

SAFETY DATA SHEET

1st Edition: 23 Jun 2015

3rd Edition: 22 Nov 2017

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

Product name:	DNA Ploidy Easy Analysis Kit
Product model:	FC-220V
Supplier:	Nihon Kohden Corporation
Address:	1-31-4 Nishiochiai, Shinjuku-ku, Tokyo 161-8560, Japan
Telephone number:	+81 3-5996-8041
Fax:	+81 3-5996-8100
Website for contact:	http://www.nihonkohden.com/
Emergency telephone number:	1-800-424-9300; CHEMTREC (US) 613-996-6666; CANUTEC (Canada) +81 3-5996-8022 (Outside US and Canada)
Recommended use and restrictions on use:	Reagent for Nihon Kohden high DNA content measuring flow cytometer

Section 2 – Hazards Identification

The classification has been made based on the safety data sheets of the components listed in Section 3.

GHS classification:

	Item	Classification
Physical hazards	Explosives	Not applicable
	Flammable gases	Not applicable
	Flammable aerosols	Not applicable
	Oxidizing gases	Not applicable
	Gases under pressure	Not applicable
	Flammable liquids	Not applicable
	Flammable solids	Classification not possible
	Self-reactive substances and mixtures	Classification not possible
	Pyrophoric liquids	Not applicable
	Pyrophoric solids	Not classified
	Self-heating substances and mixtures	Classification not possible
	Substances and mixtures which, in contact with water, emit flammable gases	Not applicable
	Oxidizing liquids	Not applicable
	Oxidizing solids	Classification not possible
	Organic peroxides	Not applicable
	Corrosive to metals	Classification not possible
Health hazards	Acute toxicity (oral)	Classification not possible
	Acute toxicity (dermal)	Classification not possible
	Acute toxicity (inhalation: gases)	Not applicable
	Acute toxicity (inhalation: vapors)	Classification not possible
	Acute toxicity (inhalation: dusts)	Classification not possible
	Acute toxicity (inhalation: mists)	Not applicable
	Skin corrosion/irritation	Classification not possible
	Serious eye damage/eye irritation	Classification not possible
	Respiratory sensitization	Classification not possible
	Skin sensitization	Classification not possible
	Germ cell mutagenicity	Classification not possible
	Carcinogenicity	Classification not possible
	Reproductive toxicity	Classification not possible
	Specific target organ toxicity (single exposure)	Classification not possible
	Specific target organ toxicity (repeated exposure)	Classification not possible
Aspiration hazard	Classification not possible	
Environmental hazards	Aquatic toxicity (acute)	Classification not possible
	Aquatic toxicity (chronic)	Classification not possible

GHS label elements:

Pictograms or hazard symbols:	None
Signal word:	None
Hazard statement:	None
Precautionary statement:	None

Section 3 – Composition/Information on Ingredients

Substance/mixture: Mixture

Composition:

Chemical Name	CAS No.	Concentration (%)
Propidium iodide	25535-16-4	< 5%
Triton X-100	9002-93-1	< 50%

The concentration shows the components of the lyophilized reagent by weight.

Section 4 – First Aid Measures

Inhalation:	Move to fresh air. Cover with a blanket to keep warm and get rest. See a physician.
Skin contact:	Remove contaminated clothes and shoes immediately. If the product is on the skin, wash thoroughly with soap and running water or lukewarm water. If the affected area looks abnormal or a strong pain persists, see a physician immediately.
Eye contact:	Immediately flush the eyes with clean water for at least 15 minutes. Rinse well the eyeballs and eyelids. See a physician.
Ingestion:	Gargle with water and see a physician.
Protection for rescuer:	Wear protection such as rubber gloves when giving first-aid treatment.

Section 5 – Fire-fighting Measures

Extinguishing media:	Powder extinguisher, water-soluble liquid foam fire extinguisher, carbon dioxide, sand, atomized water
Specific hazards:	Toxic gases such as carbon monoxide are in the combustion gas. Avoid inhaling smoke during fire-fighting.
Special fire fighting procedures:	Block the fire source. Extinguish the fire from windward. When there is a fire in the surrounding area, immediately move the product containers to a safe place. Do not allow anyone except fire-fighting personnel to enter the area of fire. Cool down the surroundings with water spray to prevent equipment from temperature increase. Take measures not to drain any material which causes environmental harm.
Protection for fire-fighter:	Extinguish the fire from windward. Wear appropriate protection such as gloves, goggles and mask. Use respiratory protectors when needed.

Section 6 – Accidental Release Measures

Personal precautions, handling accidental leakage of the product and wearing protection:

Adequately ventilate indoors until disposal of the leaked product is finished.
Do not allow anyone except for the staff to enter the leakage area. Use ropes to enclose the leakage area.
The leakage area is slippery. Watch your step.
When handling leakage of the product, wear protective gloves, goggles or mask so that you can protect yourself from droplets, dust or gas.
Handle leakage of the product from windward. Evacuate people from leeward.

Environmental precautions:	To prevent environmental harm, do not drain the product into public drainage or waterway. When diluting with a large amount of water, do not drain untreated water into public drainage or waterway.
Collection and neutralization:	When lyophilized product is spilled, vacuum it so that the product does not scatter. Collect the product in an empty container and seal it.
Preventive measures for second disaster	Immediately remove any source of ignition from the surroundings. Prepare extinguishing media. Use equipment which does not spark.

