SAFETY DATA SHEET

IMMULITE® 2000 Folic Acid



SDS no.: L2KFO2 6

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Restrictions on use

Product name : IMMULITE® 2000 Folic Acid Product code : L2KFO2/6, 10380911, 10380912

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

Identified uses Folic Acid "A" Reagent Wedge Reagent A Diagnostic agents.

Folic Acid "A" Reagent Wedge Reagent B
Folic Acid "A" Reagent Wedge Reagent C
Folic Acid "D" Reagent Wedge Reagent D
Diagnostic agents.
Folic Acid "D" Reagent Wedge Reagent E
Folic Acid "D" Reagent Wedge Reagent E
Diagnostic agents.
Folic Acid Adjustors
Diagnostic agents.

For professional users only.

Supplier : Siemens Healthcare Diagnostics Limited

Park View, Watchmoor Park, Camberley, Surrey, GU15 3YL United Kingdom

Phone: +44 (0) 345 600 1955

e-mail address of person responsible for this SDS

: dx.msds.healthcare@siemens-healthineers.com

1.4 Emergency telephone number

CHEMTREC: +44 20 3807 3798

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Folic Acid "A" Reagent Wedge Reagent A Mixture

Folic Acid "A" Reagent Wedge Reagent B Mixture Folic Acid "A" Reagent Wedge Reagent C Mixture Folic Acid "D" Reagent Wedge Reagent D Mixture Folic Acid "D" Reagent Wedge Reagent E Mixture Folic Acid Adjustors Mixture

Classification according to UK CLP/GHS

Folic Acid "A" Reagent Wedge Reagent C

Met. Corr. 1, H290 Skin Corr. 1, H314 Eye Dam. 1, H318

Folic Acid "D" Reagent Wedge Reagent D

Repr. 1B, H360FD

Folic Acid Adjustors

Skin Sens. 1, H317

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

SECTION 2: Hazards identification

2.2 Label elements

Hazard statements

Hazard pictograms







Signal word : Folic Acid "A" Reagent Wedge Reagent A No signal word.

Folic Acid "A" Reagent Wedge Reagent B No signal word.

Folic Acid "A" Reagent Wedge Reagent C Danger Folic Acid "D" Reagent Wedge Reagent D Danger Folic Acid "D" Reagent Wedge Reagent E No signal word. Warning

Folic Acid Adjustors

: Folic Acid "A" Reagent Wedge Reagent A No known significant effects or critical

hazards.

Folic Acid "A" Reagent Wedge Reagent B No known significant effects or critical

hazards.

Folic Acid "A" Reagent Wedge Reagent C H290 - May be corrosive to metals.

H314 - Causes severe skin burns and

eve damage.

Folic Acid "D" Reagent Wedge Reagent D H360FD - May damage fertility. May

damage the unborn child.

Folic Acid "D" Reagent Wedge Reagent E No known significant effects or critical

H317 - May cause an allergic skin Folic Acid Adjustors

reaction.

Precautionary statements

Prevention : Folic Acid "A" Reagent Wedge Reagent A Not applicable.

Folic Acid "A" Reagent Wedge Reagent B Not applicable.

Folic Acid "A" Reagent Wedge Reagent C P234 - Keep only in original container.

P264 - Wash hands thoroughly after

handling.

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

Folic Acid "D" Reagent Wedge Reagent D P201 - Obtain special instructions before

P280 - Wear protective gloves, protective clothing and eye or face

protection.

Folic Acid "D" Reagent Wedge Reagent E Not applicable.

Folic Acid Adjustors

P261 - Avoid breathing dust.

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

: Folic Acid "A" Reagent Wedge Reagent A Not applicable. Response

Folic Acid "A" Reagent Wedge Reagent B Not applicable.

Folic Acid "A" Reagent Wedge Reagent C P301 - IF SWALLOWED:

P331 - Do NOT induce vomiting. P303 - IF ON SKIN (or hair): P361 - Take off immediately all

contaminated clothing.

P330 - Rinse mouth.

P353 - Rinse skin with water or shower. P310 - Immediately call a POISON CENTER or doctor/physician.

P305 - IF IN EYES:

P351 - Rinse cautiously with water for

several minutes.

P338 - Remove contact lenses, if present and easy to do. Continue rinsing.

P390 - Absorb spillage to prevent

SECTION 2: Hazards identification

material damage. Folic Acid "D" Reagent Wedge Reagent D P308 + P313 - IF exposed or concerned: Get medical advice/attention. Folic Acid "D" Reagent Wedge Reagent E Not applicable. Folic Acid Adjustors P302 + P352 - IF ON SKIN: Wash with plenty of soap and water. P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention. P362 + P364 - Take off contaminated clothing and wash it before reuse. **Storage** : Folic Acid "A" Reagent Wedge Reagent A Not applicable. Folic Acid "A" Reagent Wedge Reagent B Not applicable. Folic Acid "A" Reagent Wedge Reagent C Not applicable. Folic Acid "D" Reagent Wedge Reagent D Not applicable. Folic Acid "D" Reagent Wedge Reagent E Not applicable. Not applicable. Folic Acid Adjustors **Disposal** : Folic Acid "A" Reagent Wedge Reagent A Not applicable. Folic Acid "A" Reagent Wedge Reagent B Not applicable. Folic Acid "A" Reagent Wedge Reagent C P501 - Dispose of contents and container in accordance with all local, regional, and national regulations. Folic Acid "D" Reagent Wedge Reagent D Not applicable. Folic Acid "D" Reagent Wedge Reagent E Not applicable. Folic Acid Adjustors Not applicable. Supplemental label : Folic Acid "A" Reagent Wedge Reagent A Safety data sheet available on request. elements Folic Acid "A" Reagent Wedge Reagent B Safety data sheet available on request. Folic Acid "A" Reagent Wedge Reagent C Not applicable. Folic Acid "D" Reagent Wedge Reagent D Not applicable. Folic Acid "D" Reagent Wedge Reagent E Not applicable. Not applicable. Folic Acid Adjustors **Annex XVII - Restrictions** : Folic Acid "A" Reagent Wedge Reagent A Not applicable. on the manufacture, Folic Acid "A" Reagent Wedge Reagent B Not applicable. Folic Acid "A" Reagent Wedge Reagent C Not applicable. placing on the market and Folic Acid "D" Reagent Wedge Reagent D Restricted to professional users. use of certain dangerous Folic Acid "D" Reagent Wedge Reagent E Not applicable. substances, mixtures and Folic Acid Adjustors Not applicable. articles 2.3 Other hazards Product meets the criteria : Folic Acid "A" Reagent Wedge Reagent A This mixture does not contain any for PBT or vPvB according substances that are assessed to be a PBT or a vPvB. to Regulation (EC) No. Folic Acid "A" Reagent Wedge Reagent B This mixture does not contain any 1907/2006, Annex XIII substances that are assessed to be a PBT or a vPvB. Folic Acid "A" Reagent Wedge Reagent C This mixture does not contain any substances that are assessed to be a PBT or a vPvB. Folic Acid "D" Reagent Wedge Reagent D This mixture does not contain any substances that are assessed to be a PBT or a vPvB. Folic Acid "D" Reagent Wedge Reagent E This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any Folic Acid Adjustors substances that are assessed to be a PBT or a vPvB.

