

Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Product name: CycLex NAD+/NADH Colorimetric Assay Kit Ver.2

Product code: CY-1253V2

Components: ADH, Diaphorase

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

Relevant identified uses of the product: Research Use Only

1.3 Details of the supplier of the safety data sheet

Manufacturer and Supplier (Asia): Medical & Biological Laboratories (MBL) Co., Ltd.

Address: 1018-1 Terasawaoka, Ina, Nagano 396-0002, Japan

Division: SDS Support

Telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST)

e-mail address: sds-support@mbl.co.jp

Supplier: MBL International Corporation.

Address: 15A Constitution Way, Woburn, MA 01801, USA

Telephone number: +1-800-200-5459, option 3.

e-mail address: tech@mblintl.com

Contact person: Technical Service

Emergency telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST)

2. Hazards identification

GHS classification and label elements of the product

2.1 Classification of the substance or mixture

Classification according to Hazard Communication Standard -2012 (29 CFR 1910.1200)

Not classified/Classification not possible

2.2 Label elements

Labelling according to Hazard Communication Standard -2012 (29 CFR 1910.1200)

No GHS label element

No Signal word

3. Composition/information on ingredients

Mixture/Substance selection:

3.2 Mixture

Ingredient name	CAS No.	Content (%)	ECNO	HAZCODE_EU
Glycerin	56-81-5	50-60	200-289-5	-

4. First-aid measures

4.1 Descriptions of first-aid measures

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN (or hair)

Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice/attention.

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.

IF SWALLOWED

Rinse mouth.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

5.2 Specific hazards arising from the substance or mixture

Specific hazards arising from the substance or mixture is not available.

5.3 Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

6. Accidental release measures

6.1 Personnel precautions, protective equipment and emergency procedures

Wear proper protective equipment.

6.2 Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

6.4 Reference to other sections

Refer to section 13

7. Handling and storage

7.1 Precautions for safe handling

Preventive measures

(Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

Safety measures data is not available.

Any incompatibilities data is not available.

Advice on general occupational hygiene

Do not get in eyes, on skin, or on clothing.

Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

7.2 Storage

Conditions for safe storage

Keep container tightly closed.

Keep cool. Protect from sunlight.

Container and packaging materials for safe handling data is not available.

7.3 Specific end use(s)

Research use only.

8. Exposure controls/personal protection

8.1 Control parameters

Adopted value

Adopted value in ACGIH is not available.

OSHA-PEL

(Glycerin)

TWA: 15mg/m³ (Total dust)

TWA: 5mg/m³ (Respirable fraction)

NIOSH-REL

(Glycerin)

See Appendix D

8.2 Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Washing facilities should be available.

Individual protection measures

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

Skin and body protection

Wear protective clothing.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical state: Liquid

Color: Colorless

Odor data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH: Neutral

Kinematic viscosity data is not available.

Solubility:

Water solubility: miscible

Solubility in solvent data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density data is not available.

Oxidising properties data is not available.

No Particle characteristics data is not available.

9.2 Other information

Other information is not available.

10. Stability and Reactivity

10.1 Reactivity

Reactivity data is not available.

10.2 Chemical stability

Stable under normal storage/handling conditions.

10.3 Possibility of hazardous reactions

Possibility of hazardous reactions data is not available.

10.4 Conditions to avoid

Conditions to avoid data is not available.

10.5 Incompatible materials

Incompatible materials data is not available.

10.6 Hazardous decomposition products

Hazardous decomposition products data is not available.

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity data is not available.

Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation data is not available.

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Teratogenic effects data is not available.

Reproductive toxicity data is not available.

STOT

STOT–single exposure data is not available.

STOT–repeated exposure data is not available.

Aspiration hazard data is not available.

12. Ecological Information

12.1 Ecotoxicity

Ecotoxicity data is not available.

Water solubility

(Glycerin)

miscible (ICSC, 2006)

12.2 Persistence and degradability

Persistence and degradability data is not available.

12.3 Bioaccumulative potential

(Glycerin)

log Pow=-1.76 (ICSC, 2006)

12.4 Mobility in soil

Mobility in soil data is not available.

