SAFETY DATA SHEET

Date of Issue: 03/26/20 | Version 1.0 | Previous Date of Issue: N/A | Previous Version: N/A

Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

Product Name: Human on Human Immunodetection Kit – Protein Block, Solution A, Solution B, HRP Anti-Goat IgG, HRP Antibody Diluent
Catalog No.: HOH-3000

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

Supplier United Kingdom:
Vector Laboratories Ltd.
3 Accent Park
Bakewell Road, Orton Southgate
Peterborough, PE2 6XS, United Kingdom
Tel: (01733) 237999 Fax: (01733) 237119
Email: vector@vectorlabs.co.uk

For Research Grade Use Only.

Section 2. Hazards Identification

GHS Classification:
These components have 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

No ingredients are hazardous according to OSHA criteria.
No components need to be disclosed according to the applicable regulations.

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 fire fighting 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: Liquid
Odor: None
pH: Not determined
Boiling point: Not determined
Melting point: Not determined
Flash Point: Not determined
Autoflammability: Not determined
Vapor pressure: Not determined
Relative density: Not determined
Solubility: Not applicable

Section 10. Stability and Reactivity

Chemical stability: Stable under recommended storage conditions
Conditions to avoid: pH extremes
Materials to avoid: Not applicable
Hazardous reactions/decomposition products: Not determined

Section 11. Toxicological Information

Acute toxicity: No data available
Chronic toxicity: No data available

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
IMDG: Not dangerous goods
IATA: Not dangerous goods

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: March 26, 2020

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. Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifier

Substance Name/Product Name: Human on Human Immunodetection Kit - ImmPACT DAB EqV Reagent 1 (Chromogen)
Product Identifier/Catalog No.: HOH-3000
CAS Number: Not Applicable/Chemical Mixture
EC Number: Not Applicable/Chemical Mixture
REACH Registration Number: Not Applicable/Chemical Mixture

1.2 Relevant identified uses and uses advised against

Relevant identified uses: Research Grade Use Only, For professional Users Only
Uses advised against: None
Reason why uses advised against: Not Applicable

1.3 Details of Safety Data Sheet Supplier

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

Supplier United Kingdom:
Vector Laboratories Ltd.
3 Accent Park
Bakewell Road, Orton Southgate
Peterborough, PE2 6XS, United Kingdom
Tel: (01733) 237999 Fax: (01733) 237119
Email: vector@vectorlabs.co.uk

1.4 Emergency Telephone Number

Emergency Telephone Number: (650) 697-0339
Opening hours: 5 Days a Week – 9 am to 4 pm PST/PDT
Other comments: Language English
ECHA National Helpdesks Link to Safety Data Sheet - National Emergency Telephone Number, if applicable:
http://echa.europa.eu/help/nationalhelp_contact_en.asp

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP) and 29 CFR 1910.1200 (OSHA HCS)

Flammable liquids (Category 2), H225

Acute toxicity, Oral (Category 4), H302

Eye irritation (Category 2A), H319
Germ Cell Mutagenicity (Category 2) , H341
Carcinogenicity (Category 1A), H350

2.1.2 Additional Information:

EU Hazard-statements: See Section 16

2.2 Label Elements and Precautionary Statements

GHS Label:

Signal Word: Danger

Hazard Statement(s):

H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H319	Causes serious eye damage
H341	Suspected of causing genetic defects
H350	May cause cancer

Precautionary Statement(s):

Prevention:

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilating/lighting/…/equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P264	Wash hands thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required

Response:

P301 + P312	IF SWALLOWED: call a POISON CENTER or doctor/physician IF you well feel unwell
P303 + P361 + P353	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse SKIN with water/shower
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308 + P313	If exposed or concerned: Get medical advice/attention
P330	Rinse mouth
P337 + P313	IF eye irritation persists: Get medical advice/attention
P370 + P378	In case of fire: Use…for extinction

Storage:

P403 + P235	Store in a well-ventilated place. Keep cool
P405	Store locked up

Disposal:

P501	Dispose of contents/container to an approved waste disposal plant

Supplemental Hazard information:

Container must be labelled “For Professional Users Only”