SECTION 2: Hazards identification

Other hazards which do not result in classification

Folic Acid "A" Reagent Wedge Reagent A None known.
 Folic Acid "A" Reagent Wedge Reagent B None known.
 Folic Acid "A" Reagent Wedge Reagent C None known.
 Folic Acid "D" Reagent Wedge Reagent D None known.
 Folic Acid "D" Reagent Wedge Reagent E None known.
 Folic Acid Adjustors None known.

Additional information

: Potentially biohazardous material.

Sodium azide may react with lead or copper plumbing to form highly explosive metal azides.

SECTION 3: Composition/information on ingredients

3.1 Substances

: Folic Acid "A" Reagent Wedge Reagent A Mixture Folic Acid "A" Reagent Wedge Reagent B Mixture Folic Acid "A" Reagent Wedge Reagent C Mixture Folic Acid "D" Reagent Wedge Reagent D Mixture Folic Acid "D" Reagent Wedge Reagent E Mixture Folic Acid Adjustors Mixture

Product/ingredient name	Identifiers	%	Classification	Type
Folic Acid "A" Reagent Wedge Reagent A				
(R*,R*)-(±)-1,4-dimercaptobutane- 2,3-diol	EC: 248-531-9 CAS: 27565-41-9	<10	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	[1]
Folic Acid "A" Reagent Wedge Reagent B				
dipotassium tetraborate	EC: 215-575-5 CAS: 1332-77-0	≤3	Repr. 2, H361	[1]
Folic Acid "A" Reagent Wedge Reagent C				
sodium hydroxide	EC: 215-185-5 CAS: 1310-73-2 Index: 011-002-00-6	≤10	Skin Corr. 1A, H314 Eye Dam. 1, H318	[1] [2]
salts of hydrogen cyanide	EC: 205-792-3 CAS: 151-50-8 Index: 006-007-00-5	<0.1	Acute Tox. 1, H300 Acute Tox. 1, H310 Acute Tox. 2, H330 Skin Corr. 1, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1) EUH032	[1] [2]
Folic Acid "D" Reagent Wedge Reagent D				
boric acid	EC: 233-139-2 CAS: 10043-35-3 Index: 005-007-00-2	≤3	Repr. 1B, H360FD	[1]
sodium azide	EC: 247-852-1 CAS: 26628-22-8 Index: 011-004-00-7	<0.1	Acute Tox. 2, H300 Acute Tox. 1, H310 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) EUH032	[1] [2]
Folic Acid Adjustors Glycine, N,N'-1,2-ethanediylbis[N-	EC: 205-358-3	<10	•	[1]

SECTION 3: Composition/information on ingredients

(carboxymethyl)-, sodium salt, hydrate (1:2:2)	CAS: 6381-92-6		Acute Tox. 4, H332 Eye Irrit. 2, H319 STOT RE 2, H373 (respiratory tract) (inhalation)	
3(2H)-Isothiazolone, 2-methyl-	EC: 220-239-6 CAS: 2682-20-4	<0.1	Acute Tox. 3, H301 Acute Tox. 3, H301 Acute Tox. 2, H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1) EUH071	[1]
			See Section 16 for the full text of the H statements declared above.	

<u>Type</u>

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

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1	1	Description	n at tiret	aid maasuras

4.1 Description of first aid I	measures	
Eye contact	: Folic Acid "A" Reagent Wedge Reagent A	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Folic Acid "A" Reagent Wedge Reagent B	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Folic Acid "A" Reagent Wedge Reagent C	a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
	Folic Acid "D" Reagent Wedge Reagent D	
	Folic Acid "D" Reagent Wedge Reagent E	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Folic Acid Adjustors	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for

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at least 10 minutes. Get medical

SECTION 4: First aid measures

Inhalation

attention if irritation occurs.

: Folic Acid "A" Reagent Wedge Reagent A Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if

symptoms occur.

Folic Acid "A" Reagent Wedge Reagent B

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Folic Acid "A" Reagent Wedge Reagent C Get medical attention immediately. Call

a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouthto-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Folic Acid "D" Reagent Wedge Reagent D Remove victim to fresh air and keep at

rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouthto-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Folic Acid "D" Reagent Wedge Reagent E Remove victim to fresh air and keep at

rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. rest in a position comfortable for

Folic Acid Adjustors

Remove victim to fresh air and keep at breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouthto-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The

exposed person may need to be kept under medical surveillance for 48 hours.

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SECTION 4: First aid measures

Skin contact : Folic Acid "A" Reagent Wedge Reagent A Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Folic Acid "A" Reagent Wedge Reagent B Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Folic Acid "A" Reagent Wedge Reagent C Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse. Folic Acid "D" Reagent Wedge Reagent D Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse. Folic Acid "D" Reagent Wedge Reagent E Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash with plenty of soap and water. Folic Acid Adjustors Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it. or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse. Ingestion : Folic Acid "A" Reagent Wedge Reagent A Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. If material Folic Acid "A" Reagent Wedge Reagent B has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. Folic Acid "A" Reagent Wedge Reagent C Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if

SECTION 4: First aid measures

the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs. the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Folic Acid "D" Reagent Wedge Reagent D

Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Folic Acid "D" Reagent Wedge Reagent E Wash out mouth with water. If material

has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Folic Acid Adjustors

Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders

: Folic Acid "A" Reagent Wedge Reagent A No action shall be taken involving any

Folic Acid "A" Reagent Wedge Reagent B

Folic Acid "A" Reagent Wedge Reagent C

personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still

SECTION 4: First aid measures

present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be

dangerous to the person providing aid to give mouth-to-mouth resuscitation.
Wash contaminated clothing thoroughly with water before removing it, or wear

gloves.

Folic Acid "D" Reagent Wedge Reagent D

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be

dangerous to the person providing aid to give mouth-to-mouth resuscitation.
Wash contaminated clothing thoroughly with water before removing it, or wear

gloves.

Folic Acid "D" Reagent Wedge Reagent E

Folic Acid Adjustors

No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : Folic Acid "A" Reagent Wedge Reagent A No specific data.

Folic Acid "A" Reagent Wedge Reagent B No specific data.

Folic Acid "A" Reagent Wedge Reagent C Adverse symptoms may include the

following: pain watering redness

Folic Acid "D" Reagent Wedge Reagent D No specific data.
Folic Acid "D" Reagent Wedge Reagent E No specific data.
Folic Acid Adjustors No specific data.

Inhalation: Folic Acid "A" Reagent Wedge Reagent A No specific data.Folic Acid "A" Reagent Wedge Reagent B No specific data.