12.7 Other adverse effects

Ozone depleting chemical data is not available.

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

13.1 Waste treatment methods

Dispose of contents/container in accordance with local/national regulation.

Contaminated packing

Dispose of container after using the contents completely.

14. Transport Information

UN No., UN CLASS

14.1 UN No. or ID No.: Not applicable

14.2 UN Proper Shipping Name: Not applicable

14.3 Class or division (Transport hazard class): Not applicable

14.4 Packing group: Not applicable

Not applicable to IMDG Code

Not applicable to IATA Dangerous Goods Regulations

14.5 Environmental hazards

MARPOL Annex III – Prevention of pollution by harmful substances

Marine pollutants (yes/no): no

14.6 Special precautions for user

Special precautions for user is not applicable.

15. Regulatory Information

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

Chemicals listed in TSCA Inventory

Glycerin

Other regulatory information

California Proposition 65 – Carcinogens & Reproductive Toxicity (CRT)

Not listed.

REACH 1907/2006 EC –Annex XIV– list of substance subject to authorization.

Not ingredients listed.

15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

16. Other information

The products is not applicable to GHS classifications.

Reference Book

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 21th edit., 2019 UN

IMDG Code, 2018 Edition (Incorporating Amendment 39–18)

IATA Dangerous Goods Regulations (62nd Edition) 2021

2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2020 TLVs and BEIs. (ACGIH)

Supplier's data/information

Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Revision information

Issue date: 07/05/2017

Most modern edition: 08/17/2021

General Disclaimer

This information is provided without warranty. The information is believed to be correct.

This information should be used to make an independent determination of the methods to safeguard workers and the environment.

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Product name: CycLex NAD⁺/NADH Colorimetric Assay Kit Ver.2

Product code: CY-1253V2

Components: EtOH Solution

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

Relevant identified uses of the product: Research Use Only

1.3 Details of the supplier of the safety data sheet

Manufacturer and Supplier (Asia): Medical & Biological Laboratories (MBL) Co., Ltd.

Address: 1018-1 Terasawaoka, Ina, Nagano 396-0002, Japan

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2. Hazards identification

GHS classification and label elements of the product

2.1 Classification of the substance or mixture

Classification according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

PHYSICAL AND CHEMICAL HAZARDS

Flammable liquids: Category 2

HEALTH HAZARDS

Carcinogenicity: Category 1

Reproductive toxicity: Category 1

Specific target organ toxicity – single exposure: Category 3 (Respiratory tract irritation)

Specific target organ toxicity – single exposure: Category 3 (Narcosis)

Specific target organ toxicity – repeated exposure: Category 1 (Liver)

2.2 Label elements

Labelling according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)



Signal word: Danger

HAZARD STATEMENT

H225 Highly flammable liquid and vapor

H350 May cause cancer

H360 May damage fertility or the unborn child

H335 May cause respiratory irritation

H336 May cause drowsiness or dizziness

H372 Causes damage to organs through prolonged or repeated exposure (Liver)

PRECAUTIONARY STATEMENT

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.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P271 Use only outdoors or in a well-ventilated area.
- P264 Wash contaminated parts thoroughly after handling.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P280 Use personal protective equipment as required.
- P270 Do not eat, drink or smoke when using this product.

Response

- P370 + P378 In case of fire: Use appropriate media other than water for extinction.
- P314 Get medical advice/attention if you feel unwell.
- P308 + P313 IF exposed or concerned: Get medical advice/attention.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Storage

- P403 Store in a well-ventilated place. P233 Keep container tightly closed. P235 Keep cool.

Disposal

- P501 Dispose of contents/container in accordance with local/national regulation.

Specific Physical and Chemical hazards

- Highly flammable liquid. Vapor/air mixture may explode.

3. Composition/information on ingredients

Mixture/Substance selection:

3.2 Mixture

Ingredient name	CAS No.	Content (%)	ECNO	HAZCODE_EU
Ethyl alcohol	64-17-5	20-30	200-578-6	Flam. Liq. 2, H225

4. First-aid measures

4.1 Descriptions of first-aid measures

General measures

- Get medical attention/advice if you feel unwell.