Section 7 – Handling and Storage

Handling:

Technical measures:

Preventive measures for exposure:

Ventilate during handling.
Install a facility to wash eyes and body in case of emergency.
Avoid leaking, overflowing, or scattering the product. Do not vaporize the product.
Do not inhale the vapor of the product.
Close the container tightly after every use.
Wear protective goggles or gloves.
Wash hands and face and gargle after use.
Eat, drink and smoke only in a specified area.
Do not bring contaminated gloves or other protective equipment outside the work area.

Preventive measures for fire or explosion:

Do not use a high temperature object, fire or spark.
Do not let the product contact a strong oxidant.

Other precaution:

Do not handle the product roughly. Do not tattle, drop, drag or give impact to the product container.

Ventilation:

Only handle the product in a place with local ventilation or general ventilation.

Precautions:

Do not let the product contact flame, spark, or a high temperature object. Avoid overheating and generating vapor, aerosol or dust.
Follow general handling precautions for drugs.

Storage:

Technical measures:

Avoid direct sunlight, fire and heat source.
The product is hygroscopic. Store the product in a container with an airtight seal.

Hazardous substances when mixed:

Strong oxidant, strongly reducing agent, strong acid

Storage conditions:

Do not store the product near the above hazardous substances or near a fire source.
Block the sunlight and store the product in a refrigerator at 2 to 10°C (36 to 50°F).

Packing material:

Store the product in a glass bottle with an airtight seal. Avoid direct sunlight.
Prescribed package: PET test tube with rubber stopper, aluminum bag, silica gel

Section 8 – Exposure Controls/Personal Protection

Permissible exposure limit:

OSHA PEL: No information available

ACCGIH TLV(s): No information available

Japan Society for Occupational Health: No information available

Facility:

Use hermetically enclosed equipment or device. Use local ventilation.
Install a facility to wash eyes and body and put up a sign.

Protective equipment:

Respiratory apparatus: Antidust mask

Hands: Impermeable protective gloves

Eyes: Protective goggles

Skin and body: Protective clothing, boots, apron

Hygiene measure:

Check the protective equipment with a check list periodically.

Section 9 – Physical and Chemical Properties

Appearance (physical state, form, color, etc.):

Form:	Powder (pellet)
Color:	Burgundy
Odor:	No data
pH:	No data
Melting point:	No data
Boiling point:	No data
Flash point:	No data
Spontaneous ignition temperature:	No data
Explosive range (maximum, minimum):	No data
Vapor pressure:	No data
Specific gravity:	No data
Solubility:	Dissolves in water

Section 10 – Stability and Reactivity

Stability:	Stable under recommended storage condition. Affected by sunlight. Has hygroscopic nature.
Possibility of dangerous hazardous reactivity:	Dissolves when heated. Generates irritating smoke and odor.
Conditions to avoid:	Contacting with the hazardous substances listed in Section 7 or fire source. Sunlight, heat, humidity
Hazardous degradation products:	Carbon monoxide, carbon dioxide, nitrogen oxide, halide

Section 11 – Toxicological Information

Acute toxicity:	
Subcutaneous-mouse LD ₅₀ :	16 mg/kg
Oral-rat LD ₅₀ :	1,800 mg/kg
Local effect:	Possibility of serious damage to eyes

Section 12 – Ecological Information

Mobility:	By its physicochemical nature, there is a possibility to move into an aquatic or soil environment.
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Section 13 – Disposal Considerations

Waste of the remainder:	Dispose of the product according to your local laws and your facility's guidelines for waste disposal.
Pollution container and wrapping:	Dispose of the product according to your local laws and your facility's guidelines for waste disposal.

Section 14 – Transport Information

International regulations:	Not applicable
Domestic regulations:	Not applicable
Marine pollutant:	Not applicable
Precautions:	Before transport, check that the container is not damaged or corroded and that the product is not leaked. Do not turn over, drop or damage the product containers when loading. Tie down the product containers firmly to prevent load shifting. Avoid direct sunlight.

Section 15 – Regulatory Information

IMO International Maritime Dangerous Goods Code: Not applicable

IATA Dangerous Goods Regulations: Not applicable

Section 16 – Other Information

Reference:

Registry of Toxic Effects of Chemical Substances (2009, CD-ROM)

Chemical Substances Control Act Chemical substance, 7th Edition, The Chemical Daily Co., Ltd

Chemical Encyclopedia, Kyoritsu Shuppan Co., Ltd.

Hazardous Chemicals Desk Reference, N. Irving Sax, Richard J. Lewis, Sr.

14705 Chemical Products, The Chemical Daily Co., Ltd

Statute Book for Chemical Products, The Chemical Daily Co., Ltd

ChemDAT Merck

ACROS Catalogue of MSDS

Sigma-Aldrich Material Safety Data Sheets

Alfa Aesar Material Safety Data Sheets

The Merck Index, 12th Edition

This data sheet is complete and accurate to the best of our knowledge but all information may not be covered. Any product may contain unknown harmful substances. This product must be handled carefully and used under the responsibility of the user, taking appropriate safety measures.