Folic Acid "A" Reagent Wedge Reagent C No specific data.
Folic Acid "D" Reagent Wedge Reagent D No specific data.
Folic Acid "D" Reagent Wedge Reagent E No specific data.
Folic Acid Adjustors No specific data.

Skin contact : Folic Acid "A" Reagent Wedge Reagent A No specific data.
Folic Acid "A" Reagent Wedge Reagent B No specific data.

Folic Acid "A" Reagent Wedge Reagent C Adverse symptoms may include the

following: pain or irritation

redness

blistering may occur Folic Acid "D" Reagent Wedge Reagent D No specific data. Folic Acid "D" Reagent Wedge Reagent E No specific data.

Folic Acid Adjustors Adverse symptoms may include the

following: irritation redness

SECTION 4: First aid measures

Ingestion

: Folic Acid "A" Reagent Wedge Reagent A No specific data.

Folic Acid "A" Reagent Wedge Reagent B No specific data.

Folic Acid "A" Reagent Wedge Reagent C Adverse symptoms may include the

following: stomach pains

Folic Acid "D" Reagent Wedge Reagent D No specific data.
Folic Acid "D" Reagent Wedge Reagent E No specific data.
Folic Acid Adjustors No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Folic Acid "A" Reagent Wedge Reagent A Treat symptomatically. Contact poison

treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison

Folic Acid "A" Reagent Wedge Reagent B

treatment specialist immediately if large quantities have been ingested or inhaled.

Folic Acid "A" Reagent Wedge Reagent C

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Folic Acid "D" Reagent Wedge Reagent D

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Folic Acid "D" Reagent Wedge Reagent E

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for

48 hours.

Folic Acid Adjustors

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for

48 hours.

Specific treatments : Folic Acid "A" Reagent Wedge Reagent A No specific treatment.

Folic Acid "A" Reagent Wedge Reagent B No specific treatment.
Folic Acid "A" Reagent Wedge Reagent C No specific treatment.
Folic Acid "D" Reagent Wedge Reagent D No specific treatment.
Folic Acid "D" Reagent Wedge Reagent E No specific treatment.
Folic Acid Adjustors No specific treatment.

Folic Acid "A" Reagent Wedge Reagent A Not available. Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors Not available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

: None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

: In a fire or if heated, a pressure increase will occur and the container may burst.

SECTION 5: Firefighting measures

Hazardous combustion products

Decomposition products may include the following materials: carbon dioxide

carbon monoxide nitrogen oxides metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without

suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

6.4 Reference to other sections

: See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product

SECTION 7: Handling and storage

residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values		
Folic Acid "A" Reagent Wedge Reagent C			
sodium hydroxide	EH40/2005 WELs (United Kingdom (UK), 1/2020).		
	STEL: 2 mg/m³ 15 minutes.		
salts of hydrogen cyanide	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed		
	through skin.		
	STEL: 5 mg/m³, (as CN) 15 minutes.		
	TWA: 1 mg/m³, (as CN) 8 hours.		
Folic Acid "D" Reagent Wedge Reagent D			
sodium azide	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed		
	through skin.		
	STEL: 0.3 mg/m³, (as NaN3) 15 minutes.		
	TWA: 0.1 mg/m³, (as NaN3) 8 hours.		

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
Folic Acid "A" Reagent Wedge Reagent B					
dipotassium tetraborate	DNEL	Short term Oral	0.92 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Oral	0.92 mg/ kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	3.9 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	3.9 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	7.8 mg/m ³	Workers	Systemic
	DNEL	Long term	7.8 mg/m³	Workers	Systemic

SECTION 8: Exposure controls/personal protection

		Inhalation			
	DNEL	Short term	13.6 mg/m ³	General	Local
		Inhalation		population	
	DNEL	Long term	13.6 mg/m ³	General	Local
		Inhalation	J	population	
	DNEL	Short term	13.6 mg/m ³		Local
		Inhalation	10.0 1119/111	TT GIRGIG	20001
	DNEL	Long term	13.6 mg/m³	Morkers	Local
	DIVLL	Inhalation	13.0 1119/111	WOIKEIS	Local
	DNIEL		105.6	Camaral	Cuetamia
	DNEL	Long term Dermal	185.6 mg/	General	Systemic
	D. 151		kg bw/day	population	
	DNEL	Long term Dermal	367.7 mg/	Workers	Systemic
			kg bw/day		
Folic Acid "A" Reagent Wedge Reagent C					
	DNE	Long torm	1 m a/m3	General	Local
sodium hydroxide	DNEL	Long term	1 mg/m³		Local
	D. 151	Inhalation	4 / 2	population	
	DNEL	Long term	1 mg/m³	Workers	Local
		Inhalation			
salts of hydrogen cyanide	DNEL	Long term Dermal	0.14 mg/	Workers	Systemic
			kg bw/day		
	DNEL	Long term	0.94 mg/m ³	Workers	Systemic
		Inhalation			
	DNEL	Short term Dermal	4.03 mg/	Workers	Systemic
			kg bw/day		,
	DNEL	Short term	12.5 mg/m ³	Workers	Systemic
	D. 122	Inhalation	12.0 1119/111	WOINGIO	Cyclonno
		IIIIIalation			
Folio Acid "D" Paggant Wades					
Folic Acid "D" Reagent Wedge					
Reagent D					.
boric acid	DNEL	Short term Oral	0.98 mg/	General	Systemic
			kg bw/day	population	
	DNEL	Long term Oral	0.98 mg/	General	Systemic
			kg bw/day	population	
	DNEL	Long term	4.15 mg/m ³	General	Systemic
		Inhalation		population	•
	DNEL	Long term	8.3 mg/m ³	Workers	Systemic
		Inhalation	,	· · · =	'
	DNEL	Long term Dermal	196 mg/kg	General	Systemic
	D. 1LL	Long torm Dormal	bw/day	population	- 30.011110
	DNEL	Long term Dermal	392 mg/kg	Workers	Systemic
	DINCL	Long term Dermal		MOINGIS	Oyaleiiilo
	ראבי	 	bw/day	Camaral	C. mtam-!-
sodium azide	DNEL	Long term Oral	16.7 μg/kg	General	Systemic
		<u> </u>	bw/day	population	.
	DNEL	Long term Dermal	16.7 µg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term	29 μg/m³	General	Systemic
		Inhalation		population	
	DNEL	Long term Dermal	46.7 µg/kg	Workers	Systemic
			bw/day		*
	DNEL	Long term	0.164 mg/	Workers	Systemic
		Inhalation	m ³		-,
Folic Acid Adjustors					
	ראבי	Long torm	0.63	Conoral	Local
Glycine, N,N'-1,2-ethanediylbis[N-	DNEL	Long term	0.6 mg/m ³	General	Local
(carboxymethyl)-, sodium salt,		Inhalation		population	
hydrate (1:2:2)				_	
	DNEL	Short term	1.2 mg/m ³	General	Local
		Inhalation		population	
	DNEL	Long term	1.5 mg/m ³	Workers	Local
	1	Inhalation			
		mmaaaa			
	DNEL	Long term	1.5 mg/m ³	Workers	Systemic
	DNEL		1.5 mg/m³	Workers	Systemic

