

Date of Issue: 04/15/21

Version 00

Previous Date of Issue: N/A

Previous Version: N/A

Section 1. Product and Company Identification

Product Name: Antibody-Oligonucleotide All-in-One™ Conjugation Kit
Catalog No.: A-9202-001
Kit Component: S-HyNic Linker (DMF Soluble), S-1002

Manufacturer/Supplier USA:

Vector Laboratories, Inc.
30 Ingold Road
Burlingame, CA 94010
United States
Tel: (650) 697-3600 Fax: (650) 697-0339
Email: vector@vectorlabs.com

For Research Grade Use Only.

Section 2. Hazards Identification

GHS Classification:

This product has been classified as non-hazardous based on the physical and/or chemical nature and/or concentration of ingredients.

GHS Label: Non-hazardous substance or mixture.

Hazards not otherwise classified (HNOC) or not covered by GHS: None

Section 3. Composition/Information on Ingredients

CAS Number: Custom synthesized compound. No CAS Number.

Components: Single compound.

No known hazard is associated with this compound.

Section 4. First Aid Measures

Inhalation: Remove to fresh air.

Skin contact: Wash thoroughly with soap and water.

Eye Contact: Flush eyes with water as a precaution.

Ingestion: Do not induce vomiting. Wash out mouth with water.

Section 5. Fire Fighting Measures

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment: Use respirator for firefighting if necessary.

Section 6. Accidental Release Measures

Wear protective clothing to prevent contact with eyes and skin. Ensure adequate ventilation. Collect on absorbent material and dispose of according to federal, state and local environmental regulations.

Section 7. Handling and Storage

Handling: Use only with adequate ventilation. Wear eye protection and compatible chemical-resistant gloves. Handle in accordance with good industrial hygiene and safety practice.

Storage: Keep container tightly closed and store according to product label.

Section 8. Exposure Controls/Personal Protection

Exposure limits: Contains no substances with occupational exposure limit values.

Engineering controls: Use enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits.

Personal protection:

Hand protection - Compatible chemical-resistant gloves.

Eye protection - Chemical safety goggles.

Skin protection - Lab coat.

Section 9. Physical and Chemical Properties

Appearance: Slight yellowish-white residue

Percent Purity: >90%

Boiling Point: Not Available

Melting Point: Not Available

Freezing Point: Not Available

Specific Gravity: Not Available

Solubility: Slightly soluble in aqueous solutions, soluble in DMF and DMSO solvents.

Vapor Density: Not Available

Vapor Pressure: Not Available

Evaporation Rate: Not Available

Section 10. Stability and Reactivity

Chemical stability: Stable when stored under recommended storage conditions.

Conditions to Avoid: Susceptible to aqueous hydrolysis, avoid exposure to aqueous solutions before use.

Materials / Chemicals to Be Avoided: Aromatic hydrazines decompose on exposure to oxidizing agents and metals

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide

Hazardous Polymerization: Unknown

Section 11. Toxicological Information

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Acute toxicity: Unknown.

Chronic toxicity: No data available.

Section 12. Ecological Information

No data available.

Section 13. Disposal Considerations

Discard any product, residue, disposable container or liner in full compliance with national regulations..

Observe all federal, state, and local environmental regulations.

Section 14. Transport Information

DOT (US): Not dangerous goods.

RID/ADR: Not regulated.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

Section 15. Regulatory Information

Substances of Very High Concern: None

SARA: Not Listed

TSCA All components in this product are not listed.

Other Regulations:

U.S. State: None

European/International Regulations

EC Classification: ND

EC Risk and Safety Phrases: ND

Risk Phrases: ND

Safety Phrases: ND

California Prop. 65 components: This product does not contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

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Section 16. Other Information

Date of Issue or Revision: April 26, 2021

The information contained in this Safety Data Sheet is believed to be accurate, but it is the responsibility of the user to determine the applicability of this data to necessary safety precautions. Vector Laboratories, Inc. shall not be held responsible for any damage resulting from the use of the above product or the information contained in this Safety Data Sheet.

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Version 00

Previous Date of Issue: N/A

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Section 1. Product and Company Identification

Product Name: Antibody–Oligonucleotide All-in-One™ Conjugation Kit
Catalog No.: A-9202-001
Kit Component: Oligo Resuspension Solution

Manufacturer/Supplier USA:

Vector Laboratories, Inc.
30 Ingold Road
Burlingame, CA 94010
United States
Tel: (650) 697-3600 Fax: (650) 697-0339
Email: vector@vectorlabs.com

For Research Grade Use Only.

Section 2. Hazards Identification

GHS Classification:

This product has been classified as non-hazardous based on the physical and/or chemical nature and/or concentration of ingredients.

GHS Label: Non-hazardous substance or mixture.

Hazards not otherwise classified (HNOC) or not covered by GHS: Under normal use conditions, product as manufactured is not anticipated to cause major health hazards.

Potential Health Effects

Acute Eye: Direct contact with alkaline solutions can cause blindness.

Acute Skin: Direct contact may cause skin irritation with redness.

Acute Ingestion: Acute exposure may cause gastrointestinal irritation to the mouth and stomach.

Acute Inhalation: Acute and chronic exposure may cause irritation of the mucous membranes. Symptoms may include tightness and difficulty breathing.

Section 3. Composition/Information on Ingredients

Oligo resuspension solution is supplied as a clear aqueous solution containing 0.5 mM EDTA (a metal chelator) and 100 µM sodium hydroxide at pH 9.35.

Component:	CAS#:	% by weight:
Ethylenediaminetetraacetic acid, EDTA, sodium salt	60-00-4	<0.02%
Sodium hydroxide (NaOH)	1310-73-2	<0.5%

Section 4. First Aid Measures

Inhalation: In inhaled, move to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen or artificial respiration by qualified personnel.

Skin contact: In case of skin contact, wash affected areas with soap and water and flush the area with copious amounts of water. Remove contaminated clothing.

Eye Contact: In case of contact with eyes, immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eye lids.

Ingestion: If swallowed, rinse mouth out with water provided person is conscious. Never give fluids or induce vomiting if the victim is unconscious or having convulsions.

Section 5. Fire Fighting Measures

Fire: This product is not considered to be a fire hazard.

Autoignition: Unknown

Flash Point: Unknown

Flammability Limits (vol/vol%): Unknown **Lower:** **Upper:** Unknown

Extinguishing Media: Use extinguishing media appropriate for surrounding fire

Special Fire Fighting Procedures: Use extinguishing media appropriate for surrounding fire such as water spray, carbon dioxide, dry powder. Wear full protective clothing and NIOSH-approved self-contained breathing apparatus. Avoid inhalation of material or combustion by-products.

Unusual Fire and Explosion Hazards: None

Section 6. Accidental Release Measures

Wear protective clothing to prevent contact with eyes and skin. Ensure adequate ventilation. Collect on absorbent material and dispose of according to federal, state and local environmental regulations.

Section 7. Handling and Storage

Handling: Use only with adequate ventilation. Wear eye protection and compatible chemical-resistant gloves. Handle in accordance with good industrial hygiene and safety practice.

Storage: Keep container tightly closed and store according to product label.

Section 8. Exposure Controls/Personal Protection

Exposure limits: Contains no substances with occupational exposure limit values.

Engineering controls: Use enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits.

Personal protection:

Hand protection - Compatible chemical-resistant gloves.

Eye protection - Chemical safety goggles.

Skin protection - Lab coat.

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Section 9. Physical and Chemical Properties

Appearance: Clear, colorless liquid

Percent Purity: 0.018%

Boiling Point: Not Available

Melting Point: Not Available

Specific Gravity: Not Available

Freezing Point: Not Available

Vapor Pressure: Not Available

Vapor Density: Not Available

Solubility: Aqueous solutions

Evaporation rate: Not Available

pH: 7.0

Section 10. Stability and Reactivity

Chemical stability: Stable when stored under recommended storage conditions.

Conditions to avoid: Avoid strong oxidizing agents.

Materials to avoid: Carbon monoxide, carbon dioxide, nitrogen oxides in case of fire.

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous Polymerization: Under normal conditions of storage and use, polymerization products should not be produced.

Section 11. Toxicological Information

United States

Acute toxicity/Conclusion/Summary: To the best of our knowledge, the toxicological properties of this product have not been thoroughly investigated.

Chronic toxicity/Conclusion/Summary: Not available.

Carcinogenicity/Conclusion/Summary: Not available.