2.3 Other Hazards:

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

Section 3. Composition/Information on Ingredients

3.1 Substances / Hazardous Components of Mixture:

Component	Identifier	Classification	% (Weight)
Acetonitrile	CAS # 75-05-8 EC # 200-835-2 Index # 608-001-00-3 Reach Registration # 01-2119471307-38-XXXX	Flammable Liquid (Category 2), H225 Acute Toxicity, Oral (Category 4), H302 Acute toxicity, Dermal (Category 4), H312 Eye Irritation (Category 2A), H319 Acute toxicity, Inhalation (Category 4), H332	≤75%
3,3'-diaminobenzidine	CAS# 7411-49-6 EC # 231-018-9 Index # 612-239-00-3 Reach Registration # N/A	Acute Toxicity, Oral (Category 4), H302 Eye Irritation (Category 2A), H319 Germ Cell Mutagenicity (Category 2), H341 Carcinogenicity (Category 1B), H350	≤15%

Section 4. First Aid Measures

4.1 Description of First Aid Measures

General Notes / Advice:
Consult a physician IF Exposed. Provide a copy of this safety data sheet to the doctor in attendance. Move out of dangerous area

Following inhalation:
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician

Following skin contact:
Wash skin with soap and plenty of water. Take victim immediately to hospital. Consult a physician

Following eye contact:
Rinse thoroughly with plenty of water for 15 minutes and consult a physician

Following ingestion:
DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

See Section 2 or Section 11

Acetonitrile - RTECS: AL7700000

- Headache, Dizziness, nausea, vomiting, diarrhea, rash, depression, drowsiness, impaired judgement, lack of coordination, cyanosis, death

Biphenyl-3,3',4,4'-tetrayltetraamine - RTECS: DV8750000

4.3 Indication or any Immediate Medical Attention and Special Treatment Needed

No data available

Section 5. Fire Fighting Measures

5.1 Extinguishing Media

Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemicals or carbon dioxide

Unsuitable extinguishing media:

No data available

5.2 Special hazards arising from substances or mixtures

Hazardous combustion products:

No data available

5.3 Advice for Firefighters

Protective actions:

Keep containers cool with water spray

Special protective equipment for firefighters:

Wear self-contained breathing apparatus for firefighting if necessary

5.1 Further Information

Use water spray to cool containers

Section 6. Accidental Release Measures

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures

6.1.1 For non-emergency personnel

Protective Equipment:

Use personal protective equipment. Avoid breathing vapors. Ensure adequate ventilation. Remove all ignition sources. Accumulating vapors may form explosive concentration. For information on personal protection see section 8

Emergency Procedures:

Evacuate personnel to safe areas

6.1.2 For emergency responders:

Use personal protective equipment to prevent contact with eyes and skin. Ensure adequate ventilation. Avoid breathing vapors. For information on personal protection see section 8

6.2 Environmental Precautions

Prevent further leakage or spillage if safe to do so. Discharge into the environment must be avoided

6.3 Methods and Materials for Containment and Cleaning up

Contain spillage, and then collect with non-combustible absorbent material and place in container for disposal according to local regulations

6.3.1 For containment:

Dam and absorb spills. Ensure adequate ventilation to prevent vapor accumulations

6.3.2 For cleaning up:

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Materials used to clean-up spills can cause a fire. Ensure adequate ventilation to prevent vapor accumulations

6.3.3 Other information:

No data available

6.4 Reference to other Sections

See Sections 8 and Section 13 for additional information

Section 7. Handling and Storage

7.1 Precautions for Safe Handling

In accordance with Article 5 of Directive 98/24/EC and Article 5 of Directive 2004/37/EC

Protective Measures:

Avoid contact with skin and eyes. Avoid inhalation of vapor and mist. Wash hands following use and prior to eating. Handle

in accordance with good industrial hygiene and safety practice

Measures to prevent fire:

See Section 5. Keep away from ignition sources. Ensure adequate ventilation to prevent accumulation of vapors. Take precautionary measures against static discharge

Measures to prevent aerosol and dust generation:

Not applicable

Measures to prevent handling of incompatible substances or mixtures:

See Section 6 and Section 10. Avoid uncontrolled release to the environment

Measures to protect the environment:

See Section 6. Avoid uncontrolled release to the environment

Advice on general occupational hygiene:

See Section 8. Avoid contact with skin and eyes. Wash hands following use and prior to eating. Handle in accordance with good industrial hygiene and safety practice

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Keep container tightly closed and store according to product label. Containers which are opened must be carefully resealed and kept upright to prevent leakage

Packaging materials:

No data available

Requirements for storage rooms and vessels:

Store in a cool and well-ventilated place

Further information on storage conditions: No data available

7.3 Specific End Use(s)

Recommendations:

See Section 1.2

Industrial sector specific solutions:

Not data available

Section 8. Exposure Controls/Personal Protection

In accordance with Directive 98/24/EC, Article 2(3) of Commission Decision 2014/113/EU, Directive 2004/37/EU, USA OSHA, and California Code of Regulations - Table AC-1

8.1 Control Parameters

Components with Workplace Control Parameters:

Substance	Acetonitrile			
CAS No.	75-05-8			
	Limit value - Eight hours		**Limit value - Short term**	
	ppm	**mg/m³**	**ppm**	**mg/m³**
Australia	40	67	60	101
Austria	40	70	160	280
Belgium	20	34		

Substance	Acetonitrile			
CAS No.	75-05-8			
Canada - Ontario	20	10		
Canada - Québec	40	67	60	101
Denmark	40	70	80	140
European Union	**40**	**70**		
Finland	20	34	40(1)	68(1)
France	**40**	**17**	20(1)	34(1)
Germany (AGS)	20	34	40(1)	68(1)
Germany (DFG)	10	17	20(1)	34(1)
Hungary		70		280
Ireland	40	70		
Italy	20	35		
Latvia	40	70		
New Zealand	40	67	60	101
People's republic of China		30		
Poland		70		
Romania	40	70		
Singapore	40	67	60	101
South Korea	20	33		
Spain	40	68	60	102
Sweden	30	50	60(1)	100(1)
Switzerland	20	34	40	68
The Netherlands		34		
Turkey	40	70		
USA - NIOSH	20	34		
USA - OSHA	40	70		
United Kingdom	40	68	60	102
	Remarks			

Substance	Acetonitrile
CAS No.	75-05-8
European Union	Bold-type: Indicative Occupational Exposure Limit Values and Limit Values for Occupational Exposure Binding Occupational Exposure Limit Value - BOELV ~ (for references see bibliography)
Finland	(1) 15 minutes average value
France	Bold type: Restrictive statutory limit values
Germany (AGS)	(1) 15 minutes average value
Germany (DFG)	(1) 15 minutes average value
Italy	Skin
Spain	Skin
Sweden	(1) 15 minutes average value

Components with Derived No-Effect Levels (DNELs):

Vector Laboratories does not manufacturer the components in this mixture. Information provided is based on available lists (GESTIS DNEL List) and/or manufacturer data

Workers- Acetonitrile

Routes of Exposure	Short-term local	Short-term systemic	Long-term local	Long-term systemic
Oral	(iii)	(iii)	(iii)	(iii)
Inhalation	68 mg/m^3	68 mg/m^3	68 mg/m^3	68 mg/m^3
Dermal	(iii)	(iii)	(iii)	32.2 mg/kg BW/day

Note: (i) hazard identified but no DNEL available, (ii) no exposure expected, (iii) no hazard identified

Components with Predicted No-Effect Concentration (PNEC):

Vector Laboratories does not manufacturer the components in this mixture. Information provided is based on available lists and/or manufacturer data

PNEC - Acetonitrile

Environmental Protection Target	**PNEC Value**
PNEC aquatic, freshwater	10 mg/L
PNEC sediment, freshwater	7.53 mg/kg
PNEC aquatic, marine water	1 mg/L
PNEC sediment, marine water	No exposure expected
PNEC sewage treatment plant	32 mg/L
PNEC soil (agricultural)	2.41 mg/kg
PNEC, air	Not Available

8.2 Exposure Controls

8.2.1 Appropriate Engineering Controls:

Based on exposure risk assessments, use enclosures, local exhaust ventilation or other engineering controls to minimize worker exposures

8.2.2 Personal Protective Equipment

8.2.2.1 Eye and Face Protection:

Face shield and safety glasses. Use equipment for eye protection that is tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

8.2.2.2 Skin Protection:

Hand protection:

Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. The type of protective gloves must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Wash and dry hands following use

Full contact: Acetonitrile
Material: butyl-rubber
Minimum layer thickness: 0.3 mm
Break through time: 480 min
Material tested: Vitoject® (KCL 897 / Aldrich Z67647, Size M)

Splash contact: Acetonitrile
Material: butyl-rubber
Minimum layer thickness: 0.3 mm
Break through time: 480 min
Material tested: Vitoject® (KCL 897 / Aldrich Z67647, Size M)
Data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario

Other skin protection:

The type of protective equipment required such as impervious clothing, flame retardant antistatic protective clothing, boots shall be selected based on the concentration and amount of the dangerous substance at the specific workplace