SECTION 8: Exposure controls/personal protection

	DNEL	Short term	3 mg/m³	Workers	Local
		Inhalation			
	DNEL	Short term	3 mg/m³	Workers	Systemic
		Inhalation			
	DNEL	Long term Oral	25 mg/kg	General	Systemic
			bw/day	population	
3(2H)-Isothiazolone, 2-methyl-	DNEL	Long term	0.021 mg/	General	Local
		Inhalation	m³	population	
	DNEL	Long term	0.021 mg/	Workers	Local
		Inhalation	m³		_
	DNEL	Long term Oral	0.027 mg/	General	Systemic
			kg bw/day	population	
	DNEL	Short term	0.043 mg/	General	Local
		Inhalation	m³	population	
	DNEL	Short term	0.043 mg/	Workers	Local
	DATE:	Inhalation	m³		
	DNEL	Short term Oral	0.053 mg/	General	Systemic
			kg bw/day	population	

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

SECTION 8: Exposure controls/personal protection

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Colour

Odour

Physical state : Folic Acid "A" Reagent Wedge Reagent Liquid.

Folic Acid "A" Reagent Wedge Reagent Liquid.

Folic Acid "A" Reagent Wedge Reagent Liquid.

Folic Acid "D" Reagent Wedge Reagent Liquid.

Folic Acid "D" Reagent Wedge Reagent Liquid.

Folic Acid Adjustors Solid. Folic Acid "A" Reagent Wedge Reagent Colourless.

Folic Acid "A" Reagent Wedge Reagent Colourless.

Folic Acid "A" Reagent Wedge Reagent Colourless.

Folic Acid "D" Reagent Wedge Reagent Colourless.

Folic Acid "D" Reagent Wedge Reagent Colourless.

Colourless.

Folic Acid Adjustors

: Folic Acid "A" Reagent Wedge Reagent Odourless.

Folic Acid "A" Reagent Wedge Reagent Odourless.

Folic Acid "A" Reagent Wedge Reagent Odourless.

Folic Acid "D" Reagent Wedge Reagent Odourless.

Folic Acid "D" Reagent Wedge Reagent Odourless.

Folic Acid Adjustors Bland.

Odour threshold

Melting point/freezing point

Softening point

Sublimation temperature

Initial boiling point and

boiling range

Not relevant/applicable due to nature of the product.

Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product.

Not relevant/applicable due to nature of the product.

: Folic Acid "A" Reagent Wedge Reagent Not available.

Folic Acid "A" Reagent Wedge Reagent Not available.

Folic Acid "A" Reagent Wedge Reagent Not available.

Folic Acid "D" Reagent Wedge Reagent Not available.

Folic Acid "D" Reagent Wedge Reagent Not available.

Folic Acid Adjustors Not available.

SECTION 9: Physical and chemical properties

Flammability (solid, gas)

: Folic Acid "A" Reagent Wedge Reagent Not relevant/applicable due to nature

of the product.

Folic Acid "A" Reagent Wedge Reagent Not relevant/applicable due to nature

of the product.

Folic Acid "A" Reagent Wedge Reagent Not relevant/applicable due to nature

of the product.

Folic Acid "D" Reagent Wedge Reagent Not relevant/applicable due to nature

of the product.

Folic Acid "D" Reagent Wedge Reagent Not relevant/applicable due to nature

of the product.

Folic Acid Adjustors

Not relevant/applicable due to nature

of the product.

Upper/lower flammability or explosive limits

: Folic Acid "A" Reagent Wedge Reagent Not available.

Folic Acid "A" Reagent Wedge Reagent Not available.

Folic Acid "A" Reagent Wedge Reagent Not available.

Folic Acid "D" Reagent Wedge Reagent Not available.

Folic Acid "D" Reagent Wedge Reagent Not available.

Folic Acid Adjustors Not applicable.

Flash point

Folic Acid "A" Reagent Wedge Reagent [Product does not sustain combustion.]

Folic Acid "A" Reagent Wedge Reagent [Product does not sustain combustion.]

Folic Acid "A" Reagent Wedge Reagent [Product does not sustain combustion.]

Folic Acid "D" Reagent Wedge Reagent [Product does not sustain combustion.]

Folic Acid "D" Reagent Wedge Reagent [Product does not sustain combustion.]

Folic Acid Adjustors [Product does not sustain combustion.]

	Closed cup			Open cup		
Ingredient name	°C	°F	Method	°C	°F	Method
Folic Acid "A" Reagent Wedge Reagent A						
(R^*,R^*) -(±)-1,4-dimercaptobutane-2,3-diol	109	228.2				
Folic Acid "D" Reagent Wedge Reagent E						
Oxirane, 2-methyl-, polymer with oxirane	252	485.6				

Auto-ignition temperature

Ingredient name	°C	°F	Method
Folic Acid "A" Reagent Wedge Reagent B			
sodium azide	309	588.2	EU A.16
Folio Acid "D" Doorout Wadaa Boorout D			
Folic Acid "D" Reagent Wedge Reagent D			
sodium azide	309	588.2	EU A.16
Falia Asid IIDII Dagagat Madag Dagagt F			
Folic Acid "D" Reagent Wedge Reagent E			
sodium azide	309	588.2	EU A.16

Decomposition temperature

: Not relevant/applicable due to nature of the product.

Date of issue/Date of revision : 12/13/2022 Date of previous issue Version: 1 16/34 : No previous validation

SECTION 9: Physical and chemical properties

рΗ : Folic Acid "A" Reagent Wedge Reagent Not applicable.

Folic Acid "A" Reagent Wedge Reagent 9.3 to 9.4

Folic Acid "A" Reagent Wedge Reagent 14

Folic Acid "D" Reagent Wedge Reagent 6.45 to 6.55

Folic Acid "D" Reagent Wedge Reagent 7.35 to 7.45

Folic Acid Adjustors Not applicable. : Folic Acid "A" Reagent Wedge Reagent Not available.

Folic Acid "A" Reagent Wedge Reagent Not available.

Folic Acid "A" Reagent Wedge Reagent Not available.

Folic Acid "D" Reagent Wedge Reagent Not available.

Folic Acid "D" Reagent Wedge Reagent Not available.

Folic Acid Adjustors Not applicable.

Solubility(ies)

Not available.

Viscosity

Solubility in water : Not relevant/applicable due to nature of the product. Miscible with water : Not relevant/applicable due to nature of the product. Partition coefficient: n-octanol/: Not relevant/applicable due to nature of the product.

water

Vapour pressure

	V	Vapour Pressure at 20°C			Vapour pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method	
Folic Acid "A" Reagent Wedge Reagent A							
water	23.8	3.2					
Folic Acid "A" Reagent Wedge Reagent B							
water	23.8	3.2					
Folic Acid "A" Reagent Wedge Reagent C							
water	23.8	3.2					
Folic Acid "D" Reagent Wedge Reagent D							
water	23.8	3.2					
Folic Acid "D" Reagent Wedge Reagent E							
water	23.8	3.2					

Evaporation rate : Not relevant/applicable due to nature of the product.