Mutagenicity/Conclusion/Summary: **Mutagen:** Hamster 200 gm/l Cell type: Lung, cytogenetic analysis.

Teratogenicity/Conclusion/Summary: Not available.

Reproductive toxicity/Summary: Not available

Europe

Chronic effects: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity:— **Mutagen:** Hamster 200 gm/l Cell type: Lung, cytogenetic analysis.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Section 12. Ecological Information

Environmental effects: No known significant effects or critical hazards.

Aquatic ecotoxicity/Conclusion/Summary: 96 Hr LC50 bluegill: 159 mg/L (Static)

Other adverse effects: No known significant effects or critical hazards.

Section 13. Disposal Considerations

Observe all federal, state and local environmental regulations.

Section 14. Transport Information

DOT (US): Not regulated.

RID/ADR: Not regulated.

IMDG: Not regulated.

IATA: Not regulated.

Section 15. Regulatory Information

SARA:

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: No products were found.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: This product is listed.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: This product is listed.

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found. California Prop. 65 components:

This product does not contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

European/International Regulations

EC Risk Phrases:

- R36 irritating to eyes
- R37 irritating to respiratory system
- R38 irritating to skin

WHMIS (Canada):

Not controlled under WHMIS (Canada).

Canadian Inventory: All components are listed or exempted

Section 16. Other Information

Date of Issue or Revision: April 26, 2021

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Previous Version: N/A

Section 1. Product and Company Identification

Product Name: Antibody-Oligonucleotide All-in-One™ Conjugation Kit
Catalog No.: A-9202-001
Kit Component: 1X Modification Buffer

Manufacturer/Supplier USA:

Vector Laboratories, Inc.
30 Ingold Road
Burlingame, CA 94010
United States
Tel: (650) 697-3600 Fax: (650) 697-0339
Email: vector@vectorlabs.com

For Research Grade Use Only.

Section 2. Hazards Identification

GHS Classification:

This product has been classified as non-hazardous based on the physical and/or chemical nature and/or concentration of ingredients.

GHS Label: Non-hazardous substance or mixture.

Hazards not otherwise classified (HNOC) or not covered by GHS: None

Section 3. Composition/Information on Ingredients

Component:	CAS#:	% by weight:
Sodium Phosphate, Dibasic	7558-79-4	<1%
Sodium Chloride	7647-14-5	<1%
Sodium Phosphate, Monobasic	10049-21-5	<1%

No ingredients are hazardous according to OSHA criteria.

Section 4. First Aid Measures

Inhalation: Remove to fresh air.

Skin contact: Wash thoroughly with soap and water.

Eye Contact: Flush eyes with water as a precaution.

Ingestion: Do not induce vomiting. Wash out mouth with water.

Section 5. Fire Fighting Measures

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment: Use respirator for firefighting if necessary.

Section 6. Accidental Release Measures

Wear protective clothing to prevent contact with eyes and skin. Ensure adequate ventilation. Collect on absorbent material and dispose of according to federal, state and local environmental regulations.

Section 7. Handling and Storage

Handling: Use only with adequate ventilation. Wear eye protection and compatible chemical-resistant gloves. Handle in accordance with good industrial hygiene and safety practice.

Storage: Keep container tightly closed and store according to product label.

Section 8. Exposure Controls/Personal Protection

Exposure limits: Contains no substances with occupational exposure limit values.

Engineering controls: Use enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits.

Personal protection:

Hand protection - Compatible chemical-resistant gloves.

Eye protection - Chemical safety goggles.

Skin protection - Lab coat.

Section 9. Physical and Chemical Properties

Appearance: Clear liquid

Percent Purity: 100%

Boiling Point: 100°C

Freezing Point: 0°C

pH: 8.0

Solubility: Aqueous

Vapor Density: NA

Vapor Pressure: NA

Section 10. Stability and Reactivity

Chemical stability: Stable when stored under recommended storage conditions.

Section 11. Toxicological Information

Acute toxicity: Product does not present an acute toxicity hazard based on known or supplied information.

Chronic toxicity: None known.

Section 12. Ecological Information

No data available.

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Previous Version: N/A

Section 13. Disposal Considerations

Observe all federal, state and local environmental regulations.

Section 14. Transport Information

DOT (US): Not dangerous goods.

RID/ADR: Not regulated.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

Section 15. Regulatory Information

SARA:

SARA 302 - No chemicals in this material are subject to the reporting requirements.

SARA 313 - No chemicals in this material with known CAS #s are subject to the reporting requirements.

SARA 311/312 Hazards - No SARA Hazards.

California Prop. 65 components:

This product does not contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

Section 16. Other Information

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Previous Date of Issue: N/A

Previous Version: N/A

Section 1. Product and Company Identification

Product Name: Antibody-Oligonucleotide All-in-One™ Conjugation Kit
Catalog No.: A-9202-001
Kit Component: Bead Wash Buffer

Manufacturer/Supplier USA:

Vector Laboratories, Inc.
30 Ingold Road
Burlingame, CA 94010
United States
Tel: (650) 697-3600 Fax: (650) 697-0339
Email: vector@vectorlabs.com

For Research Grade Use Only.

Section 2. Hazards Identification

GHS Classification:

This product has been classified as non-hazardous based on the physical and/or chemical nature and/or concentration of ingredients.

GHS Label: Non-hazardous substance or mixture.

Hazards not otherwise classified (HNOC) or not covered by GHS: None

Section 3. Composition/Information on Ingredients

Component:	CAS#:	% by weight:
Sodium Phosphate, Dibasic	7558-79-4	<1%
Sodium Chloride	7647-14-5	<1%
Sodium Phosphate, Monobasic	10049-21-5	<1%
Tween-20	9005-6405	0.05%

No ingredients are hazardous according to OSHA criteria.

Section 4. First Aid Measures

Inhalation: If inhaled, move to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen or artificial respiration by qualified personnel.

Skin contact: In case of skin contact, wash affected areas with soap and water and flush the area with copious amounts of water. Remove contaminated clothing.

Eye Contact: In case of contact with eyes, immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eye lids.

Ingestion: If swallowed, rinse mouth out with water provided person is conscious. Never give fluids or induce vomiting if the victim is unconscious or having convulsions.

Section 5. Fire Fighting Measures

This product is not considered to be a fire hazard.

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Special protective equipment: Use respirator for firefighting if necessary.

Section 6. Accidental Release Measures

Wear protective clothing to prevent contact with eyes and skin. Ensure adequate ventilation. Collect on absorbent material and dispose of according to federal, state, and local environmental regulations.

Section 7. Handling and Storage

Handling: Use only with adequate ventilation. Wear eye protection and compatible chemical-resistant gloves. Handle in accordance with good industrial hygiene and safety practice.

Storage: Keep container tightly closed and store according to product label.

Section 8. Exposure Controls/Personal Protection

Exposure limits: Contains no substances with occupational exposure limit values.

Engineering controls: Use enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits.

Personal protection:

Hand protection - Compatible chemical-resistant gloves.

Eye protection - Chemical safety goggles.

Skin protection - Lab coat.

Section 9. Physical and Chemical Properties

Appearance: Clear liquid

Percent Purity: 1%

Boiling Point: Not available

Melting Point: Not available

Specific Gravity: Not available

Freezing Point: Not Available

Vapor pressure: Not available

Vapor density: Not available

Solubility: Aqueous solutions

pH: 8.0

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Section 10. Stability and Reactivity

Chemical stability: Stable when stored under recommended storage conditions.

Conditions to Avoid: No data available

Materials / Chemicals to Be Avoided: Aluminium, bases, iron, oxidants and phenol causing fire.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, nitrogen oxides (NO_x)

Hazardous Polymerization: Unknown.

Section 11. Toxicological Information

Acute toxicity/Conclusion/Summary: To the best of our knowledge, the toxicological properties of this product have not been thoroughly investigated.

MES: No LD50/LC50 information found relating to normal routes of occupational exposure. 2-sulfobenzaldehyde: toxicological properties of this substance have not been fully investigated.

Chronic toxicity/Conclusion/Summary: Not available.

Carcinogenicity/Conclusion/Summary: 2-formylbenzenesulfonic acid, sodium salt,- Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Mutagenicity/Conclusion/Summary: Not available.

Teratogenicity/Conclusion/Summary: Not available.

Reproductive toxicity/Summary: Not available

Section 12. Ecological Information

No data available.

Section 13. Disposal Considerations

The generation of waste should be avoided or minimized wherever possible. Observe all federal, state and local environmental regulations.

Section 14. Transport Information

DOT (US): Not regulated.

