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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Commercial Product Name : MET DNP Probe, RUO

Mat.-No./ Genisys-No. : 06641695001

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

Recommended restrictions : Fo

on use

: For professional users only.

1.3 Details of the supplier of the safety data sheet

Company : Ventana Medical Systems

1910 E. Innovation Park Drive

85755 Tucson AZ

E-mail address

Telephone : 1-800-227-2155 or 520-877-2155

Telefax

Responsible Department

In case of emergencies: : CHEMTREC 1-800-424-9300 (U.S. or

Canada)

1-703-527-3887 (International)

:

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Reproductive toxicity, Category 1B H360D: May damage the unborn child.

Classification (67/548/EEC, 1999/45/EC)

Toxic to Reproduction Category 2 R61: May cause harm to the unborn child.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

Signal word : Danger

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Hazard statements H360D May damage the unborn child.

Precautionary statements : Prevention:

> P201 Obtain special instructions before use. P202 Do not handle until all safety precautions

> > have been read and understood.

P281 Use personal protective equipment as

required.

Response:

P308 + P313 IF exposed or concerned: Get medical

advice/ attention.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an

approved waste disposal plant.

Restricted to professional users.

mixtures

Special labelling of certain : Restricted to professional users.

2.3 Other hazards

No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No.	Classification	Classification	Concentration
	EC-No.	(67/548/EEC)	(REGULATION	[%]
	Registration		(EC) No	
	number		1272/2008)	
formamide	75-12-7 200-842-0	Repr.Cat.2; R61	Repr. 1B; H360D	>= 30 - < 50

For the full text of the R-phrases mentioned in this Section, see Section 16. For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice : Move out of dangerous area.

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Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled : If unconscious place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact : If on skin, rinse well with water.

: Flush eyes with water as a precaution. In case of eye contact

> Remove contact lenses. Protect unharmed eve.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician. Take victim immediately to hospital.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : The first aid procedure should be established in consultation

with the doctor responsible for industrial medicine.

SECTION 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Unsuitable extinguishing

media

: High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

: No information available.

5.3 Advice for firefighters

for firefighters

Special protective equipment : Wear self contained breathing apparatus for fire fighting if

necessary.

Further information : Standard procedure for chemical fires.

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Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

Local authorities should be advised if significant spillages

cannot be contained.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

Treat recovered material as described in the section "Disposal considerations".

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours/dust.

For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Dispose of rinse water in accordance with local and national

regulations.

Advice on protection against

fire and explosion

: Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Further information on

storage conditions

: See label or package insert

7.3 Specific end uses

Specific use(s) : Laboratory chemicals

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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Exposure Guidelines

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Source
formamide	75-12-7	TWA	10 ppm	USA. ACGIH Threshold Limit Values (TLV)
		TWA	10 ppm 15 mg/m3	USA. NIOSH Recommended Exposure Limits
		TWA	20 ppm 30 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
		STEL	30 ppm 45 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000

Eye protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Hand protection

Protective gloves

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. This recommendation is only valid for the product mentioned in the safety data sheet and provided by us and for the application specified by us. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : impervious clothing

> Choose body protection according to the amount and concentration of the dangerous substance at the work place.

: Wash hands before breaks and at the end of workday. Hygiene measures

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance : liquid

pH : 7.4

Melting point/range : no data available
Boiling point/boiling range : no data available
Flash point : not applicable

Flammability (solid, gas) : The product is not flammable.

Lower explosion limit : no data available
Upper explosion limit : no data available
Vapour pressure : no data available

Density : 1.12 g/cm3

Partition coefficient: n-

octanol/water

: no data available

Ignition temperature : no data available
Thermal decomposition : no data available
Viscosity, dynamic : no data available

9.2 Other information

Conductivity : no data available
Oxidising potential : no data available
Surface tension : no data available

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

Hazardous reactions : Further information: No decomposition if stored and applied as

directed.

10.4 Conditions to avoid

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Conditions to avoid : no data available

10.5 Incompatible materials

Materials to avoid : no data available

10.6 Hazardous decomposition products

Hazardous decomposition

products

: no data available

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Product

Acute inhalation toxicity : no data available

Acute dermal toxicity : no data available

Acute toxicity (other routes of : no data available

administration)

Aspiration toxicity : no data available

Components:

formamide:

Acute oral toxicity : LD50 Oral: 5,570 mg/kg, rat

Acute inhalation toxicity : LC50: > 7.3 mg/l, 6 h, rat, vapour

Acute dermal toxicity : LD50 Dermal: 17,000 mg/kg, rabbit

Acute toxicity (other routes of : no data available

administration)

Skin corrosion/irritation : rabbit, Result: No skin irritation

Serious eye damage/eye

irritation

: rabbit, Result: No eye irritation

Respiratory or skin

sensitization

: Result: no data available

Assessment: May damage the unborn child., Presumed Reproductive toxicity

human reproductive toxicant

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STOT - single exposure : Assessment: The substance or mixture is not classified as

specific target organ toxicant, single exposure.

STOT - repeated exposure : Assessment: The substance or mixture is not classified as

specific target organ toxicant, repeated exposure.