SECTION 9: Physical and chemical properties

Relative density : Folic Acid "A" Reagent Wedge Reagent 1 Folic Acid "A" Reagent Wedge Reagent 1 Folic Acid "A" Reagent Wedge Reagent 1 Folic Acid "D" Reagent Wedge Reagent 1 Folic Acid "D" Reagent Wedge Reagent 1 Folic Acid Adjustors >1 **Density** Folic Acid "A" Reagent Wedge Reagent Not available. Folic Acid "A" Reagent Wedge Reagent Not available. Folic Acid "A" Reagent Wedge Reagent Not available. Folic Acid "D" Reagent Wedge Reagent Not available. Folic Acid "D" Reagent Wedge Reagent Not available. Folic Acid Adjustors Not available. Folic Acid "A" Reagent Wedge Reagent Not available. Vapour density Folic Acid "A" Reagent Wedge Reagent Not available. Folic Acid "A" Reagent Wedge Reagent Not available. Folic Acid "D" Reagent Wedge Reagent Not available. Folic Acid "D" Reagent Wedge Reagent Not available. Folic Acid Adjustors Not applicable. : Folic Acid "A" Reagent Wedge Reagent Not available. **Explosive properties** Folic Acid "A" Reagent Wedge Reagent Not available. Folic Acid "A" Reagent Wedge Reagent Not available. Folic Acid "D" Reagent Wedge Reagent Not available. Folic Acid "D" Reagent Wedge Reagent Not available. Folic Acid Adjustors Not available. Oxidising properties : Folic Acid "A" Reagent Wedge Reagent Not available. Folic Acid "A" Reagent Wedge Reagent Not available. Folic Acid "A" Reagent Wedge Reagent Not available. Folic Acid "D" Reagent Wedge Reagent Not available. Folic Acid "D" Reagent Wedge Reagent Not available. Not available. Folic Acid Adjustors **Particle characteristics**

Median particle size : Not applicable.

9.2 Other information

SECTION 9: Physical and chemical properties

Fire point : Folic Acid "A" Reagent Wedge Reagent Not available.

Α

Folic Acid "A" Reagent Wedge Reagent Not available.

В

Folic Acid "A" Reagent Wedge Reagent Not available.

С

Folic Acid "D" Reagent Wedge Reagent Not available.

D

Folic Acid "D" Reagent Wedge Reagent Not available.

F

Folic Acid Adjustors Not available.

Burning time : Not relevant/applicable due to nature of the product.

Fundamental burning velocity : Not relevant/applicable due to nature of the product.

Burning rate : Not relevant/applicable due to nature of the product.

SADT : Not relevant/applicable due to nature of the product.

SAPT : Not relevant/applicable due to nature of the product.

Heat of reaction : Not relevant/applicable due to nature of the product.

Heat of reaction : Not relevant/applicable due to nature of the product.
 Heat of combustion : Not relevant/applicable due to nature of the product.
 Flow time (ISO 2431) : Not relevant/applicable due to nature of the product.
 Molecular weight : Not relevant/applicable due to nature of the product.

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : No specific data.

10.6 Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Folic Acid "A" Reagent Wedge Reagent C salts of hydrogen cyanide	LD50 Oral	Rat	5 mg/kg	-
Folic Acid "D" Reagent Wedge Reagent D				
sodium azide	LD50 Dermal LD50 Dermal	Rabbit Rat	20 mg/kg 50 mg/kg	-
	LD50 Oral	Rat	27 mg/kg	-

Conclusion/Summary: Folic Acid "A" Reagent Wedge Reagent A Not available.

Folic Acid "A" Reagent Wedge Reagent B Not available.
Folic Acid "A" Reagent Wedge Reagent C Not available.
Folic Acid "D" Reagent Wedge Reagent D Not available.
Folic Acid "D" Reagent Wedge Reagent E Not available.
Folic Acid Adjustors

Folic Acid Adjustors Not available.

SECTION 11: Toxicological information

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent A (R*,R*)-(±)-1,4-dimercaptobutane-2,3-diol	10000 500	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Folic Acid "A" Reagent Wedge Reagent C salts of hydrogen cyanide	5	5	N/A	N/A	0.05
Folic Acid "D" Reagent Wedge Reagent D sodium azide	27	20	N/A	N/A	N/A
Folic Acid Adjustors Folic Acid Adjustors Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt, hydrate (1:2:2) 3(2H)-Isothiazolone, 2-methyl-	7226.1 500 100	N/A N/A 300	N/A N/A N/A	159 11 0.5	N/A N/A N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Folic Acid "A" Reagent					
Wedge Reagent C					
sodium hydroxide	Eyes - Mild irritant	Rabbit	-	400 ug	-
•	Eyes - Severe irritant	Monkey	-	24 hours 1 %	-
	Eyes - Severe irritant	Rabbit	-	1 %	-
	Eyes - Severe irritant	Rabbit	-	0.5 minutes	-
				1 mg	
	Eyes - Severe irritant	Rabbit	-	24 hours 50	-
				ug	
	Skin - Mild irritant	Human	-	24 hours 2 %	-
	Skin - Severe irritant	Rabbit	-	24 hours 500	-
				mg	
Folic Acid "D" Reagent					
Wedge Reagent D					
boric acid	Skin - Mild irritant	Human	-	72 hours 15 mg I	-

Conclusion/Summary

Contraction Cummary		
Skin	: Folic Acid "A" Reagent Wedge Reagent Folic Acid "A" Reagent Wedge Reagent Folic Acid "A" Reagent Wedge Reagent Folic Acid "D" Reagent Wedge Reagent Folic Acid "D" Reagent Wedge Reagent Folic Acid Adjustors	t B Not available. t C Not available. t D Not available.
Eyes	: Folic Acid "A" Reagent Wedge Reagent Folic Acid "A" Reagent Wedge Reagent Folic Acid "A" Reagent Wedge Reagent Folic Acid "D" Reagent Wedge Reagent Folic Acid "D" Reagent Wedge Reagent Folic Acid Adjustors	t B Not available. t C Not available. t D Not available.
Respiratory	: Folic Acid "A" Reagent Wedge Reagent Folic Acid "A" Reagent Wedge Reagent Folic Acid "A" Reagent Wedge Reagent Folic Acid "D" Reagent Wedge Reagent Folic Acid "D" Reagent Wedge Reagent Folic Acid Adjustors	t B Not available. t C Not available. t D Not available.

Sensitisation

SECTION 11: Toxicological information

Conclusion/Summary

Skin : Folic Acid "A" Reagent Wedge Reagent A Not available.

Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors Not available.