RID/ADR: Not regulated.

IMDG: Not regulated.

IATA: Not regulated.

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Previous Date of Issue: N/A

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Section 15. Regulatory Information

HCS Classification: Irritating material

SARA Title III Hazard Classes:

SARA 302/304/311/312 extremely hazardous substances; **No products were found.**

SARA 302/304 emergency planning and notification: **No products found.**

SARA 302/304/311/312 hazardous chemicals; **No products found.**

SARA 311/312; **No SARA hazards.**

United States inventory (TSCA 8b): All components are listed or exempted.

International Regulations:

Classification: Not Classified

Section 16. Other Information

Date of Issue or Revision: April 26, 2021

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Date of Issue: 04/26/21

Version 00

Previous Date of Issue: N/A

Previous Version: N/A

Section 1. Product and Company Identification

Product Name: Antibody-Oligonucleotide All-in-One™ Conjugation Kit
Catalog No.: A-9202-001
Kit Component: Bead Elution Buffer

Manufacturer/Supplier USA:

Vector Laboratories, Inc.
30 Ingold Road
Burlingame, CA 94010
United States
Tel: (650) 697-3600 Fax: (650) 697-0339
Email: vector@vectorlabs.com

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Section 2. Hazards Identification

GHS Classification:

This product has been classified as non-hazardous based on the physical and/or chemical nature and/or concentration of ingredients.

GHS Label: Non-hazardous substance or mixture.

Hazards not otherwise classified (HNOC) or not covered by GHS: None

Section 3. Composition/Information on Ingredients

Chemical Composition: A sodium phosphate-based buffer composition containing various other non-hazardous buffer components at pH 6.0.

No ingredients are hazardous according to OSHA criteria.

Section 4. First Aid Measures

Inhalation: If inhaled, move to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen or artificial respiration by qualified personnel.

Skin contact: In case of skin contact, wash affected areas with soap and water and flush the area with copious amounts of water. Remove contaminated clothing.

Eye Contact: In case of contact with eyes, immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eye lids.

Ingestion: If swallowed, rinse mouth out with water provided person is conscious. Never give fluids or induce vomiting if the victim is unconscious or having convulsions.

Section 5. Fire Fighting Measures

This product is not considered to be a fire hazard.

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Special protective equipment: Use respirator for firefighting if necessary.

Section 6. Accidental Release Measures

Wear protective clothing to prevent contact with eyes and skin. Ensure adequate ventilation. Collect on absorbent material and dispose of according to federal, state, and local environmental regulations.

Section 7. Handling and Storage

Handling: Use only with adequate ventilation. Wear eye protection and compatible chemical-resistant gloves. Handle in accordance with good industrial hygiene and safety practice.

Storage: Keep container tightly closed and store according to product label.

Section 8. Exposure Controls/Personal Protection

Exposure limits: Contains no substances with occupational exposure limit values.

Engineering controls: Use enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits.

Personal protection:

Hand protection - Compatible chemical-resistant gloves.

Eye protection - Chemical safety goggles.

Skin protection - Lab coat.

Section 9. Physical and Chemical Properties

Appearance: Clear liquid

Percent Purity: 1%

Boiling Point: Not available

Melting Point: Not available

Specific Gravity: Not available

Freezing Point: Not Available

Vapor pressure: Not available

Vapor density: Not available

Solubility: Aqueous solutions

pH: 6.0

Section 10. Stability and Reactivity

Chemical stability: Stable when stored under recommended storage conditions.

Conditions to Avoid: No data available

Hazardous Decomposition Products: Phosphorus oxides may form when heated to decomposition. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous Polymerization: Unknown.

Section 11. Toxicological Information

United States

Acute toxicity/Conclusion/Summary: To the best of our knowledge, the toxicological properties of this product have not been thoroughly investigated.

Chronic toxicity/Conclusion/Summary: Not available.

Carcinogenicity/Conclusion/Summary: Not available.

Mutagenicity/Conclusion/Summary: Not available.

Teratogenicity/Conclusion/Summary: Not available.

Reproductive toxicity/Summary: Not available

Europe

Chronic effects: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Section 12. Ecological Information

No data available.

Section 13. Disposal Considerations

The generation of waste should be avoided or minimized wherever possible. Observe all federal, state and local environmental regulations.

Section 14. Transport Information

DOT (US): Not regulated.

RID/ADR: Not regulated.

IMDG: Not regulated.

IATA: Not regulated.

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Section 15. Regulatory Information

HCS Classification: Not regulated

SARA Title III Hazard Classes:

SARA 302/304/311/312 extremely hazardous substances; No products were found.

SARA 302/304 emergency planning and notification: No products found.

SARA 302/304/311/312 hazardous chemicals; No products found.

SARA 311/312; No SARA hazards.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: This product is listed.

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

Canada

WHMIS (Canada): Not controlled under WHMIS (Canada).

Canadian Inventory: All components are listed or exempted

EU Regulations

EC Classification: Xi -irritant

Risk Phrases: R36 irritating to eyes

R37 irritating to respiratory system

R38 irritating to skin

International Regulations

International Lists: Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Korea inventory (KECI): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

Japan inventory (ENCS): All components are listed or exempted.

Section 16. Other Information

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Previous Date of Issue: N/A

Previous Version: N/A

Section 1. Product and Company Identification

Product Name: Antibody-Oligonucleotide All-in-One™ Conjugation Kit
Catalog No.: A-9202-001
Kit Component: Spin Column (Red Cap)

Manufacturer/Supplier USA:

Vector Laboratories, Inc.
30 Ingold Road
Burlingame, CA 94010
United States
Tel: (650) 697-3600 Fax: (650) 697-0339
Email: vector@vectorlabs.com

For Research Grade Use Only.

Section 2. Hazards Identification

GHS Classification:

This product has been classified as non-hazardous based on the physical and/or chemical nature and/or concentration of ingredients.

GHS Label: Non-hazardous substance or mixture.

Hazards not otherwise classified (HNOC) or not covered by GHS: None

Section 3. Composition/Information on Ingredients

Spin Column (Red Cap) contains a polymeric chromatography resin (slurry) equilibrated in sodium phosphate/sodium chloride solution pH 8.0

Component:	CAS#:	% by weight:
Sodium Phosphate, Dibasic	7558-79-4	<1%
Sodium Chloride	7647-14-5	<1%
Sodium Phosphate, Monobasic	10049-21-5	<1%
Polymeric Resin	Not available	50%

No ingredients are hazardous according to OSHA criteria.

Section 4. First Aid Measures

Inhalation: If inhaled, move to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen or artificial respiration by qualified personnel.

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Skin contact: In case of skin contact, wash affected areas with soap and water and flush the area with copious amounts of water. Remove contaminated clothing.

Eye Contact: In case of contact with eyes, immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eye lids.

Ingestion: If swallowed, rinse mouth out with water provided person is conscious. Never give fluids or induce vomiting if the victim is unconscious or having convulsions.

Section 5. Fire Fighting Measures

This product is not considered to be a fire hazard.

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Special protective equipment: Use respirator for firefighting if necessary.

Section 6. Accidental Release Measures

Wear protective clothing to prevent contact with eyes and skin. Ensure adequate ventilation. Collect on absorbent material and dispose of according to federal, state, and local environmental regulations.

Section 7. Handling and Storage

Handling: Use only with adequate ventilation. Wear eye protection and compatible chemical-resistant gloves. Handle in accordance with good industrial hygiene and safety practice.

Storage: Keep container tightly closed and store according to product label.

Section 8. Exposure Controls/Personal Protection

Exposure limits: Contains no substances with occupational exposure limit values.

Engineering controls: Use enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits.

Personal protection:

Hand protection - Compatible chemical-resistant gloves.

Eye protection - Chemical safety goggles.

Skin protection - Lab coat.

Section 9. Physical and Chemical Properties

Appearance: White gel slurry

Percent Purity: Not available

Boiling Point: Not available

Melting Point: Not available

Specific Gravity: 1.22 g/mL

Freezing Point: Not Available

Vapor pressure: Not available

Vapor density: Not available

Solubility: Easily dispersible in aqueous solutions

pH: 8.0

Evaporation rate: Not available

Section 10. Stability and Reactivity

Chemical stability: Stable when stored under recommended storage conditions.

Conditions to Avoid: No data available

Materials / Chemicals to Be Avoided: Unknown.

Hazardous Decomposition Products: Phosphorus oxides may form when heated to decomposition. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous Polymerization: Under normal conditions of storage and use, polymerization product should not be produced.