IF INHALED

- Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN (or hair)

- Take off immediately all contaminated clothing. Rinse skin with water/shower.

- Wash with plenty of soap and water.

- If skin irritation occurs: Get medical advice/attention.

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.

IF SWALLOWED

- Rinse mouth.

4.2 Most important symptoms and effects, both acute and delayed

(Symptoms when skin and/or eye contact)

Dry skin

Eye irritation

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

5.3 Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

6. Accidental release measures

6.1 Personnel precautions, protective equipment and emergency procedures

Wear proper protective equipment.

6.2 Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

6.4 Reference to other sections

Refer to section 8

7. Handling and storage

7.1 Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Do not breathe dust/fume/gas/mist/vapors/spray.

(Protective measures against fire and explosion)

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

(Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

Safety Measures

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Use personal protective equipment as required.

Any incompatibilities data is not available.

Advice on general occupational hygiene

Do not get in eyes, on skin, or on clothing.

Wash contaminated parts thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

7.2 Storage

Conditions for safe storage

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

Container and packaging materials for safe handling data is not available.

7.3 Specific end use(s)

Research use only.

8. Exposure controls/personal protection

8.1 Control parameters

Adopted value

(Ethyl alcohol)

ACGIH (2008) STEL: 1000ppm (URT irr)

OSHA-PEL

(Ethyl alcohol)

TWA: 1000ppm, 1900mg/m³

NIOSH-REL

(Ethyl alcohol)

TWA: 1000ppm

8.2 Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Washing facilities should be available.

Individual protection measures

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

Skin and body protection

Wear protective clothing.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical state: Liquid

Color: Colorless

Odor data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point: 78.5°C

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point: (Tag closed cup method)13°C

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH: Neutral

Kinematic viscosity data is not available.

Solubility:

Solubility in water data is not available.

Solubility in solvent data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density data is not available.

No Particle characteristics data is not available.

10. Stability and Reactivity

10.1 Reactivity

Reactivity data is not available.

10.2 Chemical stability

Stable under normal storage/handling conditions.

10.3 Possibility of hazardous reactions

Vapors may catch fire and explode.

10.4 Conditions to avoid

Conditions to avoid data is not available.

10.5 Incompatible materials

Incompatible materials data is not available.

10.6 Hazardous decomposition products

Hazardous decomposition products data is not available.

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity data is not available.

Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation data is not available.

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenicity

(Ethyl alcohol)

IARC-Gr.1: Carcinogenic to humans

(Ethyl alcohol)

ACGIH-A3(2008): Confirmed Animal Carcinogen with Unknown Relevance to Humans

Teratogenic effects data is not available.

Reproductive toxicity data is not available.

STOT

STOT-single exposure data is not available.

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

12. Ecological Information

12.1 Ecotoxicity

Ecotoxicity data is not available.

Water solubility

(Ethyl alcohol)

miscible (ICSC, 2000)

12.2 Persistence and degradability

(Ethyl alcohol)

Degrade rapidly (BOD_Degradation : 89% (Registered chemicals data check & review, 1993))

12.3 Bioaccumulative potential

(Ethyl alcohol)

log Pow=-0.32 (ICSC, 2000)

12.4 Mobility in soil

Mobility in soil data is not available.

12.7 Other adverse effects

Ozone depleting chemical data is not available.

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

13.1 Waste treatment methods

Dispose of contents/container in accordance with local/national regulation.

Contaminated packing

Dispose of container after using the contents completely.

14. Transport Information**UN No., UN CLASS**

14.1 UN No. or ID No.: 1170

14.2 UN Proper Shipping Name:

ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3 Class or division (Transport hazard class) : 3

14.4 Packing group: II

ERG GUIDE No.: 127

Special provisions No.: 144

IMDG Code (International Maritime Dangerous Goods Regulations)