Respiratory: Folic Acid "A" Reagent Wedge Reagent A Not available.

Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors

Mutagenicity

Conclusion/Summary: Folic Acid "A" Reagent Wedge Reagent A Not available.

Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors Not available.

Carcinogenicity

Conclusion/Summary : Folic Acid "A" Reagent Wedge Reagent A Not available.

Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors Not available.

Reproductive toxicity

Conclusion/Summary: Folic Acid "A" Reagent Wedge Reagent A Not available.

Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors Not available.

Teratogenicity

Conclusion/Summary: Folic Acid "A" Reagent Wedge Reagent A Not available.

Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Folic Acid "A" Reagent Wedge Reagent A (R*,R*)-(±)-1,4-dimercaptobutane-2,3-diol	Category 3		Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Folic Acid Adjustors Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-, sodium salt, hydrate (1:2:2)	Category 2	inhalation	respiratory tract

Aspiration hazard

Not available.

SECTION 11: Toxicological information

Information on likely routes of exposure

Folic Acid "A" Reagent Wedge Reagent A Not available.
 Folic Acid "A" Reagent Wedge Reagent B Not available.
 Folic Acid "A" Reagent Wedge Reagent C Not available.
 Folic Acid "D" Reagent Wedge Reagent D Not available.
 Folic Acid "D" Reagent Wedge Reagent E Not available.
 Folic Acid Adjustors Not available.

Potential acute health effects

Eye contact

Ingestion

: Folic Acid "A" Reagent Wedge Reagent A No known significant effects or critical

hazards.

Folic Acid "A" Reagent Wedge Reagent B No known significant effects or critical

hazards.

Folic Acid "A" Reagent Wedge Reagent C Causes serious eye damage.

Folic Acid "D" Reagent Wedge Reagent D No known significant effects or critical

hazards.

Folic Acid "D" Reagent Wedge Reagent E No known significant effects or critical

hazards.

Folic Acid Adjustors No known significant effects or critical

hazards.

Inhalation : Folic Acid "A" Reagent Wedge Reagent A No known significant effects or critical

hazards.

Folic Acid "A" Reagent Wedge Reagent B No known significant effects or critical

hazards.

Folic Acid "A" Reagent Wedge Reagent C No known significant effects or critical

hazards.

Folic Acid "D" Reagent Wedge Reagent D No known significant effects or critical

hazards.

Folic Acid "D" Reagent Wedge Reagent E No known significant effects or critical

hazards.

Folic Acid Adjustors No known significant effects or critical

hazards.

Skin contact : Folic Acid "A" Reagent Wedge Reagent A No known significant effects or critical

hazards.

Folic Acid "A" Reagent Wedge Reagent B No known significant effects or critical

hazards.

Folic Acid "A" Reagent Wedge Reagent C Causes severe burns.

Folic Acid "D" Reagent Wedge Reagent D No known significant effects or critical

hazards.

Folic Acid "D" Reagent Wedge Reagent E No known significant effects or critical

hazards.

Folic Acid Adjustors May cause an allergic skin reaction.

: Folic Acid "A" Reagent Wedge Reagent A No known significant effects or critical

hazards.

Folic Acid "A" Reagent Wedge Reagent B No known significant effects or critical

hazards.

Folic Acid "A" Reagent Wedge Reagent C No known significant effects or critical

hazards.

Folic Acid "D" Reagent Wedge Reagent D No known significant effects or critical

hazards.

Folic Acid "D" Reagent Wedge Reagent E No known significant effects or critical

hazards.

Folic Acid Adjustors No known significant effects or critical

hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Folic Acid "A" Reagent Wedge Reagent A No specific data.

Folic Acid "A" Reagent Wedge Reagent C Adverse symptoms may include the

following: pain watering redness

Folic Acid "D" Reagent Wedge Reagent D No specific data.

Folic Acid "A" Reagent Wedge Reagent B No specific data.

SECTION 11: Toxicological information

Folic Acid "D" Reagent Wedge Reagent E No specific data.

Folic Acid Adjustors No specific data.

Inhalation : Folic Acid "A" Reagent Wedge Reagent A No specific data.

> Folic Acid "A" Reagent Wedge Reagent B No specific data. Folic Acid "A" Reagent Wedge Reagent C No specific data. Folic Acid "D" Reagent Wedge Reagent D No specific data. Folic Acid "D" Reagent Wedge Reagent E No specific data. Folic Acid Adjustors No specific data.

Skin contact : Folic Acid "A" Reagent Wedge Reagent A No specific data.

Folic Acid "A" Reagent Wedge Reagent B No specific data.

Folic Acid "A" Reagent Wedge Reagent C Adverse symptoms may include the

following: pain or irritation

redness

blistering may occur Folic Acid "D" Reagent Wedge Reagent D No specific data.

Folic Acid "D" Reagent Wedge Reagent E No specific data.

Folic Acid Adjustors Adverse symptoms may include the

following: irritation redness

Ingestion : Folic Acid "A" Reagent Wedge Reagent A No specific data.

Folic Acid "A" Reagent Wedge Reagent B No specific data.

Folic Acid "A" Reagent Wedge Reagent C Adverse symptoms may include the

following: stomach pains

Folic Acid "D" Reagent Wedge Reagent D No specific data. Folic Acid "D" Reagent Wedge Reagent E No specific data. Folic Acid Adjustors No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate

effects

: Folic Acid "A" Reagent Wedge Reagent A Not available. Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors Not available. : Folic Acid "A" Reagent Wedge Reagent A Not available.

Potential delayed effects

Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors Not available.

Long term exposure

Potential immediate

effects

Folic Acid "A" Reagent Wedge Reagent A Not available. Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors Not available.

: Folic Acid "A" Reagent Wedge Reagent A Not available. Potential delayed effects

Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors Not available.

Potential chronic health effects

Not available.

Date of issue/Date of revision : 12/13/2022 Date of previous issue Version: 1 23/34 : No previous validation

