance or mixture.

SECTION 3: Composition/Information on ingredients

3.1. Substances

Name	Product identifier	%
Reducing Agent (Component D)	CAS-No.: 134-03-2	N/A

The specific chemical component identities and/or the exact component percentages of this material may be withheld as trade secrets. This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1). Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/ inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents.

3.2. Mixtures

Not applicable

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



SECTION 4: First-aid measures

4.1. Description of first aid measures

If inhaled	: Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
In case of skin contact	: Rinse with plenty of water. Immediate medical attention is not required.
In case of eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
If swallowed	 Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

4.2. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

4.3. Most important symptoms and effects, both acute and delayed

Not Applicable

4.4. Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Water spray. Carbon dioxide (CO2). Foam. Dry chemical.

5.2. Advice from firefighters

Standard procedure for chemical fires.

5.3. Further information

No data available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment. See Section 8 for more detail.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

See Section 8 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Always wear recommended Personal Protective Equipment. No special handling advices are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place.

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



7.3. Specific end use(s)

For research use only.

SECTION 8: Exposure controls	s/personal protection
8.1. Control parameters	
Reducing Agent (Component D)
No additional information available	
8.2. Appropriate engineering co	ntrols
Exposure Limits	: Contains no substances with occupational exposure limit values
Engineering measures	: Ensure adequate ventilation, especially in confined areas
8.3. Individual protection measu	ures/ Personal protective equipment
Respiratory protection:	
In case of insufficient ventilation wear	respirators and components tested and approved under appropriate government standards
Hand protection:	
Wear suitable gloves. Glove material:	Compatible chemical-resistant gloves
Eye/Face protection:	
Wear tight sealing safety goggles	
Skin/Body Protection:	
Wear suitable protective clothing	
Hygiene measures:	
Handle in accordance with good indus	strial hygiene and safety practice
Control of Environmental exposure	

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	: Solid
Color	: No data available
Odor	: No data available
Odor threshold	: No data available
pH	: Not Applicable
Melting / Freezing points	: °C and °F Mixture has not been tested
Initial boiling point & boiling range	: °C and °F Mixture has not been tested
Flash point	: °C and °F Mixture has not been tested
Evaporation rate	: No data available

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023

: No data available

No data available
No data available
No data available
No data available
No data available
No data available
No data available

Mixture has not been tested
Mixture has not been tested
Mixture has not been tested
DMSO, DMF, DCM, THF, Chloroform



Flammability (solid, gas)
Explosive limits
Vapor pressure
Relative density
Water solubility
Partition coefficient: n-octanol/water
Auto-ignition temperature
Decomposition temperature
Viscosity
Explosive properties
Oxidizing properties

9.2. Other safety information

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

None known

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

Hazardous reaction has not been reported

10.4. Conditions to avoid

No information available

10.5. Incompatible materials

No dangerous reaction known under conditions of normal use

10.6. Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: No data available
Irritation	: No data available
Corrosivity	: No data available
Sensitization	: No data available
STOT - Single Exposure	: No data available
STOT - Repeated Exposure	: No data available
Carcinogenicity	: No data available
Mutagenicity	: No data available
Reproductive toxicity	: No data available
Aspiration hazard	: No data available
Viscosity, kinematic	: No data available

SECTION 12: Ecological information

12.1. Toxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



12.2. Persistence and degradability

No information available

12.3. Bioaccumulative potential

No information available

12.4. Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB

12.5. Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods

: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations.

UN number	:	Not applicable
UN proper shipping name	:	Not applicable
Transport hazard class(es)	:	Not applicable
Packing group	:	Not applicable
Environmental hazards	:	Not applicable
Special precautions for user	:	Not applicable
Transport in bulk according to Annex II of MARPOL	:	Not applicable
73/78 and the IBC Code		

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Reducing Agent (Component D)	CAS-No. 134-03-2
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according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



15.2. SARA 313 Components

This product is not regulated by SARA

15.3. Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs

15.4. California Proposition 65

This product does not contain any Proposition 65 chemicals.

15.5. WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products

Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16: Other information

16.1. References

ECHA: http://echa.europa.eu/

TOXNET: <u>http://toxnet.nlm.nih.gov/</u>

eChemPortal: http://www.echemportal.org/

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



SECTION 1: Identification

1.1. Identification of the substance/mixture

Product form	:	Substance
Product name	:	Click-&-Go® Plus 647 Imaging Kit
Kit component	:	Wash Buffer (Component E)
Product code	:	CCT-1320

1.2. Identified uses of the substance or mixture

Identified Uses

: Laboratory chemicals, manufacture of substances

1.3. Company/undertaking identification

Manufacturer

Vector Laboratories, Inc. 8341 E. Gelding Drive Scottsdale, AZ 85260 T: (480) 584-3340 customerservice@vectorlabs.com

1.4. Emergency telephone number

Emergency number

: US only (800) 227-6666 or outside of the US +1 (650) 697-3600 (7:15 AM - 5:00 PM PST)

SECTION 2: Hazard(s) i	identification

2.1. Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2. GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3. Hazards not otherwise classified (HNOC) or not covered by GHS

Not a hazardous substance or mixture.

