

1. Identification

Product Name: Moist Mark Plus™ (ink contained therein)

Item #: MP1000, MP2100

Synonyms: Premium Slide/Cassette Marker

Recommended Use: N/A

Manufacturer:

Cancer Diagnostics, Inc.
4300 Emperor Blvd. #400
Durham, NC 27703
1-877-846-5393

Restrictions on Use: N/A

In Case of Emergency:

Chemtrec 1-800-424-9300 (USA and CANADA)

2. Hazard Identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

Eye Irrit. 2; H319

Skin Irrit. 2; H315

Skin Sens. 1; H317

Classification in accordance with Directive 67/548/EEC or 1999/45/EC

R43

Classification information

Classification and labelling are based on toxicological studies performed on the product (mixture).

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms



GHS07

Signal word

Warning

Hazardous component(s) to be indicated on label:

1,3,5-tris(2-hydroxyethyl)-1,3,5-triazinane

1,2-benzisothiazol-3(2H)-one

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Hazard statements

H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
 P280 Wear protective clothing/eye protection/face protection.
 P501 Dispose of contents/container in accordance with local and national regulations.

2.3 Other hazards

No data available.

3. Composition and Information on Ingredients
3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures
Chemical characterization

Aqueous preparation

Hazardous ingredients

No	Substance name			Additional information	
	CAS / EC / Index / REACH no	Classification 67/548/EEC	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	ethanediol				
	107-21-1 203-473-3 603-027-00-1 -	Xn; R22	Acute Tox. 4*; H302	1.00 - 5.00	%-b.w.
2	propan-2-ol				
	67-63-0 200-661-7 603-117-00-0 -	F; R11 Xi; R36 R67	Eye Irrit. 2; H319 Flam. Liq. 2; H225 STOT SE 3; H336	0.10 - 1.00	%-b.w.
3	1,3,5-tris(2-hydroxyethyl)-1,3,5-triazinane				
	4719-04-4 225-208-0 613-114-00-6 -	Xn; R22 R43	Acute Tox. 4*; H302 Skin Sens. 1; H317	0.10 - 1.00	%-b.w.
4	ammonia, anhydrous				
	7664-41-7 231-635-3 007-001-00-5 -	R10 T; R23 C; R34 N; R50	Acute Tox. 3*; H331 Aquatic Acute 1; H400 Flam. Gas 2; H221 Press. Gas Skin Corr. 1B; H314	0.10 - 1.00	%-b.w.
5	1,2-benzisothiazol-3(2H)-one				
	2634-33-5 220-120-9 613-088-00-6 -	Xn; R22 Xi; R38 Xi; R41 R43 N; R50	Acute Tox. 4*; H302 Aquatic Acute 1; H400 Eye Dam. 1; H318 Skin Irrit. 2; H315 Skin Sens. 1; H317	< 0.50	%-b.w.
6	CARBON BLACK				
	1333-86-4 215-609-9 - -	-	-	10.00 - 20.00	%-b.w.

Full Text for all R-phrases, H-phrases and EUH-phrases: pls. see section 16(*,**,***,****) Detailed explanation pls. refer to CLP regulation No. 1272/2008, annex VI, 1.2

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No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
3	-	Skin Sens. 1; H317: C >= 0.1%	-	-
4	U	-	-	-
5	-	Skin Sens. 1; H317: C >= 0.05%	-	-

Full text for the notes: pls. see section 16 "Notes relating to the identification, classification and labelling of substances ((EC) No 1272/2008, Annex VI)".

3.3 Other information

The data subject of this Material Safety Data sheet refer to the ink contained in this product (marker).

4. First Aid Measures
4.1 Description of first aid measures
General information

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

After inhalation

Ensure supply of fresh air.

After skin contact

Wash off immediately with soap and water.

After eye contact

Remove contact lens. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Seek medical assistance.

After ingestion

Rinse mouth thoroughly with water. Call a doctor immediately. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

5. Fire-Fighting Measures
5.1 Extinguishing media
Suitable extinguishing media

Foam; Carbon dioxide; Extinguishing powder; Water spray jet

Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixture

None known.

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing.