SECTION 11: Toxicological information

GEOTION 11. TOXIC	ological information
Conclusion/Summary	: Folic Acid "A" Reagent Wedge Reagent A Not available. Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors Not available.
General	: Folic Acid "A" Reagent Wedge Reagent A No known significant effects or critical hazards.
	Folic Acid "A" Reagent Wedge Reagent B No known significant effects or critical hazards.
	Folic Acid "A" Reagent Wedge Reagent C No known significant effects or critical hazards.
	Folic Acid "D" Reagent Wedge Reagent D No known significant effects or critical hazards.
	Folic Acid "D" Reagent Wedge Reagent E No known significant effects or critical hazards.
	Folic Acid Adjustors Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: Folic Acid "A" Reagent Wedge Reagent A No known significant effects or critical hazards.
	Folic Acid "A" Reagent Wedge Reagent B No known significant effects or critical hazards.
	Folic Acid "A" Reagent Wedge Reagent C No known significant effects or critical hazards.
	Folic Acid "D" Reagent Wedge Reagent D No known significant effects or critical hazards.
	Folic Acid "D" Reagent Wedge Reagent E No known significant effects or critical hazards.
	Folic Acid Adjustors No known significant effects or critical hazards.
Mutagenicity	: Folic Acid "A" Reagent Wedge Reagent A No known significant effects or critical hazards.
	Folic Acid "A" Reagent Wedge Reagent B No known significant effects or critical hazards.
	Folic Acid "A" Reagent Wedge Reagent C No known significant effects or critical hazards.
	Folic Acid "D" Reagent Wedge Reagent D No known significant effects or critical hazards.
	Folic Acid "D" Reagent Wedge Reagent E No known significant effects or critical hazards.
	Folic Acid Adjustors No known significant effects or critical hazards.
Reproductive toxicity	: Folic Acid "A" Reagent Wedge Reagent A No known significant effects or critical hazards.
	Folic Acid "A" Reagent Wedge Reagent B No known significant effects or critical hazards.
	Folic Acid "A" Reagent Wedge Reagent C No known significant effects or critical hazards.
	Folic Acid "D" Reagent Wedge Reagent D May damage fertility. May damage the unborn child.
	Folic Acid "D" Reagent Wedge Reagent E No known significant effects or critical hazards.
	Folic Acid Adjustors No known significant effects or critical hazards.
Interactive effects	 Folic Acid "A" Reagent Wedge Reagent A Not available. Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid Adjustors Not available. Not available.
<u>Toxicokinetics</u>	

Date of issue/Date of revision

SECTION 11: Toxicological information

Absorption	: Folic Acid "A" Reagent Wedge Reagent A Not available. Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors Not available.
Distribution	: Folic Acid "A" Reagent Wedge Reagent A Not available. Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors Not available.
Metabolism	: Folic Acid "A" Reagent Wedge Reagent A Not available. Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors Not available.
Elimination	: Folic Acid "A" Reagent Wedge Reagent A Not available. Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors Not available.
Other information	: Folic Acid "A" Reagent Wedge Reagent A Not available. Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Folic Acid "A" Reagent Wedge Reagent C			
sodium hydroxide	Acute EC50 40.38 mg/l Fresh water	Crustaceans - Water flea - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 125 ppm Fresh water	Fish - Western mosquitofish - Gambusia affinis - Adult	96 hours
salts of hydrogen cyanide	Acute EC50 0.331 mg/l Fresh water	Algae - Green algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours
	Acute LC50 64.4 μg/l Marine water	Crustaceans - Rock crab - Cancer irroratus - Zoea	48 hours
	Acute LC50 1 μg/l Fresh water	Daphnia - Water flea - Daphnia pulex	48 hours
	Acute LC50 0.03 mg/l Marine water	Fish - Cobia - Rachycentron canadum - Young	96 hours
	Chronic EC10 0.158 mg/l Fresh water	Algae - Green algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours
	Chronic NOEC 0.05 mg/l Fresh water	Fish - Zambezi barbel - Clarias gariepinus - Adult	4 weeks
Folic Acid "D" Reagent Wedge Reagent D			
boric acid	Acute LC50 45.5 mg/l Fresh water	Crustaceans - Water flea - Ceriodaphnia dubia	48 hours
	Acute LC50 133000 μg/l Fresh water	Daphnia - Water flea - Daphnia	48 hours

SECTION 12: Ecological information

	1	1	1
		magna - Neonate	
	Acute LC50 75 mg/l Marine water	Fish - Red sea bream - Pagrus	96 hours
		major	
	Chronic NOEC 6000 µg/l Fresh water	Daphnia - Water flea - Daphnia	21 days
		magna	
	Chronic NOEC 2100 µg/l Fresh water	Fish - Rainbow trout,donaldson	87 days
		trout - Oncorhynchus mykiss	
sodium azide	Acute EC50 9200 µg/l Marine water	Algae - Giant kelp - Macrocystis	96 hours
		pyrifera	
	Acute EC50 6.4 mg/l Fresh water	Crustaceans - Water flea -	48 hours
		Simocephalus serrulatus -	
		Larvae	
	Acute EC50 4.2 mg/l Fresh water	Daphnia - Water flea - Daphnia	48 hours
		pulex - Larvae	
	Acute LC50 0.68 mg/l Fresh water	Fish - Bluegill - Lepomis	96 hours
	_	macrochirus	
	Chronic NOEC 5600 µg/l Marine water	Algae - Giant kelp - Macrocystis	96 hours
		pyrifera	
Folic Acid Adjustors			
3(2H)-Isothiazolone,	Acute EC50 0.18 ppm Fresh water	Daphnia - Water flea - Daphnia	48 hours
2-methyl-		magna	
	Acute LC50 0.07 ppm Fresh water	Fish - Rainbow trout,donaldson	96 hours
		trout - Oncorhynchus mykiss	
	I .		1

Conclusion/Summary

: Folic Acid "A" Reagent Wedge Reagent A Not available. Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors Not available.

12.2 Persistence and degradability

Conclusion/Summary

: Folic Acid "A" Reagent Wedge Reagent A Not available. Folic Acid "A" Reagent Wedge Reagent B Not available. Folic Acid "A" Reagent Wedge Reagent C Not available. Folic Acid "D" Reagent Wedge Reagent D Not available. Folic Acid "D" Reagent Wedge Reagent E Not available. Folic Acid Adjustors Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Folic Acid "D" Reagent Wedge Reagent D			
boric acid	-1.09	-	low

12.4 Mobility in soil

12.4 MODINLY III SON		
Soil/water partition coefficient (Koc)	: Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	Not available. Not available. Not available.
Mobility	: Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	Not available. Not available. Not available.

SECTION 12: Ecological information

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities

with jurisdiction.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

Sodium azide may react with lead or copper plumbing to form highly explosive metal

azides.

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste

packaging should be recycled. Incineration or landfill should only be considered

when recycling is not feasible.

Special precautions This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out.

Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

ADR/RID 4 4 4 1 1 1 1 1

Folic Acid "A" Reagent Wedge Reagent A	Not regulated.
Folic Acid "A" Reagent Wedge Reagent B	Not regulated.
Folic Acid "A" Reagent Wedge Reagent C	UN1824

Folic Acid "D" Reagent Wedge Reagent D Not regulated. Folic Acid "D" Reagent Wedge Reagent E Not regulated. Not regulated.