8.2.2.3 Respiratory Protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

8.2.2.4 Thermal Hazards:

No data available

8.2.3 Control of Environmental Exposure:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

Section 9. Physical and Chemical Properties

According to Article 8(2) of Regulation (EC) No 1272/2008, where applicable

Appearance: Clear Liquid
Odor: ether-like
pH: Not determined
Boiling point: 81 - 82 °C (178 - 180 °F)
Melting point: -48 °C (-54 °F)
Viscosity: Not determined

Flash Point: 2.0 °C (35.6 °F) - closed cup
Decomposition temperature: Not determined
Vapor pressure: 121.44 hPa (91.09 mmHg) at 25 °C
Relative density: 0.786 g/mL at 25 °C (77 °F)
Solubility: Not determined
Upper Explosive Limit: Not determined

Evaporation rate: Not determined
Odor Threshold: Not determined
Freezing point: Not determined
Auto-ignition temperature: Not determined

Lower Explosive Limit: Not determined
Flammability: Yes
Vapor Density: Not determined
Partition Coefficient: Not determined

Section 10. Stability and Reactivity

10.1 Reactivity:
No data available

10.2 Chemical stability:
Stable under recommended storage conditions

10.3 Possibility of Hazardous Reactions:
Vapors may form explosive mixture with air

10.4 Conditions to avoid:
Heat, sparks and flames

10.5 Incompatible Materials:
Acids, bases, nitrating agents, nitrogen-fluorine compounds, oxidizers, perchlorates, sulphites

10.6 Hazardous reactions/decomposition products:
Carbon oxides, nitrogen oxides, hydrogen cyanide. See Section 5

Section 11. Toxicological Information

11.1 Information on Toxicological Effects

Acetonitrile - RTECS: AL7700000

- Headache, Dizziness, nausea, vomiting, diarrhea, rash, depression, drowsiness, impaired judgement, lack of coordination, cyanosis, death

Acute Toxicity:

Acetonitrile	LD50 Oral - Rat - male - 1,320 - 6,690 mg/kg LC50 Inhalation - Mouse - 4 h - 3587 ppm (OECD Test Guideline 403) LC50 Inhalation - Rat - 4 h – 26.8 mg/l LD50 Dermal - Rabbit – male and female - >2000 mg/kg (OECD Test Guideline 402)
Biphenyl-3,3',4,4'-tetrayltetraamine	LD50 Oral – Mouse - 1834 mg/kg
Skin corrosion/irritation:	
Acetonitrile	Skin – Rabbit - No skin irritation (OECD Test Guideline 404)
Serious eye damage/eye irritation:	
Acetonitrile	Eyes- Rabbit – Irritating to eyes (OECD Test Guideline 405)
Respiratory or skin sensitization:	
Acetonitrile	Buehlet test - Guinea pig – Negative (OECD Test Guideline 406)
Germ cell mutagenicity:	
Acetonitrile	Hamster – Ovary - Negative Mutagenicity (micronucleus test) – Mouse – Positive – some in vivo tests
Biphenyl-3,3',4,4'-tetrayltetraamine	In vitro tests showed mutagenic effects – Rat – Liver – Unscheduled DNA Synthesis

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified

as probable, possible, or confirmed as human carcinogen by IARC

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH

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 identified as a carcinogen or potential carcinogen by OSHA

Reproductive toxicity:
No data available
Specific target organ toxicity - single exposure:
Not classified as a specific target organ toxicant, single exposure
Specific target organ toxicity - repeated exposure:
Not classified as a specific target organ toxicant, repeated exposure
Aspiration hazard:
No aspiration toxicity classification
Additional Information:

Acetonitrile	RTECS: AL7700000
Biphenyl-3,3',4,4'-tetrayltetraamine	RTECS: DV8750000

Section 12. Ecological Information

12.1 Toxicology:

Acetonitrile	Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 1,640.00 mg/l - 96 h, NOEC - Oryzias latipes - 102 mg/l - 21 d Toxicity to daphnia and other aquatic invertebrates- EC50 - Daphnia magna (Water flea) - 3,600 mg/l - 48 h (OECD Test Guideline 202), NOEC - Daphnia magna (Water flea) - 160 mg/l - 21 d

12.2 Persistence and degradability:

Acetonitrile	Biodegradability Result: 84 % - Readily biodegradable (OECD Test Guideline 301C)

12.3 Bioaccumulative potential:
No bioaccumulation is to be expected

12.4 Mobility in soil:
Not expected to absorb on soil

12.5 PBT and vPvB assessment:
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects:
No data available

12.7 Additional Information:
No data available

Section 13. Disposal Considerations

13.1 Waste Treatment Methods:

13.1.1 Product / Packaging Disposal:

Product:

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dispose in a safe manner in accordance per local/national regulations

Packaging:

Dispose of as unused product

13.1.2 Waste treatment-relevant information:

No data available

13.1.3 Sewage disposal-relevant information:

Sewage disposal must meet the local and federal regulations

13.1.4 Other disposal recommendations:

No data available

Section 14. Transport Information

DOT (US)

UN number: 1648 Class: 3 Packing Group: II

Proper Shipping Name: Acetonitrile Solution

Reportable Quantity (RQ): 5000 lbs

Poison Inhalation Hazard: No

RID/ADR

UN number: 1648 Class: 3 Packing Group: II Tunnel Restriction Code: 2(D/E)

Proper Shipping Name: Acetonitrile Solution

IMDG

UN number: 1648 Class: 3 Packing Group: II EMS-No: F-E, S-D

Proper Shipping Name: ACETONITRILE SOLUTION

IATA

UN number: 1648 Class: 3 Packing Group: II

Proper Shipping Name: Acetonitrile Solution

Section 15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations:

Authorizations and/or restrictions on use: None
Other EU Regulations: None

USA regulations

SARA 302 Components:
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

SARA 313 Components:
The following components are subject to reporting levels established by SARA Title III, Section 313:
Acetonitrile CAS-No.75-05-8 Revision Date2007-07-01

SARA 311/312 Hazards:
Fire Hazard, Acute Health Hazard

Risk Phrases:
R11 – Highly flammable
R22 - Harmful if swallowed
R36 - Irritating to eyes
R45- May cause cancer
R46- May cause inheritable genetic damage

Safety Phrases:
S7- Keep container tightly closed
S16 – Keep away from sources of ignition – No Smoking
S36/37/39 – Wear suitable protective clothing, gloves and eye/face protection

Massachusetts Right to Know Components
Acetonitrile CAS-No.75-05-8 Revision Date2007-07-01

Pennsylvania Right to Know Components
Acetonitrile CAS-No.75-05-8 Revision Date2007-07-01
Biphenyl-3,3',4,4'-tetrayltetraamine CAS-No. 91-95-2 Revision Date

New Jersey Right to Know Components
Acetonitrile CAS-No.75-05-8 Revision Date2007-07-01

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

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier

Section 16. Other Information

Indication of changes:
Not Applicable

Abbreviations & Acronyms:

HNOC	Hazards Not Otherwise Classified
GHS	Globally Harmonized System
OSHA	Occupational Safety and Health Administration
TWA	Time Weighted Average
PEL	Permissible Exposure Limit
REL	Recommended Exposure Limit
STEL	Short-Term Exposure Limit (15 minutes)

NIOSH	National Institute for Occupational Safety and Health
DNELs	Derived No-Effect Levels
PNEC	Predicted No-Effect Concentration
BW	Body Weight
NA	Not Applicable
IARC	International Agency for Research on Cancer
ACGIH	American Conference of Governmental Industrial Hygienists
NTP	National Toxicology Program
RTECS	Registry of Toxic Effects of Chemical Substances
SARA	Superfund Amendments and Reauthorization Act of 1986
ECHA	European Chemicals Agency

Key Literature References and sources of data:
European Chemical Agency (ECHA) REGULATION (EC) No 1272/2008
Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU
Regulation (EC) No. 1272/2008 (CLP, EU GHS)
Dangerous Goods Regulations (DGR) for the air transport (IATA)
International Maritime Dangerous Goods Code (IMDG)
International Agency for Research on Cancer (IARC) - List of Classifications / Volumes 1–123
American Conference of Governmental Industrial Hygienists (ACGIH) - 2019 TLVs and BEIs
National Toxicology Program (NTP) - Report on Carcinogens (RoC)
Occupational Safety and Health Administration (OSHA) – US CFR 1910 Subpart Z

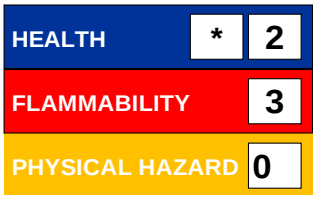
Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification Procedure
Flammable liquids (Category 2), H225	Calculation method
Acute toxicity, Oral (Category 4), H302	Calculation method
Eye irritation (Category 2A), H319	Calculation method
Germ Cell Mutagenicity (Category 2), H341	Calculation method
Carcinogenicity (Category 1B), H350	Calculation method