Section 11. Toxicological Information

Acute toxicity/Conclusion/Summary: To the best of our knowledge, the toxicological properties of this product have not been thoroughly investigated.

Chronic toxicity/Conclusion/Summary: Not available.

Carcinogenicity/Conclusion/Summary: Not available

Mutagenicity/Conclusion/Summary: Not available.

Teratogenicity/Conclusion/Summary: Not available.

Reproductive toxicity/Summary: Not available

Section 12. Ecological Information

None known.

Section 13. Disposal Considerations

The generation of waste should be avoided or minimized wherever possible. Observe all federal, state and local environmental regulations.

Section 14. Transport Information

DOT (US): Not regulated.

RID/ADR: Not regulated.

IMDG: Not regulated.

IATA: Not regulated.

Section 15. Regulatory Information

HCS Classification: Not regulated

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Previous Version: N/A

SARA Title III Hazard Classes:

SARA 302/304/311/312 extremely hazardous substances; No products were found.

SARA 302/304 emergency planning and notification: No products found.

SARA 302/304/311/312 hazardous chemicals; No products found.

SARA 311/312; No SARA hazards.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: This product is listed.

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

Canada

WHMIS (Canada): Not controlled under WHMIS (Canada).

Canadian Inventory: All components are listed or exempted

EU Regulations

EC Classification: Xi -irritant

Risk Phrases: R36 irritating to eyes
R37 irritating to respiratory system
R38 irritating to skin

International Regulations

International Lists: Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Korea inventory (KECI): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

Japan inventory (ENCS): All components are listed or exempted.

Section 16. Other Information

Date of Issue or Revision: April 26, 2021

The information contained in this Safety Data Sheet is believed to be accurate, but it is the responsibility of the user to determine the applicability of this data to necessary safety precautions. Vector Laboratories, Inc. shall not be held responsible for any damage resulting from the use of the above product or the information contained in this Safety Data Sheet.

For Research Grade Use Only.

Date of Issue: 04/26/21

Version 00

Previous Date of Issue: N/A

Previous Version: N/A

Section 1. Product and Company Identification

Product Name: Antibody-Oligonucleotide All-in-One™ Conjugation Kit
Catalog No.: A-9202-001
Kit Component: Spin Column (Yellow Cap)

Manufacturer/Supplier USA:

Vector Laboratories, Inc.
30 Ingold Road
Burlingame, CA 94010
United States
Tel: (650) 697-3600 Fax: (650) 697-0339
Email: vector@vectorlabs.com

For Research Grade Use Only.

Section 2. Hazards Identification

GHS Classification:

This product has been classified as non-hazardous based on the physical and/or chemical nature and/or concentration of ingredients.

GHS Label: Non-hazardous substance or mixture.

Hazards not otherwise classified (HNOC) or not covered by GHS: None

Section 3. Composition/Information on Ingredients

Spin Column (Yellow Cap) contains a 0.5 mL of a polymeric chromatography resin (slurry) equilibrated in sodium phosphate/sodium chloride solution pH 6.0 containing less than 0.3% aniline.

Component:	CAS#:	% by weight:
Sodium Phosphate, Dibasic	7558-79-4	<1%
Sodium Chloride	7647-14-5	<1%
Sodium Phosphate, Monobasic	10049-21-5	<1%
Aniline	62-53-3	<1%
Polymeric Resin	Not available	50%

No ingredients are hazardous according to OSHA criteria.

Section 4. First Aid Measures

Inhalation: If inhaled, move to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen or artificial respiration by qualified personnel.

Skin contact: In case of skin contact, wash affected areas with soap and water and flush the area with copious amounts of water. Remove contaminated clothing.

Eye Contact: In case of contact with eyes, immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eye lids.

Ingestion: If swallowed, rinse mouth out with water provided person is conscious. Never give fluids or induce vomiting if the victim is unconscious or having convulsions.

Notes to Physician: Absorption of this product into the body may cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood). Moderate degrees of cyanosis need to be treated only by supportive measures: bed rest and oxygen inhalation. Cleansing of the entire contaminated area of the body is of utmost importance. Do not administer alcohol in any form. Individuals with liver or kidney disorders, impaired cardiovascular status, or a history of alcoholism may be more susceptible to the effects of this product. Effects may be delayed. If cyanosis is severe, intravenous injection of Methylene blue, 1mg/kg of body weight may be of value.

Antidote: Methylene blue, alone or in combination with oxygen is indicated as a treatment in nitrite induced methemoglobinemia.

Section 5. Fire Fighting Measures

This product is not considered to be a fire hazard.

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Special protective equipment: Use respirator for firefighting if necessary.

Section 6. Accidental Release Measures

Wear protective clothing to prevent contact with eyes and skin. Ensure adequate ventilation. Collect on absorbent material and dispose of according to federal, state, and local environmental regulations.

Section 7. Handling and Storage

Handling: Use only with adequate ventilation. Wear eye protection and compatible chemical-resistant gloves. Handle in accordance with good industrial hygiene and safety practice.

Storage: Keep container tightly closed and store according to product label.

Section 8. Exposure Controls/Personal Protection

Exposure limits: Contains no substances with occupational exposure limit values.

Engineering controls: Use enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits.

Personal protection:

Hand protection - Compatible chemical-resistant gloves.

Eye protection - Chemical safety goggles.

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Skin protection - Lab coat.

Section 9. Physical and Chemical Properties

Appearance: White gel slurry

Percent Purity: Not available

Boiling Point: Not available

Melting Point: Not available

Specific Gravity: Not available

Freezing Point: Not Available

Vapor pressure: Not available

Vapor density: Not available

Solubility: Easily dispersible in aqueous solutions

pH: 6.0

Evaporation rate: Not available

Section 10. Stability and Reactivity

Chemical stability: Stable when stored under recommended storage conditions.

Conditions to Avoid: Temperatures <0°C or > 50°C

Materials / Chemicals to Be Avoided: Reactive with strong oxidizing agents, metal, acids, alkali.

Hazardous Decomposition Products: Phosphorus oxides may form when heated to decomposition.

Section 11. Toxicological Information

United States

Information for Aniline

Route of exposure

Skin absorption: toxic if absorbed through skin. Readily absorbed through skin.

Eye contact: causes severe eye irritation.

Ingestion: toxic if swallowed

Inhalation: Material is irritating to mucous membranes and upper respiratory tract. Toxic if inhaled.

Sensitization;

Skin: May cause allergic skin reaction.

Target Organs: Blood, bladder, kidneys, central nervous system.

Signs and symptoms of exposure: Fatigue. Incoordination. Nausea. Vomiting. Headache. Dizziness. Symptoms may be delayed. Unconsciousness. Weakness. Confusion. Drowsiness. Absorption into body leads to methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2-4 hours.

Carcinogenicity:

ACGIH: Classified A3 (proven for animal)

IARC: (not classifiable for human)

OSHA: Not available

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Previous Version: N/A

Mutagenic Effects:

Mutagenic for mammalian somatic cells. Species human, dose 300 umol.L, cell type lymphocyte, mutation test: sister chromatid exchange. Mutagenic for bacteria and or yeast.

Reproductive Effects: Chronic exposure to aniline (6-13 days, pregnant) poses reproductive hazard in mouse at 4.48 g/kg (oral)

Acute Oral Toxicity: Oral LD50; Acute: 250 mg/Kg (rat), 464 mg/Kg (mouse);

Acute Dermal Toxicity: Dermal (LD50): Acute: 820 mg/Kg (rabbit), 1400 mg/Kg (rat)

Section 12. Ecological Information

None known and not information not available.

Section 13. Disposal Considerations

The generation of waste should be avoided or minimized wherever possible. Observe all federal, state and local environmental regulations.

Section 14. Transport Information

Aqueous solutions containing 1% or less aniline by volume is not subject to these regulations.

DOT (US): Not regulated.

RID/ADR: Not regulated.

IMDG: Not regulated.

IATA: Not regulated.

