



TOP2A DNP Probe, RUO

Version 1.0

Revision Date 04-04-2012

Print Date 04-25-2012

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Commercial Product Name : TOP2A DNP Probe, RUO
Mat.-No./ Genisys-No. : 06621112001

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

Recommended restrictions : For professional users only.
on use

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.

Special labelling of certain mixtures : 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. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
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.
- In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
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

- Special protective equipment for firefighters : 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.

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



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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/cm ³
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 administration) : no data available

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 administration) : no data available

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

Reproductive toxicity : Assessment: May damage the unborn child., Presumed 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 aquatic invertebrates : no data available

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

Toxicity to daphnia and other aquatic invertebrates : 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 the environment : no data available

12.2 Persistence and degradability

Product:

Biodegradability : no data available

Components:

formamide:

Biodegradability : > 70 %, Exposure time: 28 d, OECD Test Guideline 302, Readily biodegradable, according to appropriate OECD test.

12.3 Bioaccumulative potential

Product:

Bioaccumulation : no data available

Components:

formamide:

Bioaccumulation : no data available

12.4 Mobility in soil

Product:

Mobility : no data available

Distribution among environmental compartments : no data available

Environmental fate and pathways : no data available

Physico-chemical removability : no data available

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
removability : no data available

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:

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).

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
(DOC) : no data available

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 Potential : This product neither contains, nor was manufactured with a 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 SOCM I 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 %
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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