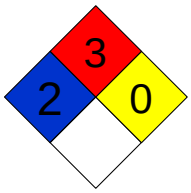
Training Advice:
Training and continued education on safe handling of the chemical and chemical waste disposal must be provided to the workers to ensure protection of human health and the environment

Further Information:

HMIS Classification



NFPA Rating



Prepared By: Otis Institute, Inc. 399 Fremont Street, San Francisco, CA 94105

Date of Issue or Revision: March 26, 2020

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

SAFETY DATA SHEET

Date of Issue: 03/26/20 | Version 1.0 | Previous Date of Issue: N/A | Previous Version: N/A

Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

Product Name: Human on Human Immunodetection Kit - ImmPACT® DAB EqV Reagent 2 (Diluent)
Catalog No.: HOH-3000

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

Supplier United Kingdom:
Vector Laboratories Ltd.
3 Accent Park
Bakewell Road, Orton Southgate
Peterborough, PE2 6XS, United Kingdom
Tel: (01733) 237999 Fax: (01733) 237119
Email: vector@vectorlabs.co.uk

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Section 2. Hazards Identification

GHS Classification:

Skin Corrosion – Category 1B, H314
Serious Eye Damage – Category 1, H314
Reproductive toxicity – Category 1B, H360

GHS Label: 

Signal Word: Danger

Hazard Statements:

H314 – Causes severe ski burns and eye damage.
H360 – May damage fertility or the unborn child.

Precautionary Statements:

Obtain special instructions before use. Wear protective gloves/protective clothing/eye protection/face protection. Do not eat, drink or smoke when handling this product. IF SWALLOWED: Immediately call a POISON Center or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Section 3. Composition/Information on Ingredients

Reagent 2 is dissolved in the component listed below.

Component:	CAS#:	EC#:	% by weight:
Imidazole	288-32-4	206-019-2	<0.4%

Section 4. First Aid Measures

Inhalation: Remove to fresh air. Obtain medical attention.
Skin contact: Wash exposed area with soap and plenty of water. Remove contaminated clothing. Obtain medical attention.
Eye Contact: Wash eyes with plenty of water for at least 15 minutes. Have victim remove contact lenses. Be sure to wash

under eyelids. Obtain medical attention.
Ingestion: Do not induce vomiting. If person is conscious, wash out mouth with water. Obtain medical attention.

Section 5. Fire Fighting Measures

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special protective equipment: Use respirator and protective clothing to prevent contact with eyes and skin. Toxic gases can be evolved.

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. Do not let product enter drains.

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: Store in a refrigerator.

Section 8. Exposure Controls/Personal Protection

Exposure limits: Occupational exposure limit values have not been established.
Engineering controls: No special controls needed.
Personal protection:

Hand protection - Compatible chemical-resistant gloves.
Eye protection – Wear chemical safety goggles and face shield when eye and face contact is possible due to splashing or spraying of material.
Skin protection - Lab coat with sleeves.
Respiratory Protection – Exceeding exposure limits is unlikely during normal usage. However, if irritating vapors are produced, respiratory protection is recommended. Attempt to reduce exposure levels to an acceptable range.
General Hygiene Measures – Avoid contact with eyes, skin and clothing. Wash hands thoroughly after handling and before eating or drinking.

Section 9. Physical and Chemical Properties

Appearance: Clear liquid.
Odor: Not determined.
pH: >7
Boiling point: Not determined.
Melting point: Not determined.
Flash Point: Not determined.
Autoflammability: Not determined.
Vapor pressure: Not determined.
Relative density: Not determined.
Solubility: Soluble.

Section 10. Stability and Reactivity

Chemical stability: Stable under recommended storage conditions.
Conditions to avoid: None identified.
Materials to avoid: Strong oxidizers, acid chlorides, acid, alkali metals, and phosphorous halides.

Hazardous reactions/decomposition products: Carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen cyanide, ammonia.

Section 11. Toxicological Information

Information on toxicological effects:

Acute toxicity: No data available.
Skin irritation: No data available
Skin and respiratory sensitzation: No data available
Serious eye damage/eye irritation: No data available.
Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible, potential , know, anticipated, or confirmed carcinogen by IARC, ACGIH, NTP, or OSHA.
Mutagenicity: No data available.
Reproductive Toxicity: No data available.
Developmental effects: No data available.
Target organ effects: No data available.

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

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 regulated.
RID/ADR: Not regulated.
IMDG: Not regulated.
IATA: Not regulated.

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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