Section 15. Regulatory Information

HCS Classification: Not regulated

U.S. Federal regulations:

TSCA

8(b) inventory: aniline

Chemical Weapons Convention: No TSCA 12(b): No CDTA: Yes

SARA Title III Hazard Classes:

SARA 302/304/311/312 extremely hazardous substances: aniline :5000 lbs

SARA 302/304/311/312 extremely hazardous substances: aniline

CERCLAL Hazardous substances: aniline: 5000 lbs (2268 kg)

Other Regulations:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

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Previous Version: N/A

California prop, 65; This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: aniline to cause birth defects or reproductive harm which requires a warning under the statute: aniline

California prop, 65: No significant risk level: aniline: 0.1 mg/ml (value)

Connecticut hazardous material survey: aniline

Illinois toxic substances disclosure to employee act: aniline

New York release reporting list: aniline

Rhode Island RTK: aniline

Pennsylvania RTK: aniline

Minnesota: aniline

Massachusetts RTK: aniline

New Jersey: aniline

Louisiana RTK: aniline

California Director's list of Hazardous substances: aniline

Canada

WHMIS (Canada): Class D-1A: Material causing immediate and serious toxic effects (Very toxic) Class D-2B: Material causing other toxic effects (Toxic)

EU Regulations

EC Classification: T: Toxic, Xi –irritant
Risk Phrases: R2: Keep out of reach of children
R36 irritating to eyes
R23 Toxic by inhalation
R24 Toxic in contact with skin
R25 Toxic if swallowed
R37 irritating to respiratory system
R38 irritating to skin

International Regulations

Australian Hazchem Code: 3X

Section 16. Other Information

Date of Issue or Revision: April 26, 2021

The information contained in this Safety Data Sheet is believed to be accurate, but it is the responsibility of the user to determine the applicability of this data to necessary safety precautions. Vector Laboratories, Inc. shall not be held responsible for any damage resulting from the use of the above product or the information contained in this Safety Data Sheet.

For Research Grade Use Only.

Date of Issue: 04/26/21

Version 00

Previous Date of Issue: N/A

Previous Version: N/A

Section 1. Product and Company Identification

Product Name: Antibody-Oligonucleotide All-in-One™ Conjugation Kit
Catalog No.: A-9202-001
Kit Component: Spin Column (Blue Cap)

Manufacturer/Supplier USA:

Vector Laboratories, Inc.
30 Ingold Road
Burlingame, CA 94010
United States
Tel: (650) 697-3600 Fax: (650) 697-0339
Email: vector@vectorlabs.com

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Section 2. Hazards Identification

GHS Classification:

This product has been classified as non-hazardous based on the physical and/or chemical nature and/or concentration of ingredients.

GHS Label: Non-hazardous substance or mixture.

Hazards not otherwise classified (HNOC) or not covered by GHS: None

Section 3. Composition/Information on Ingredients

Spin Column (Blue Cap) contains a polymeric chromatography resin equilibrated in a sodium phosphate-buffered saline solution containing 0.05% sodium azide as preservative.

Component:	CAS#:	% by weight:
Sodium Phosphate, Dibasic	7558-79-4	<0.2%
Sodium Chloride	7647-14-5	<0.1%
Sodium Phosphate, Monobasic	10049-21-5	<0.1%
EDTA	64-02-8	<0.1%
Sodium azide	26628-22-8	0.05%
Polymeric Resin	Not available	50%

No ingredients are hazardous according to OSHA criteria.

Section 4. First Aid Measures

Inhalation: If inhaled, move to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen or artificial respiration by qualified personnel.

Skin contact: In case of skin contact, wash affected areas with soap and water and flush the area with copious amounts of water. Remove contaminated clothing.

Eye Contact: In case of contact with eyes, immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eye lids.

Ingestion: If swallowed, rinse mouth out with water provided person is conscious. Never give fluids or induce vomiting if the victim is unconscious or having convulsions.

Section 5. Fire Fighting Measures

This product is not considered to be a fire hazard.

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Special protective equipment: Use respirator for firefighting if necessary.

Section 6. Accidental Release Measures

Wear protective clothing to prevent contact with eyes and skin. Ensure adequate ventilation. Collect on absorbent material and dispose of according to federal, state, and local environmental regulations.

Section 7. Handling and Storage

Handling: Use only with adequate ventilation. Wear eye protection and compatible chemical-resistant gloves. Handle in accordance with good industrial hygiene and safety practice.

Storage: Keep container tightly closed and store according to product label.

Section 8. Exposure Controls/Personal Protection

Exposure limits: Contains no substances with occupational exposure limit values.

Engineering controls: Use enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits.

Personal protection:

Hand protection - Compatible chemical-resistant gloves.

Eye protection - Chemical safety goggles.

Skin protection - Lab coat.

Section 9. Physical and Chemical Properties

Appearance: White gel slurry

Percent Purity: Not available

Boiling Point: Not available

Melting Point: Not available

Specific Gravity: Not available

Freezing Point: Not Available

Vapor pressure: Not available

Vapor density: Not available

Solubility: Easily dispersible in aqueous solutions

pH: 7.2

Date of Issue: 04/26/21

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Previous Date of Issue: N/A

Previous Version: N/A

Evaporation rate: Not available

Section 10. Stability and Reactivity

Chemical stability: Stable when stored under recommended storage conditions.

Conditions to Avoid: Avoid exposure to lead and copper.

Materials / Chemicals to Be Avoided: Unknown.

Hazardous Decomposition Products: Phosphorus oxides may form when heated to decomposition. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous Polymerization: Under normal conditions of storage and use, polymerization product should not be produced.

Section 11. Toxicological Information

United States

Acute toxicity/Conclusion/Summary: To the best of our knowledge, the toxicological properties of this product have not been thoroughly investigated.

Chronic toxicity/Conclusion/Summary: Not available.

Carcinogenicity/Conclusion/Summary: Not available

Mutagenicity/Conclusion/Summary: Not available.

Teratogenicity/Conclusion/Summary: Not available.

Reproductive toxicity/Summary: Not available.

Europe

Chronic effects: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Section 12. Ecological Information

None known.

Section 13. Disposal Considerations

The generation of waste should be avoided or minimized wherever possible. Observe all federal, state and local environmental regulations.

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Previous Date of Issue: N/A

Previous Version: N/A

Section 14. Transport Information

DOT (US): Not regulated.

RID/ADR: Not regulated.

IMDG: Not regulated.

IATA: Not regulated.

Section 15. Regulatory Information

HCS Classification: Not regulated

United States inventory (TSCA 8b): All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances; No products were found.

SARA 302/304 emergency planning and notification: No products found.

SARA 302/304/311/312 hazardous chemicals; No products found.

SARA 311/312; MSDS distribution chemical inventory – hazard identification: No products were found.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: This product is listed.

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

Canada

WHMIS (Canada): Not controlled under WHMIS (Canada).

Canadian Inventory: All components are listed or exempted

EU Regulations

EC Classification: Xi = irritant

T+ = Toxic

Risk Phrases:

R22 Harmful if swallowed.

R36 Irritating to eyes

R37 Irritating to respiratory system

R38 Irritating to skin

R50 Very toxic to aquatic organisms.

R51 Toxic to aquatic organisms.

R52 Harmful to aquatic organisms.

R53 May cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S23 Keep out of reach of children

S24 Avoid skin contact.

S25 Avoid contact with eyes

S26 In case of contact with eyes, rinse immediately with water and seek medical advice

S46 If swallowed, see medical advice immediately and show this MSDS

Date of Issue: 04/26/21

Version 00

Previous Date of Issue: N/A

Previous Version: N/A

Section 16. Other Information

Date of Issue or Revision: April 26, 2021

The information contained in this Safety Data Sheet is believed to be accurate, but it is the responsibility of the user to determine the applicability of this data to necessary safety precautions. Vector Laboratories, Inc. shall not be held responsible for any damage resulting from the use of the above product or the information contained in this Safety Data Sheet.

For Research Grade Use Only.

Section 1. Product and Company Identification

Product Name: Antibody-Oligonucleotide All-in-One™ Conjugation Kit
Catalog No.: A-9202-001
Kit Component: DMF (N,N-Dimethylformamide), S-4001

Manufacturer/Supplier USA:

Vector Laboratories, Inc.
30 Ingold Road
Burlingame, CA 94010
United States
Tel: (650) 697-3600 Fax: (650) 697-0339
Email: vector@vectorlabs.com

For Research Grade Use Only.

Section 2. Hazards Identification

- 2.1 Classification of the substance or mixture**
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Flammable liquids (Category 3), H226
Acute toxicity, Inhalation (Category 4) H332
Acute toxicity, Dermal (Category 4), H312
Eye Irritation (Category 2A), H319
Reproductive toxicity (Category 1B), H360

2.2 GHS Label elements, including precautionary statements

Pictogram:



Signal word: Danger

Hazard statement(s)

H226	Flammable liquid and vapor.
H312 + H332	Harmful in contact with skin or if inhaled.
H319	Causes serious eye irritation.
H360	May damage fertility or the unborn child

Precautionary statement(s)

Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood

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Use personal protective equipment as required
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
Wear eye/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool

Response

IF exposed or concerned: Get medical attention/advice

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Skin

Call a POISON CENTER or doctor/physician if you feel unwell

Wash contaminated clothing before reuse

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing If eye irritation persists: Get medical advice/attention

Fire

In case of fire: Use CO₂, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

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

Lachrymator (substance which increases the flow of tears). Rapidly absorbed through skin.