SECTION 3: Composition/Information on ingredients

3.1. Substances

Name	Product identifier	%
Wash Buffer (Component E)	CAS-No.: N/A	N/A

The specific chemical component identities and/or the exact component percentages of this material may be withheld as trade secrets.

This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1). Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/ inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents.

3.2. Mixtures

Not applicable

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



SECTION 4: First-aid measures

4.1. Description of first aid measures

If inhaled	: Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
In case of skin contact	: Rinse with plenty of water. Immediate medical attention is not required.
In case of eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
If swallowed	 Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

4.2. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

4.3. Most important symptoms and effects, both acute and delayed

Not Applicable

4.4. Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Water spray. Carbon dioxide (CO2). Foam. Dry chemical.

5.2. Advice from firefighters

Standard procedure for chemical fires.

5.3. Further information

No data available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment. See Section 8 for more detail.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

See Section 8 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Always wear recommended Personal Protective Equipment. No special handling advices are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place.

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



7.3. Specific end use(s)

For research use only.

SECTION 8: Exposure controls	s/personal protection	
8.1. Control parameters		
Wash Buffer (Component E)		
No additional information available		
8.2. Appropriate engineering co	ntrols	
Exposure Limits	: Contains no substances with occupational exposure limit values	
Engineering measures	: Ensure adequate ventilation, especially in confined areas	
8.3. Individual protection measu	ires/ Personal protective equipment	
Respiratory protection:		
In case of insufficient ventilation wear	respirators and components tested and approved under appropriate government standards	
Hand protection:		
Wear suitable gloves. Glove material: Compatible chemical-resistant gloves		
Eye/Face protection:		
Wear tight sealing safety goggles		
Skin/Body Protection:		
Wear suitable protective clothing		
Hygiene measures:		
Handle in accordance with good industrial hygiene and safety practice		
Control of Environmental exposure:		
No special environmental precautions	required	

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	: Liquid
Color	: No data available
Odor	: No data available
Odor threshold	: No data available
pH	: Not Applicable
Melting / Freezing points	: °C and °F Mixture has not been tested
Initial boiling point & boiling range	: °C and °F Mixture has not been tested
Flash point	: °C and °F Mixture has not been tested
Evaporation rate	: No data available
	THE ME SECURITY

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023

: No data available

No data available
No data available
No data available
No data available
No data available
No data available
No data available

Mixture has not been tested
Mixture has not been tested
Mixture has not been tested
DMSO, DMF, DCM, THF, Chloroform



Flammability (solid, gas)
Explosive limits
Vapor pressure
Relative density
Water solubility
Partition coefficient: n-octanol/water
Auto-ignition temperature
Decomposition temperature
Viscosity
Explosive properties
Oxidizing properties

9.2. Other safety information

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

None known

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

Hazardous reaction has not been reported

10.4. Conditions to avoid

No information available

10.5. Incompatible materials

No dangerous reaction known under conditions of normal use

10.6. Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LD50 (inhalation, rat/mouse)
Sodium azide	27 mg/kg	n/a	n/a

11.2. Principal Routes of Exposure

Acute toxicity	: No data available
Irritation	: No data available
Corrosivity	: No data available
Sensitization	: No data available
STOT - Single Exposure	: No data available
STOT - Repeated Exposure	: No data available
Carcinogenicity	: No data available
Mutagenicity	: No data available
Reproductive toxicity	: No data available

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



Aspiration hazard Viscosity, kinematic No data availableNo data available

SECTION 12: Ecological information

12.1. Toxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

12.2. Persistence and degradability

No information available

12.3. Bioaccumulative potential

No information available

12.4. Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB

12.5. Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods

: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations.

UN number	:	Not applicable
UN proper shipping name	:	Not applicable
Transport hazard class(es)	:	Not applicable
Packing group	:	Not applicable
Environmental hazards	:	Not applicable
Special precautions for user	:	Not applicable
Transport in bulk according to Annex II of MARPOL	:	Not applicable
73/78 and the IBC Code		

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Wash Buffer (Component E)

CAS-No. N/A

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/24/2023



Component	TSCA
Sodium azide	Listed
CAS 26628-22-8	
Weight % <0.1	

15.2. SARA 313 Components

This product is not regulated by SARA

15.3. Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs

15.4. California Proposition 65

This product does not contain any Proposition 65 chemicals.

15.5. WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products

Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16: Other information

16.1. References

ECHA: http://echa.europa.eu/

TOXNET: <u>http://toxnet.nlm.nih.gov/</u>

eChemPortal: http://www.echemportal.org/

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.