14.1 UN No.: 1170

14.2 Proper Shipping Name:

ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3 Class or division: 3

14.4 Packing group: II

Special provisions No.: 144

IATA Dangerous Goods Regulations

14.1 UN No.: 1170

14.2 Proper Shipping Name:

ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3 Class or division: 3

Hazard labels: Flamm.liquid

14.4 Packing group: II

Passenger and cargo aircraft_Excepted quantity code: E2

Passenger and cargo aircraft_(Ltd Qty) Packing instructions : Y341

Passenger and cargo aircraft_(Ltd Qty) Max Net Qty/Pkg : 1L

Passenger and cargo aircraft_Packing instruction: 353

Passenger and cargo aircraft_Max Net Qty/Pkg: 5L

Cargo aircraft only_Packing instruction: 364

Cargo aircraft only_Max Net Qty/Pkg: 60L

Special provisions No.: A3; A58; A180

ERG code: 3L

14.5 Environmental hazards

MARPOL Annex III – Prevention of pollution by harmful substances

Marine pollutants (yes/no) : no

14.6 Special precautions for user

Special precautions for user is not applicable.

15. Regulatory Information

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

Chemicals listed in TSCA Inventory

Ethyl alcohol

Other regulatory information

US regulations

This product is hazardous according to OSHA 29CFR 1910.1200

Medical & Biological Laboratories (MBL) Co., Ltd.

California Proposition 65 – Carcinogens & Reproductive Toxicity (CRT): Not listed.

EU Regulations

REACH 1907/2006 EC –Annex XIV– list of substance subject to authorization.

Not ingredients listed.

15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

16. Other information

GHS classification and labelling

Flam. Liq. 2: H225 Highly flammable liquid and vapor

Carc. 1: H350 May cause cancer

Repr. 1: H360 May damage fertility or the unborn child

STOT SE 3: H335 May cause respiratory irritation

STOT SE 3: H336 May cause drowsiness or dizziness

STOT RE 1: H372 Causes damage to organs through prolonged or repeated exposure

Reference Book

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 21th edit., 2019 UN

IMDG Code, 2018 Edition (Incorporating Amendment 39–18)

IATA Dangerous Goods Regulations (62nd Edition) 2021

EU REGULATION (EC) No. 1272/2008 (CLP), amended by COMMISSION REGULATION (EU) 2019/521

2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2020 TLVs and BEIs. (ACGIH)

Supplier's data/information

Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Revision information

Issue date: 07/05/2017

Most modern edition: 08/17/2021

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Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Product name: CycLex NAD⁺/NADH Colorimetric Assay Kit Ver.2

Product code: CY-1253V2

Components: 400 µM NADH

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

Relevant identified uses of the product: Research Use Only

1.3 Details of the supplier of the safety data sheet

Manufacturer and Supplier (Asia): Medical & Biological Laboratories (MBL) Co., Ltd.

Address: 1018-1 Terasawaoka, Ina, Nagano 396-0002, Japan

Division: SDS Support

Telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST)

e-mail address: sds-support@mbl.co.jp

Supplier: MBL International Corporation.

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e-mail address: tech@mblintl.com/

Contact person: Technical Service

Emergency telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST)

2. Hazards identification

GHS classification and label elements of the product

2.1 Classification of the substance or mixture

Classification according to Hazard Communication Standard-2012 (29 CFR 1910.1200)

PHYSICAL AND CHEMICAL HAZARDS

Flammable liquids: Category 4

2.2 Label elements

Labelling according to Hazard Communication Standard-2012 (29 CFR 1910.1200)

No GHS label element

Signal word: Warning

HAZARD STATEMENT

H227 Combustible liquid

PRECAUTIONARY STATEMENT

Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P370 + P378 In case of fire: Use appropriate media other than water for extinction.

Storage

P403 Store in a well-ventilated place. P235 Keep cool.

Disposal

P501 Dispose of contents/container in accordance with local/national regulation.

Specific Physical and Chemical hazards

Heating may cause fire.

3. Composition/information on ingredients

Mixture/Substance selection:

3.2 Mixture

Ingredient name	CAS No.	Content (%)	ECNO	HAZCODE_EU
Dimethyl sulfoxide	67-68-5	90=<-<100	200-664-3	-

4. First-aid measures

4.1 Descriptions of first-aid measures

General measures

Get medical attention/advice if you feel unwell.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN (or hair)

Gently wash with plenty of soap and water.

Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice/attention.

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.

IF SWALLOWED

Rinse mouth.

4.2 Most important symptoms and effects, both acute and delayed

(Symptoms when skin and/or eye contact)

Irritation

Eye irritation

4.3 Indication of any immediate medical attention and special treatment needed

Specific treatment (see ... on this label)(... reference to supplemental first aid instruction)(may include a cleansing agent specified by the manufacturer/supplier or the competent authority).

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

5.2 Specific hazards arising from the substance or mixture

Specific hazards arising from the substance or mixture is not available.

5.3 Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

6. Accidental release measures

6.1 Personnel precautions, protective equipment and emergency procedures

Wear proper protective equipment.

6.2 Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste

container.

6.4 Reference to other sections

Refer to section 8

7. Handling and storage

7.1 Precautions for safe handling

Preventive measures

(Protective measures against fire and explosion)

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

(Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

Safety Measures

Wear protective gloves/protective clothing/eye protection/face protection.

Any incompatibilities data is not available.

Advice on general occupational hygiene

Wash hands thoroughly after handling.

7.2 Storage

Conditions for safe storage

Store in a well-ventilated place.

(Incompatible storage condition)

Protect from sunlight.

Container and packaging materials for safe handling data is not available.

7.3 Specific end use(s)

Research use only.

8. Exposure controls/personal protection

8.1 Control parameters

Adopted value

Adopted value in ACGIH is not available.

8.2 Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Individual protection measures

Eye protection

Wear eye/face protection.

Skin and body protection

Wear protective clothing.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical state: Liquid

Color: Colorless

Odor data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point: (Tag closed cup method)(87°C)

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH: Neutral

Kinematic viscosity data is not available.

Solubility:

Solubility in water data is not available.

Solubility in solvent data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density data is not available.

No Particle characteristics data is not available.

10. Stability and Reactivity

10.1 Reactivity

Reactivity data is not available.

10.2 Chemical stability

Stable under normal storage/handling conditions.

10.3 Possibility of hazardous reactions

Possibility of hazardous reactions data is not available.

10.4 Conditions to avoid

Conditions to avoid data is not available.

10.5 Incompatible materials

Incompatible materials data is not available.

10.6 Hazardous decomposition products

Hazardous decomposition products data is not available.

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[Company proprietary data]

Rat LD50: 14,500mg/kg (HSDB(Access on September 2019))

Rat LD50: >20,000mg/kg (SIDS(2008))

Acute toxicity (Dermal)

[Company proprietary data]

Rat LD50: 40,000mg/kg(DFGOT vol.3(1992))

Rat LD50:>40,000mg/kg (SIDS(2008))

Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation data is not available.

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Teratogenic effects data is not available.

Reproductive toxicity data is not available.

STOT

STOT-single exposure data is not available.

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

12. Ecological Information

12.1 Ecotoxicity

Ecotoxicity data is not available.

Water solubility

(Dimethyl sulfoxide)

miscible (ICSC, 2000)

12.2 Persistence and degradability

Persistence and degradability data is not available.

12.3 Bioaccumulative potential

(Dimethyl sulfoxide)

log Pow=-1.35 (calculated) (ICSC, 2000)

12.4 Mobility in soil

Mobility in soil data is not available.

12.7 Other adverse effects

Ozone depleting chemical data is not available.

Additional data

Data on the preparation itself is not available.

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

13.1 Waste treatment methods

Dispose of contents/container in accordance with local/national regulation.

Contaminated packing

Dispose of container after using the contents completely.

14. Transport Information

UN No., UN CLASS

14.1 UN No. or ID No.: Not applicable

14.2 UN Proper Shipping Name: Not applicable

14.3 Class or division (Transport hazard class): Not applicable

14.4 Packing group: Not applicable

Not applicable to IMDG Code

Not applicable to IATA Dangerous Goods Regulations

14.5 Environmental hazards

MARPOL Annex III – Prevention of pollution by harmful substances

Marine pollutants (yes/no) : no

14.6 Special precautions for user

Special precautions for user is not applicable.