Section 3. Composition/Information on Ingredients

Component:	CAS#:	Weight %
Dimethylformamide	68-12-2	98-100%

Section 4. First Aid Measures

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

Skin Contact: Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

Inhalation: Move to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. If not breathing, give artificial respiration.

Ingestion: Do not induce vomiting. Call a physician or Poison Control Center immediately.

Most important symptoms and effects: Irritating to eyes. Breathing difficulties. May be harmful if absorbed through skin: Gastrointestinal discomfort: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

Notes to Physician: Treat symptomatically

Section 5. Fire Fighting Measures

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Cool closed containers exposed to fire with water spray.

Unsuitable Extinguishing Media:	No information available
Flash Point:	58 °C / 136.4 °F
Method -	Abel-Pensky (DIN 51755)
Autoignition Temperature	445 °C / 833 °F
Explosion Limits	
Upper	15.2 vol %
Lower	2.2 vol %
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available

Specific Hazards Arising from the Chemical

Flammable. Risk of ignition. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Vapors may form explosive mixtures with air.

Hazardous Combustion Products

Carbon monoxide (CO) Carbon dioxide (CO₂) Nitrogen oxides (NO_x)

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

Section 6. Accidental Release Measures

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions: Should not be released into the environment. See Section 12 for additional ecological information.

Methods for Containment and Clean up: Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

Section 7. Handling and Storage

7.1 Precautions for safe handling

Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Do not breathe vapors or spray mist. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Use explosion-proof equipment. Take precautionary measures against static discharges. See Section 8 for personal protection.

7.2 Conditions for safe storage

Keep/store only in original container. Storage Temperature: Store at or below room temperature. Keep away from heat and sources of ignition.

7.3 Incompatibilities

Strong oxidizing agents, Halogens, Halogenated compounds, Reducing agents.

Section 8. Exposure Controls/Personal Protection

8.1 Control Parameters

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

8.2 Appropriate Engineering Controls

General industrial hygiene practices.

8.3 Individual Protection Measures

- | | |
|-------------------------|--|
| Eye/Face Protection: | Wear safety glasses with side shields (or goggles). |
| Skin/Body Protection: | Wear suitable protective clothing and gloves. |
| Respiratory Protection: | Use in well ventilated areas. |
| General: | Handle in accordance with good industrial hygiene and safety practice. |

Section 9. Physical and Chemical Properties

Physical State: Liquid

Appearance: Clear, colorless

Odor: Pungent, amine-like

Solubility: completely soluble with water

% volatiles by volume: @21°C:100

Freezing Point: Not available

Boiling Point: 253 °C / 307.4 °F

Melting Point: -61 °C / -77.8 °F

Specific gravity: 0.95 @ 20°C (68°F)

Vapor Pressure: 0.5 kPa (25°C)

Evaporation rate: (butyl Acetate=1):0.17

Section 10. Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Can react briskly with oxidizers, danger of explosion.

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10.4 Conditions to avoid

Ignition sources. Heat, flames and incompatibles.

10.5 Incompatible materials

Bromine, carbon tetrachloride, chromic anhydride, 2,5-dimethylpyrrole, phosphorus oxychloride, hexachlorobenzene, magnesium nitrate, ethylene diisocyanate, phosphorus trioxide, triethyl aluminum, organic nitrates, acidic and alkaline materials and other halogenated compounds. Contact with iron or strong oxidizers may cause fires and explosions: may react violently with alkyl aluminums. Methylene diisocyanate can polymerize violently on contact with DMF.

10.6 Hazardous decomposition products

May form ammonia, carbon dioxide, amines, and nitrogen oxides when heated to decomposition. Above 350 °C DMF begins to degrade with formation of dimethylamine and carbon monoxide.

Hazardous Polymerization:

Will not occur.

Section 11. Toxicological Information

11.1 Information on likely routes of exposure

Inhalation: Avoid breathing vapors or mists. May cause irritation of respiratory tract.

Eye contact: Redness. Causes serious irritation.

Skin contact: Causes mild skin irritation.

Ingestion: May be harmful if swallowed.

11.2 Information on toxicological effects

Symptoms: No information available.

11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/Irritation: Mild

Serious Eye Damage/Eye Irritation: Serious

Skin or Respiratory Sensitization: No information available

Germ Cell Mutagenicity: No information available

Carcinogenicity: No information available

Reproductive Toxicity: No information available

Developmental Toxicity: No information available

Teratogenicity: Teratogenic effects have occurred in experimental animals.

STOT – Single Exposure: No information available

STOT – Repeated Exposure: No information available

Target Organs: Kidney, liver, spleen, eyes, skin, respiratory system

Chronic Toxicity: No information available

Subchronic Toxicity: No information available

Neurological Effects: No information available

Aspiration Hazard: No information available

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Previous Date of Issue: N/A

Previous Version: N/A

Section 12. Ecological Information

12.1 Marine pollutant

No information available

12.2 Ecotoxicity

No information available

12.3 Persistence and degradability

No information available

12.4 Bioaccumulation

No information available

12.5 Mobility

No information available

12.6 Other adverse effects

Ozone: No information available

Ozone Depletion Potential: No information available

Section 13. Disposal Considerations

13.1 Waste treatment methods

Relevant Information: Keep out of drains, sewers, ditches and waterways.
 Disposal Method: Use a licensed professional waste disposal service to dispose of this product. Consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.
 Contaminated Packaging: Dispose of as unused product.

Observe all federal, state and local environmental regulations.

Section 14. Transport Information

DOT

UN-No	Proper Shipping Name	Hazard Class	Packing Group
UN2265	N,N-DIMETHYLFORMAMIDE	3	III

TDG

UN-No	Proper Shipping Name	Hazard Class	Packing Group
UN2265	N,N-DIMETHYLFORMAMIDE	3	III

IATA

UN-No	Proper Shipping Name	Hazard Class	Packing Group
UN2265	N,N-DIMETHYLFORMAMIDE	3	III

IMDG/IMO

UN-No	Proper Shipping Name	Hazard Class	Packing Group
UN2265	N,N-DIMETHYLFORMAMIDE	3	III

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Section 15. Regulatory Information

SARA:

SARA 302 - No chemicals in this material are subject to the reporting requirements.

SARA 313 – Dimethylformamide, CAS# 68-12-2.

SARA 311/312 Hazards – See section 2 for more information.

CWA (Clean Water Act): Not applicable

CERCLA: This material, as supplied, contains one or more substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Prop. 65 components:

This product does not contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

Section 16. Other Information

Date of Issue or Revision: April 26, 2021

The information contained in this Safety Data Sheet is believed to be accurate, but it is the responsibility of the user to determine the applicability of this data to necessary safety precautions. Vector Laboratories, Inc. shall not be held responsible for any damage resulting from the use of the above product or the information contained in this Safety Data Sheet.

For Research Grade Use Only.

Section 1. Product and Company Identification

Product Name: Antibody-Oligonucleotide All-in-One™ Conjugation Kit
Catalog No.: A-9202-001
Kit Component: 2-Hydrazinopyridine dihydrochloride, S-2002-100

Manufacturer/Supplier USA:

Vector Laboratories, Inc.
30 Ingold Road
Burlingame, CA 94010
United States
Tel: (650) 697-3600 Fax: (650) 697-0339
Email: vector@vectorlabs.com

For Research Grade Use Only.

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

- Skin irritation (Category 2), H315
- Eye irritation (Category 2A), H319
- Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

2.2 GHS Label elements, including precautionary statements

Pictogram:



Signal word: Warning

Hazard statement(s)

- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.

Precautionary statement(s)

- P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
- P264 Wash skin thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/ eye protection/ face protection.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

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P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

Section 3. Composition/Information on Ingredients

Component:	CAS#:	EC#:
2-Pyridone hydrazone dihydrochloride	62437-99-4	263-541-3

Molecular Formula: C₅H₇N₃HCl

Molecular Weight: 181.1

No ingredients are hazardous according to OSHA criteria.

Section 4. First Aid Measures

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen.