6. Accidental Release Measures
6.1 Personal precautions, protective equipment and emergency procedures
For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Avoid contact with skin, eyes and clothing.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

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6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g., sand, kieselguhr, universal binder). When picked up, treat material as prescribed under heading "Disposal considerations".

6.4 Reference to other sections

No data available.

7. Handling and Storage

7.1 Precautions for safe handling

Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation, if necessary). Observe the usual precautions for handling chemicals.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately. Wash hands before breaks and after work.

Advice on protection against fire and explosion

No special measures necessary.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place.

Requirements for storage rooms and vessels

Store product in closed containers. Protect from heat and direct sunlight.

Advice on storage assembly

None known

7.3 Specific end use(s)

No data available.

8. Exposure Controls/Personal Protection
8.1 Control parameters
Occupational exposure limit values

No	Substance name	CAS no.	EC no.	
1	CARBON BLACK	1333-86-4	215-609-9	
List of approved workplace exposure limits (WELs) / EH40				
Carbon black				
	STEL	7	mg/m ³	
	TWA	3.5	mg/m ³	
2	ethanediol	107-21-1	203-473-3	
2000/39/EWG				
Ethylene glycol				
	STEL	104	mg/m ³	40 ml/m ³
	TWA	52	mg/m ³	20 ml/m ³
	Skin resorption / sensibilisation		Skin	
List of approved workplace exposure limits (WELs) / EH40				
Ethane 1,2-diol				
	particulate			
	TWA	10	mg/m ³	
	Skin resorption / sensibilisation		Sk	
List of approved workplace exposure limits (WELs) / EH40				
Ethane 1,2-diol				
	vapour			
	STEL	104	mg/m ³	
	TWA	52	mg/m ³	
	Skin resorption / sensibilisation		Sk	
3	propan-2-ol	67-63-0	200-661-7	
List of approved workplace exposure limits (WELs) / EH40				
Propan-2-ol				
	STEL	1250	mg/m ³	500 ml/m ³
	TWA	999	mg/m ³	400 ml/m ³
4	ammonia, anhydrous	7664-41-7	231-635-3	
List of approved workplace exposure limits (WELs) / EH40				
Ammonia				
	STEL	25	mg/m ³	35 ml/m ³
	TWA	18	mg/m ³	25 ml/m ³
2000/39/EWG				
Ammonia, anhydrous				
	STEL	36	mg/m ³	50 ml/m ³
	TWA	14	mg/m ³	20 ml/m ³

8.2 Exposure controls
Appropriate engineering controls

No data available.

Personal protective equipment
Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Safety glasses (EN 166)

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Hand protection

In case of intensive contact, wear protective gloves (EN 374). Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other

Normal chemical work clothing.

Environmental exposure controls

No data available.

9. Physical and Chemical Properties Section
9.1 Information on basic physical and chemical properties

Form/Colour	
liquid	
black	
Odour	
No data available	
Odour threshold	
No data available	
pH value	
No data available	
Boiling point / boiling range	
Value	100 °C
Melting point / melting range	
No data available	
Decomposition point / decomposition range	
No data available	
Flash point	
Not applicable	

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Auto-ignition temperature			
No data available			
Oxidising properties			
No data available			
Explosive properties			
No data available			
Flammability (solid, gas)			
No data available			
Lower flammability or explosive limits			
No data available			
Upper flammability or explosive limits			
No data available			
Vapour pressure			
No data available			
Vapour density			
No data available			
Evaporation rate			
No data available			
Relative density			
No data available			
Density			
no data available			
Solubility in water			
Remarks		soluble	
Solubility(ies)			
No data available			
Partition coefficient: n-octanol/water			
No	Substance name	CAS no.	EC no.
1	1,2-benzisothiazol-3(2H)-one	2634-33-5	220-120-9
log Pow		1.3	
Source		Manufacturer	
Viscosity			
No data available			

9.2 Other information

Other information
No data available.