15. Regulatory Information

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

Chemicals listed in TSCA Inventory

Dimethyl sulfoxide

Other regulatory information

US regulations

This product is not hazardous according to OSHA 29CFR 1910.1200

California Proposition 65 – Carcinogens & Reproductive Toxicity (CRT): Not listed.

EU Regulations

REACH 1907/2006 EC –Annex XIV– list of substance subject to authorization.

Not ingredients listed.

15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

16. Other information

Reference Book

Globally Harmonized System of classification and labelling of chemicals, UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 21th edit., 2019 UN
IMDG Code, 2018 Edition (Incorporating Amendment 39–18)
IATA Dangerous Goods Regulations (62nd Edition) 2021
EU REGULATION (EC) No. 1272/2008 (CLP), amended by COMMISSION REGULATION (EU) 2019/521
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Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Revision information

Issue date: 07/05/2017

Most modern edition: 08/17/2021

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Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Product name: CycLex NAD+/NADH Colorimetric Assay Kit Ver.2
 Product code: CY-1253V2
 Components: NAD+/NADH Assay Buffer (20X), WST-1, 20X Standard Dilution Buffer

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

Relevant identified uses of the product: Research Use Only

1.3 Details of the supplier of the safety data sheet

Manufacturer and Supplier (Asia): Medical & Biological Laboratories (MBL) Co., Ltd.
 Address: 1018-1 Terasawaoka, Ina, Nagano 396-0002, Japan
 Division: SDS Support
 Telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST)
 e-mail address: sds-support@mbl.co.jp
 Supplier: MBL International Corporation.
 Address: 15A Constitution Way, Woburn, MA 01801, USA
 Telephone number: +1-800-200-5459, option 3.
 FAX: +1-781-939-6963
 e-mail address: tech@mblintl.com/
 Contact person: Technical Service
 Emergency telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST)

2. Hazards identification

GHS classification and label elements of the product

2.1 Classification of the substance or mixture

Classification according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)
 Not classified/ Classification not possible.

2.2 Label elements

Labelling according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)
 No GHS label element
 No Signal word

3. Composition/information on ingredients

Mixture/Substance selection:

3.2 Mixture

Ingredient name	CAS No.	Content (%)	ECNO	HAZCODE_EU
Non hazardous substance	-	-	-	-

4. First-aid measures

4.1 Descriptions of first-aid measures

General measures

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

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN (or hair)

Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice/attention.

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.

IF SWALLOWED

Rinse mouth.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

5.2 Specific hazards arising from the substance or mixture

Specific hazards arising from the substance or mixture is not available.

5.3 Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

6. Accidental release measures

6.1 Personnel precautions, protective equipment and emergency procedures

Wear proper protective equipment.

6.2 Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

7. Handling and storage

7.1 Precautions for safe handling

Preventive measures

(Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

Safety measures data is not available.

Any incompatibilities data is not available.

Advice on general occupational hygiene

Do not get in eyes, on skin, or on clothing.

Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

7.2 Storage

Conditions for safe storage

Keep container tightly closed.

Keep cool. Protect from sunlight.

Container and packaging materials for safe handling data is not available.

7.3 Specific end use(s)

Research use only.

8. Exposure controls/personal protection

8.1 Control parameters

Adopted value

Adopted value in ACGIH is not available.

8.2 Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Washing facilities should be available.

Individual protection measures

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

Skin and body protection

Wear protective clothing.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical state: Liquid

Color: Colorless

Odor data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH data is not available.

Kinematic viscosity data is not available.

Solubility:

Solubility in water data is not available.

Solubility in solvent data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density data is not available.

No Particle characteristics data is not available.

10. Stability and Reactivity

10.1 Reactivity

Reactivity data is not available.

10.2 Chemical stability

Stable under normal storage/handling conditions.

10.3 Possibility of hazardous reactions

Possibility of hazardous reactions data is not available.

10.4 Conditions to avoid

Conditions to avoid data is not available.

10.5 Incompatible materials

Incompatible materials data is not available.

10.6 Hazardous decomposition products

Hazardous decomposition products data is not available.

11. Toxicological Information

11.1 Information on toxicological effects

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