Skin contact: Immediately wash skin with soap and copious amounts of water.

Eye Contact: Immediately flush eyes with copious amounts of water for at least 15 minutes.

Ingestion: If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Other: Wash contaminated clothing before re-use.

Section 5. Fire Fighting Measures

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment: Use respirator for firefighting if necessary.

Section 6. Accidental Release Measures

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves. Sweep up, place in a bag, and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7. Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into

consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place. Storage class (TRGS 510): 13: Non-Combustible Solids

Section 8. Exposure Controls/Personal Protection

Exposure limits: Contains no substances with occupational exposure limit values.

Engineering controls: Use enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits.

Personal protection:

Hand protection - Compatible chemical-resistant gloves.

Eye protection - Chemical safety goggles.

Skin protection - Lab coat.

Section 9. Physical and Chemical Properties

Appearance: White solid

Percent Purity: >95%

Boiling Point: NA

Melting Point: NA

Freezing Point: NA

pH: NA

Solubility in Water: NA

Vapor Density: NA

Vapor Pressure: NA

Section 10. Stability and Reactivity

Chemical stability: Stable when stored under recommended storage conditions.

Incompatibility: Strong oxidizing agents

Hazardous Decomposition Components: Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO_x), Hydrogen chloride gas. Other decomposition products - No data available.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

No data available

Dermal: No data available

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

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No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity

No data available

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12. Ecological Information

No data available.

Section 13. Disposal Considerations

Observe all federal, state and local environmental regulations.

Section 14. Transport Information

DOT (US): Not dangerous goods.

RID/ADR: Not regulated.

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Previous Version: N/A

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

Section 15. Regulatory Information

SARA:

SARA 302 - No chemicals in this material are subject to the reporting requirements.

SARA 313 - No chemicals in this material with known CAS #s are subject to the reporting requirements.

SARA 311/312 Hazards – Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

2-Pyridone hydrazone dihydrochloride CAS-No. 62437-99-4

New Jersey Right To Know Components

2-Pyridone hydrazone dihydrochloride CAS-No. 62437-99-4

California Prop. 65 components:

This product does not contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

Section 16. Other Information

Date of Issue or Revision: April 26, 2021

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For Research Grade Use Only.

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Previous Date of Issue: N/A

Previous Version: N/A

Section 1. Product and Company Identification

Product Name: Antibody-Oligonucleotide All-in-One™ Conjugation Kit
Catalog No.: A-9202-001
Kit Component: Affinity Magnetic Beads

Manufacturer/Supplier USA:

Vector Laboratories, Inc.
30 Ingold Road
Burlingame, CA 94010
United States
Tel: (650) 697-3600 Fax: (650) 697-0339
Email: vector@vectorlabs.com

For Research Grade Use Only.

Section 2. Hazards Identification

GHS Classification:

This product has been classified as non-hazardous based on the physical and/or chemical nature and/or concentration of ingredients.

Classification: R11

Physical/chemical hazards: Highly Flammable

Section 3. Composition/Information on Ingredients

Magnetic agarose chromatography media (black gel slurry) containing encapsulated iron oxide particles in 15% ethanol/water suspension (v/w).

Component:	CAS#:	% by weight:
Ethanol	64-17-5	<16%
Iron (II, III) oxide	1317-61-9	<1%
Agarose-based chromatography media	None	<25%

No ingredients are hazardous according to OSHA criteria.

Section 4. First Aid Measures

Inhalation: If inhaled, move to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen or artificial respiration by qualified personnel.

Skin contact: In case of skin contact, wash affected areas with soap and water and flush the area with

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copious amounts of water. Remove contaminated clothing.

Eye Contact: In case of contact with eyes, immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eye lids.

Ingestion: If swallowed, rinse mouth out with water provided person is conscious. Never give fluids or induce vomiting if the victim is unconscious or having convulsions.

Section 5. Fire Fighting Measures

Autoignition temp: 789 °C

Flash point: 36 °C (closed cup)

Specific gravity: 0.989 g/cm³

Autoignition temp: 789 °C

Flash point: 36 °C (closed cup)

Vapor pressure: 43.6 mmHg (ethanol)

Vapor density: 1.52 g/l (ethanol)

Extinguishing Media: Use extinguishing media appropriate for surrounding fire

Special Fire Fighting Procedures: Use extinguishing media appropriate for surrounding fire such as water spray, carbon dioxide, dry powder. Wear full protective clothing and NIOSH approved self-contained breathing apparatus. Avoid inhalation of material or combustion by-products.

Unusual Fire and Explosion Hazards: None

Section 6. Accidental Release Measures

Wear protective clothing to prevent contact with eyes and skin. Ensure adequate ventilation. Collect on absorbent material and dispose of according to federal, state, and local environmental regulations.

Section 7. Handling and Storage

Handling: Use only with adequate ventilation. Wear eye protection and compatible chemical-resistant gloves. Handle in accordance with good industrial hygiene and safety practice.

Storage: Keep container tightly closed and store according to product label.

Section 8. Exposure Controls/Personal Protection

Exposure limits: Contains no substances with occupational exposure limit values.

Engineering controls: Use enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits.

Personal protection:

Hand protection - Compatible chemical-resistant gloves.

Eye protection - Chemical safety goggles.

Skin protection - Lab coat.

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Previous Version: N/A

Section 9. Physical and Chemical Properties

Appearance: Black slurry suspension; liquid

Odor: Slightly alcohol-like

Autoignition temp: 789 °C

Boiling Point: 77-78°C (ethanol)

Melting Point: May solidify at <0°C

Flash Point: 36°C (closed cup)

Specific Gravity: 0.989 g/cm³

Vapor pressure: 43.6 mmHg (ethanol)

Vapor density: 1.52 g/l (ethanol)

Section 10. Stability and Reactivity

Chemical stability: Stable when stored under recommended storage conditions.

Conditions to Avoid: Heat and flame.

Materials / Chemicals to Be Avoided: Exposure to oxidizing agents such as hydrogen peroxide, perchloric acid; nitric acid; metal perchlorates, metal nitrates, sodium metals, potassium metals, acid anhydrides, acid chlorides.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Unknown

Section 11. Toxicological Information

United States

Acute toxicity/Conclusion/Summary: To the best of our knowledge, the toxicological properties of this product have not been thoroughly investigated.

Chronic toxicity/Conclusion/Summary: Not available.

Carcinogenicity/Conclusion/Summary: Not available

Mutagenicity/Conclusion/Summary: Not available.

Teratogenicity/Conclusion/Summary: Not available.

Reproductive toxicity/Summary: Not available.

Europe

Chronic effects: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

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Previous Date of Issue: N/A

Previous Version: N/A

Section 12. Ecological Information

None known.

Section 13. Disposal Considerations

The generation of waste should be avoided or minimized wherever possible. Observe all federal, state, and local environmental regulations.

Section 14. Transport Information

DOT

Proper Shipping Name: Combustible liquid, n.o.s.

UN #: 1193

Hazard Class: Flammable

Packaging Group: Group III

Hazard Label Statement: None

PIH: None PIH

IATA

Non-hazardous for air transport

Section 15. Regulatory Information

United States

U.S. Federal regulations:

United States inventory (TSCA 8b): Ethanol

SARA 302/304/311/312 extremely hazardous substances; No products were found.

SARA 302/304 emergency planning and notification: No products found.

SARA 302/304/311/312 hazardous chemicals; ethanol

SARA 311/312; MSDS distribution chemical inventory – hazard identification: ethanol: fire hazard (acute) health hazard, delayed (chronic) health hazard

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: This product is listed.

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

EU Regulations

EC Classification: R11, highly flammable, Xi = irritant

Risk Phrases: R11-highly flammable

R36 irritating to eyes

R37 irritating to respiratory system

R38 irritating to skin

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Previous Date of Issue: N/A

Previous Version: N/A

Section 16. Other Information

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For Research Grade Use Only.

Date of Issue: 04/26/21

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Previous Date of Issue: N/A

Previous Version: N/A

Section 1. Product and Company Identification

Product Name: Antibody-Oligonucleotide All-in-One™ Conjugation Kit
Catalog No.: A-9202-001
Kit Component: S-4FB Linker (DMF Soluble), S-1004

Manufacturer/Supplier USA:

Vector Laboratories, Inc.
30 Ingold Road
Burlingame, CA 94010
United States
Tel: (650) 697-3600 Fax: (650) 697-0339
Email: vector@vectorlabs.com

For Research Grade Use Only.