10. Stability and Reactivity
10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

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10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

11. Toxicological Information
11.1 Information on toxicological effects

Acute oral toxicity			
No	Product Name		
1	edding Ink contained in: edding 8404 aerospace marker		
LD50	>	5000	mg/kg
Species	rat		
Source	Manufacturer		
Acute dermal toxicity			
No	Product Name		
1	edding Ink contained in: edding 8404 aerospace marker		
LD50	>	5000	mg/kg
Species	rabbit		
Source	Manufacturer		
Acute inhalational toxicity			
No	Product Name		
1	edding Ink contained in: edding 8404 aerospace marker		
LC50	>	50000	mg/m ³
State of aggregation	Dust/mist		
Species	rat		
Source	Manufacturer		
No	Substance name	CAS no.	EC no.
2	propan-2-ol	67-63-0	200-661-7
LC50		72.6	mg/l
Duration of exposure		4	h
State of aggregation	Vapour		
Species	rat		
Source	Manufacturer		

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Skin corrosion/irritation
No data available
Serious eye damage/irritation
No data available
Respiratory or skin sensitisation
No data available
Germ cell mutagenicity
No data available
Reproduction toxicity
No data available
Carcinogenicity
No data available
STOT-single exposure
No data available
STOT-repeated exposure
No data available
Aspiration hazard
No data available

12. Ecological Information
12.1 Toxicity

Toxicity to fish (acute)			
No	Substance name	CAS no.	EC no.
1	propan-2-ol	67-63-0	200-661-7
LC50		9640	mg/l
Duration of exposure		96	h
Species	Pimephales promelas		
Source	Manufacturer		
2	1,2-benzisothiazol-3(2H)-one	2634-33-5	220-120-9
LC50		2.18	mg/l
Duration of exposure		96	h
Species	Oncorhynchus mykiss		
Method	OECD 203		
Source	Manufacturer		
Toxicity to fish (chronic)			
No data available			
Toxicity to Daphnia (acute)			
No	Substance name	CAS no.	EC no.
1	propan-2-ol	67-63-0	200-661-7
EC50		13299	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Source	Manufacturer		
2	1,2-benzisothiazol-3(2H)-one	2634-33-5	220-120-9
EC50		2.94	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	Manufacturer		

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Toxicity to Daphnia (chronic)	
No data available	

Toxicity to algae (acute)			
No	Substance name	CAS no.	EC no.
1	propan-2-ol	67-63-0	200-661-7
EC50	>	1000	mg/l
Duration of exposure		72	h
Species	Desmodemus subspicatus		
Source	Manufacturer		
2	1,2-benzisothiazol-3(2H)-one	2634-33-5	220-120-9
ErC50		0.11	mg/l
Duration of exposure		72	h
Species	Pseudokirchneriella subcapitata		
Method	OECD 201		
Source	Manufacturer		

Toxicity to algae (chronic)	
No data available	

12.2 Persistence and degradability

Biodegradability			
No	Substance name	CAS no.	EC no.
1	propan-2-ol	67-63-0	200-661-7
Value		95	%
Duration		21	day(s)
Method	OECD 301 E		
Source	Manufacturer		
Evaluation	readily biodegradable		

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water			
No	Substance name	CAS no.	EC no.
1	1,2-benzisothiazol-3(2H)-one	2634-33-5	220-120-9
log Pow		1.3	
Source	Manufacturer		

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

12.7 Other information

Other information
Do not discharge product unmonitored into the environment.

13. Disposal Considerations
13.1 Waste treatment methods
Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

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Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

14. Transport Information

14.1 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG

The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

15. Regulatory Information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES

The product is considered being subject to REACH regulation (EC) 1907/2006 annexe XVII.	No 3
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Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances

Remarks: Annex I, part 1 + 2: not mentioned. With regard to possibly appropriate decomposition products see Chapter 10.

15.2 Chemical safety assessment

For this mixture a chemical safety assessment has not been carried out.

16. Other Information**Sources of key data used to compile the data sheet:**

EC Directive 67/548/EC resp. 1999/45/EC as amended in each case.

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Full text of the R-, H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

R10	Flammable.
R11	Highly flammable.
R22	Harmful if swallowed.
R23	Toxic by inhalation.
R34	Causes burns.
R36	Irritating to eyes.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.
R43	May cause sensitisation by skin contact.
R50	Very toxic to aquatic organisms.
R67	Vapours may cause drowsiness and dizziness.
H221	Flammable gas.
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.

Notes relating to the identification, classification and labelling of substances and mixtures ((EC) No 1272/2008, Annex VI)

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When put on the market gases have to be classified as 'Gases under pressure', in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case.

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1-877-846-5393

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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of SDS