Aspiration toxicity : no data available

Further information : no data available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Product:

Toxicity to fish : no data available Toxicity to daphnia and other : no data available

aquatic invertebrates

Toxicity to algae : no data available

Toxicity to bacteria : no data available

Ecotoxicology Assessment

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to

the environment

: no data available

Components:

formamide:

Toxicity to fish : LC50: 3,200 mg/l, Oncorhynchus mykiss (rainbow trout),

OECD Test Guideline 203

: LC100: 5,000 mg/l, Oncorhynchus mykiss (rainbow trout),

OECD Test Guideline 203

: LC0: 2,000 mg/l, Oncorhynchus mykiss (rainbow trout), OECD

Test Guideline 203

aquatic invertebrates

Toxicity to daphnia and other : EC50: > 500 mg/l, 48 h, Daphnia magna (Water flea)

Toxicity to algae : EC50: > 500 mg/l, 72 h, Desmodesmus subspicatus (green

algae)

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Toxicity to bacteria : EC50: > 10,000 mg/l, 17 h, Pseudomonas putida

Ecotoxicology Assessment

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to : no data available

the environment

12.2 Persistence and degradability

Product:

: no data available Biodegradability

Components:

formamide:

: > 70 %, Exposure time: 28 d, OECD Test Guideline 302, Biodegradability

Readily biodegradable, according to appropriate OECD test.

12.3 Bioaccumulative potential

Product:

: no data available Bioaccumulation

Components:

formamide:

Bioaccumulation : no data available

12.4 Mobility in soil

Product:

Mobility : no data available : no data available Distribution among

environmental compartments

Environmental fate and

: no data available

pathways

Physico-chemical : no data available

removability

Components:

formamide:

Mobility : no data available

Distribution among

environmental compartments

: no data available

Environmental fate and : no data available

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pathways

Physico-chemical : no data available

removability

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance is not considered to be persistent,

> bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent nor very bioaccumulating

(vPvB).

Components:

formamide:

: This substance is not considered to be persistent. Assessment

> bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent nor very bioaccumulating

(vPvB).

12.6 Other adverse effects

Product:

Biochemical Oxygen

Demand (BOD)

: no data available

Dissolved organic carbon

(DOC)

: no data available

Chemical Oxygen Demand

(COD)

: no data available

Adsorbed organic bound

halogens (AOX)

: no data available

Components:

formamide:

Biochemical Oxygen

Demand (BOD)

: no data available

Dissolved organic carbon : no data available

(DOC)

Chemical Oxygen Demand

(COD)

: no data available

Adsorbed organic bound : no data available

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halogens (AOX)

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product : Do not contaminate ponds, waterways or ditches with

chemical or used container.

Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product.

Empty containers should be taken to an approved waste

handling site for recycling or disposal. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

DOT

Not dangerous goods

IATA

Not dangerous goods

IMDG

Not dangerous goods

SECTION 15. REGULATORY INFORMATION

TSCA list : Belongs to the group 'OSHA Chemicals in Need of Dermal

Absorption Testing'

(e) Manufacturers and importers of the substances listed below by category must submit a Preliminary Assessment Information Manufacturers Report for each site at which they manufacture or import each substance by the reporting date shown in the table below. The categories are listed in alphabetic order with the chemical substances within each category listed by ascending numerical CAS number.

Listed

(a) List of substances. The following chemical substances are subject to all the provisions of part 716. Manufacturers, importers, and processors of a listed substance are subject to

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the reporting requirements of subpart A for that substance.

OSHA Hazards : Reproductive hazard

WHMIS Classification : D2A Very Toxic Material Causing Other Toxic Effects

Reproductive hazard

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

CERCLA Reportable Quantity

Product : This material does not contain any components with a CERCLA

RQ.

Components : edetic acid 5000 lbs

SARA 302 Reportable Quantity

Product : This material does not contain any components with a SARA 302

RQ.

SARA 311/312 Hazards : Chronic Health Hazard

EPCRA - Emergency Planning and Community Right-to-Know Act

SARA 302 : SARA 302: No chemicals in this material are subject to the

reporting requirements of SARA Title III, Section 302.

SARA 304 : This material does not contain any components with a section

304 EHS RQ.

Clean Air Act

Ozone-Depletion : This product neither contains, nor was manufactured with a

Potential Class I or Class II ODS as defined by the U.S. Clean Air Act

Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

formamide 40.8 %

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Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

US State Regulations

Massachusetts Right To Know

Components : formamide 30 - 60 %

Pennsylvania Right To Know

Components	: formamide	30 - 60 %
	water	10 - 30 %
	Doytrongulfot Notriumcolz	10 20 0/

Dextransulfat, Natriumsalz 10 - 30 % edetic acid 0 - 0.1 %

New Jersey Right To Know

Components	: formamide	30 - 60 %
	water	10 - 30 %
	Dextransulfat, Natriumsalz	10 - 30 %

sodium chloride 1 - 5 %

California Prop 65 Components : This product does not contain any chemicals known to State of

California to cause cancer, birth defects, or any other

reproductive harm.

SECTION 16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R61 May cause harm to the unborn child.

Full text of H-Statements referred to under sections 2 and 3.

H360D May damage the unborn child.

Further information

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

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