Section 2. Hazards Identification

GHS Classification:

This product has been classified as non-hazardous based on the physical and/or chemical nature and/or concentration of ingredients.

GHS Label: Non-hazardous substance or mixture.

Hazards not otherwise classified (HNOC) or not covered by GHS: None

Section 3. Composition/Information on Ingredients

CAS Number: Custom synthesized compound. No CAS Number.

Components: Single compound.

Molecular Formula: C₁₂H₉NO₅

Molecular Weight: 247.2

No known hazard is associated with this compound.

Section 4. First Aid Measures

Inhalation: Remove to fresh air.

Skin contact: Wash thoroughly with soap and water.

Eye Contact: Flush eyes with water as a precaution.

Ingestion: Do not induce vomiting. Wash out mouth with water.

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Previous Version: N/A

Section 5. Fire Fighting Measures

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment: Use respirator for firefighting if necessary.

Section 6. Accidental Release Measures

Wear protective clothing to prevent contact with eyes and skin. Ensure adequate ventilation. Collect on absorbent material and dispose of according to federal, state and local environmental regulations.

Section 7. Handling and Storage

Handling: Use only with adequate ventilation. Wear eye protection and compatible chemical-resistant gloves. Handle in accordance with good industrial hygiene and safety practice.

Storage: Keep container tightly closed and store according to product label.

Section 8. Exposure Controls/Personal Protection

Exposure limits: Contains no substances with occupational exposure limit values.

Engineering controls: Use enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits.

Personal protection:

Hand protection - Compatible chemical-resistant gloves.

Eye protection - Chemical safety goggles.

Skin protection - Lab coat.

Section 9. Physical and Chemical Properties

Appearance: white solid

Percent Purity: >97%

Boiling Point: NA

Melting Point: NA

Freezing Point: NA

pH: NA

Solubility in Water: NA

Vapor Density: NA

Vapor Pressure: NA

Section 10. Stability and Reactivity

Chemical stability: Stable when stored under recommended storage conditions.

Incompatibility: NA

Hazardous reactions/decomposition products: NA

Section 11. Toxicological Information

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Previous Date of Issue: N/A

Previous Version: N/A

Acute toxicity: Product does not present an acute toxicity hazard based on known or supplied information.

Chronic toxicity: No data available.

Section 12. Ecological Information

No data available.

Section 13. Disposal Considerations

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Observe all federal, state, and local environmental regulations.

Section 14. Transport Information

DOT (US): Not regulated.

RID/ADR: Not regulated.

IMDG: Not regulated.

IATA: Not regulated..

Section 15. Regulatory Information

Substances of Very High Concern: None

SARA:

SARA 302 - No chemicals in this material are subject to the reporting requirements.

SARA 313 - No chemicals in this material with known CAS #s are subject to the reporting requirements.

SARA 311/312 Hazards - No SARA Hazards.

California Prop. 65 components:

This product does not contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

Section 16. Other Information

Date of Issue or Revision: April 26, 2021

The information contained in this Safety Data Sheet is believed to be accurate, but it is the responsibility of the user to determine the applicability of this data to necessary safety precautions. Vector Laboratories, Inc. shall not be held responsible for any damage resulting from the use of the above product or the information contained in this Safety Data Sheet.

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Previous Date of Issue: N/A

Previous Version: N/A

Section 1. Product and Company Identification

Product Name: Antibody-Oligonucleotide All-in-One™ Conjugation Kit
Catalog No.: A-9202-001
Kit Component: Spin Column (Brown Cap)

Manufacturer/Supplier USA:

Vector Laboratories, Inc.
30 Ingold Road
Burlingame, CA 94010
United States
Tel: (650) 697-3600 Fax: (650) 697-0339
Email: vector@vectorlabs.com

For Research Grade Use Only.

Section 2. Hazards Identification

GHS Classification:

This product has been classified as non-hazardous based on the physical and/or chemical nature and/or concentration of ingredients.

GHS Label: Non-hazardous substance or mixture.

Hazards not otherwise classified (HNOC) or not covered by GHS: None

Section 3. Composition/Information on Ingredients

Spin Column (Brown Cap) contains a polymeric chromatography resin equilibrated in a sodium phosphate-buffered saline solution (pH 6.0).

Component:	CAS#:	% by weight:
Sodium Phosphate, Dibasic	7558-79-4	<0.2%
Sodium Chloride	7647-14-5	<0.1%
Sodium Phosphate, Monobasic	10049-21-5	<0.1%
Polymeric Resin	Not available	50%

No ingredients are hazardous according to OSHA criteria.

Section 4. First Aid Measures

Inhalation: If inhaled, move to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen or artificial respiration by qualified personnel.

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Previous Date of Issue: N/A

Previous Version: N/A

Skin contact: In case of skin contact, wash affected areas with soap and water and flush the area with copious amounts of water. Remove contaminated clothing.

Eye Contact: In case of contact with eyes, immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eye lids.

Ingestion: If swallowed, rinse mouth out with water provided person is conscious. Never give fluids or induce vomiting if the victim is unconscious or having convulsions.

Section 5. Fire Fighting Measures

This product is not considered to be a fire hazard.

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Special protective equipment: Use respirator for firefighting if necessary.

Section 6. Accidental Release Measures

Wear protective clothing to prevent contact with eyes and skin. Ensure adequate ventilation. Collect on absorbent material and dispose of according to federal, state, and local environmental regulations.

Section 7. Handling and Storage

Handling: Use only with adequate ventilation. Wear eye protection and compatible chemical-resistant gloves. Handle in accordance with good industrial hygiene and safety practice.

Storage: Keep container tightly closed and store according to product label.

Section 8. Exposure Controls/Personal Protection

Exposure limits: Contains no substances with occupational exposure limit values.

Engineering controls: Use enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits.

Personal protection:

Hand protection - Compatible chemical-resistant gloves.

Eye protection - Chemical safety goggles.

Skin protection - Lab coat.

Section 9. Physical and Chemical Properties

Appearance: White gel slurry

Percent Purity: Not available

Boiling Point: Not available

Melting Point: Not available

Specific Gravity: Not available

Freezing Point: Not Available

Vapor pressure: Not available

Vapor density: Not available

Solubility: Easily dispersible in aqueous solutions

pH: 6.0

Evaporation rate: Not available

Section 10. Stability and Reactivity

Chemical stability: Stable when stored under recommended storage conditions.

Conditions to Avoid: Avoid exposure to lead and copper

Materials / Chemicals to Be Avoided: Unknown.

Hazardous Decomposition Products: Phosphorus oxides may form when heated to decomposition. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous Polymerization: Under normal conditions of storage and use, polymerization product should not be produced.

Section 11. Toxicological Information

United States:

Acute toxicity/Conclusion/Summary: To the best of our knowledge, the toxicological properties of this product have not been thoroughly investigated.

Chronic toxicity/Conclusion/Summary: Not available.

Carcinogenicity/Conclusion/Summary: Not available

Mutagenicity/Conclusion/Summary: Not available.

Teratogenicity/Conclusion/Summary: Not available.

Reproductive toxicity/Summary: Not available

Europe

Chronic effects: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Section 12. Ecological Information

None known.

Section 13. Disposal Considerations

The generation of waste should be avoided or minimized wherever possible. Observe all federal, state and local environmental regulations.

Section 14. Transport Information

DOT (US): Not regulated.

RID/ADR: Not regulated.

IMDG: Not regulated.

IATA: Not regulated.

Section 15. Regulatory Information

United States

HCS Classification: Not regulated

SARA Title III Hazard Classes:

SARA 302/304/311/312 extremely hazardous substances; No products were found.

SARA 302/304 emergency planning and notification: No products found.

SARA 302/304/311/312 hazardous chemicals; No products found.

SARA 311/312; No SARA hazards.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: This product is listed.

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

Canada

WHMIS (Canada): Not controlled under WHMIS (Canada).

Canadian Inventory: All components are listed or exempted

EU Regulations

EC Classification: Xi -irritant

Risk Phrases: R36 irritating to eyes
R37 irritating to respiratory system
R38 irritating to skin

International Regulations

International Lists: Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Korea inventory (KECI): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

Japan inventory (ENCS): All components are listed or exempted.

Section 16. Other Information

Date of Issue or Revision: April 26, 2021

The information contained in this Safety Data Sheet is believed to be accurate, but it is the responsibility of the user to determine the applicability of this data to necessary safety precautions. Vector Laboratories, Inc. shall not be held responsible for any damage resulting from the use of the above product or the information contained in this Safety Data Sheet.

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