Folic Acid Adjustors

Folic Acid "A" Reagent Wedge Reagent A

Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Sodium hydroxide solution

Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E

Folic Acid Adjustors

14.3 Transport hazard class(es)

14.2 UN proper

shipping name

Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B

Folic Acid "A" Reagent Wedge Reagent C 8 Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E

Folic Acid Adjustors

14.4 Packing group

Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B

Folic Acid "A" Reagent Wedge Reagent C Ш Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E

Folic Acid Adjustors

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SECTION 14: Transport information

SECTION 14:	i ransport information	
14.5 Environmental hazards	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	No. No. No. No. No.
Additional information	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	- - - - -
<u>ADN</u>		
14.1 UN number	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	Not regulated. Not regulated. UN1824 Not regulated. Not regulated. Not regulated.
14.2 UN proper shipping name	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	- Sodium hydroxide solution - - -
14.3 Transport hazard class(es)	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	- 8 - - -
14.4 Packing group	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	- - II - -
14.5 Environmental hazards	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	No. No. No. No. No. No.
Additional information	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	- - - - -
<u>IMDG</u>		
14.1 UN number	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	Not regulated. Not regulated. UN1824 Not regulated. Not regulated. Not regulated.

SECTION 14: Transport information

3_311311 1111		
14.2 UN proper shipping name	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	- SODIUM HYDROXIDE, SOLUTION - - -
14.3 Transport hazard class(es)	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	- 8 - -
14.4 Packing group	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	- - II - -
14.5 Environmental hazards	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	No. No. No. No. No.
Additional information	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	- - - - -
<u>IATA</u>		
14.1 UN number	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	Not regulated. Not regulated. UN1824 Not regulated. Not regulated. Not regulated.
14.2 UN proper shipping name	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	- SODIUM HYDROXIDE, SOLUTION - - -
14.3 Transport hazard class(es)	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	- 8 - -

SECTION 14: Transport information

14.4 Packing group	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	- - II - -
14.5 Environmental hazards	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	No. No. No. No. No.
Additional information	Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	- - - -

user

14.6 Special precautions for : Folic Acid "A" Reagent Wedge Reagent A Transport within user's premises:

always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Folic Acid "A" Reagent Wedge Reagent B Transport within user's premises:

always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Folic Acid "A" Reagent Wedge Reagent C Transport within user's premises:

always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Folic Acid "D" Reagent Wedge Reagent D Transport within user's premises:

always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Folic Acid "D" Reagent Wedge Reagent E Transport within user's premises:

always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or

spillage.

Folic Acid Adjustors

Transport within user's premises:

always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture UK (GB) /REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Folic Acid "D" Reagent Wedge Reagent D				
Toxic to reproduction	boric acid	Candidate	-	6/18/2010

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

Annex XVII - Restrictions on the manufacture. placing on the market and use of certain dangerous substances,

mixtures and articles

: Folic Acid "A" Reagent Wedge Reagent A Not applicable. Folic Acid "A" Reagent Wedge Reagent B Not applicable. Folic Acid "A" Reagent Wedge Reagent C Not applicable. Folic Acid "D" Reagent Wedge Reagent D Restricted to professional users.

Folic Acid "D" Reagent Wedge Reagent E Not applicable. Folic Acid Adjustors Not applicable.

Seveso Directive

This product is not controlled under the Seveso Directive.

EU regulations

Industrial emissions (integrated pollution prevention and control) -Air

: Folic Acid "A" Reagent Wedge Reagent A Not listed Folic Acid "A" Reagent Wedge Reagent B Not listed Folic Acid "A" Reagent Wedge Reagent C Not listed Folic Acid "D" Reagent Wedge Reagent D Not listed Folic Acid "D" Reagent Wedge Reagent E Not listed Folic Acid Adjustors Not listed

Industrial emissions (integrated pollution prevention and control) -Water

: Folic Acid "A" Reagent Wedge Reagent A Not listed Folic Acid "A" Reagent Wedge Reagent B Not listed Folic Acid "A" Reagent Wedge Reagent C Not listed Folic Acid "D" Reagent Wedge Reagent D Not listed Folic Acid "D" Reagent Wedge Reagent E Not listed Folic Acid Adjustors Not listed

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

: No previous validation Date of issue/Date of revision : 12/13/2022 Date of previous issue Version: 1 31/34

SECTION 15: Regulatory information

15.2 Chemical safety

assessment

: Not applicable.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and

: ATE = Acute Toxicity Estimate

acronyms

GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and

Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019

No. 720 and amendments

DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level

EUH statement = GB CLP-specific Hazard statement

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
Folic Acid "A" Reagent Wedge Reagent C	
Met. Corr. 1, H290	On basis of test data
Skin Corr. 1, H314	On basis of test data
Eye Dam. 1, H318	On basis of test data
Folic Acid "D" Reagent Wedge Reagent D Repr. 1B, H360FD	Calculation method
Folic Acid Adjustors Skin Sens. 1, H317	Calculation method

Full text of abbreviated H statements

Folic Acid "A" Reagent Wedge Reagent A

H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Folic Acid "A" Reagent Wedge Reagent B

H361 Suspected of damaging fertility or the unborn child.

Folic Acid "A" Reagent Wedge Reagent C

H290 May be corrosive to metals.

H300 Fatal if swallowed.
H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

SECTION 16: Other information

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects. EUH032 Contact with acids liberates very toxic gas.

Folic Acid "D" Reagent Wedge Reagent D

H300 Fatal if swallowed. H310 Fatal in contact with skin.

H360FD May damage fertility. May damage the unborn child.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.EUH032 Contact with acids liberates very toxic gas.

Folic Acid Adjustors

H301 Toxic if swallowed.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.

H330 Fatal if inhaled. H332 Harmful if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

EUH071 Corrosive to the respiratory tract.

Full text of classifications

Folic Acid "A" Reagent Wedge Reagent A

Acute Tox. 4 ACUTE TOXICITY - Category 4

Eye Irrit. 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2

Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2

STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

Folic Acid "A" Reagent Wedge Reagent B

Repr. 2 REPRODUCTIVE TOXICITY - Category 2

Folic Acid "A" Reagent Wedge Reagent C

Acute Tox. 1 ACUTE TOXICITY - Category 1
Acute Tox. 2 ACUTE TOXICITY - Category 2

Aquatic Acute 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Eye Dam. 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1

Met. Corr. 1 CORROSIVE TO METALS - Category 1
Skin Corr. 1 SKIN CORROSION/IRRITATION - Category 1
Skin Corr. 1A SKIN CORROSION/IRRITATION - Category 1A

Folic Acid "D" Reagent Wedge Reagent D

Acute Tox. 1 ACUTE TOXICITY - Category 1
Acute Tox. 2 ACUTE TOXICITY - Category 2

Aquatic Acute 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1

SECTION 16: Other information

Aquatic Chronic 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1

Repr. 1B REPRODUCTIVE TOXICITY - Category 1B

Folic Acid Adjustors

Acute Tox. 2 ACUTE TOXICITY - Category 2
Acute Tox. 3 ACUTE TOXICITY - Category 3
Acute Tox. 4 ACUTE TOXICITY - Category 4

Aquatic Acute 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Eye Dam. 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2

Skin Corr. 1B SKIN CORROSION/IRRITATION - Category 1B

Skin Sens. 1 SKIN SENSITISATION - Category 1
Skin Sens. 1A SKIN SENSITISATION - Category 1A

STOT RE 2 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2

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revision

Date of previous issue : No previous validation

Version : 1

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.