

SAFETY DATA SHEET

SIEMENS

Immulite® 2000 Folic Acid

**MSDS
no.**

L2KFO2_6

Section 1. Identification

GHS product identifier	: Immulite® 2000 Folic Acid
Product code	: L2KFO2/6, 10380911, 10380912
Other means of identification	: Folic Acid "A" Reagent Wedge Reagent A L2FOA2-RA Folic Acid "A" Reagent Wedge Reagent B L2FOA2-RB Folic Acid "A" Reagent Wedge Reagent C L2FOA2-RC Folic Acid "D" Reagent Wedge Reagent D L2FOD2-RD Folic Acid "D" Reagent Wedge Reagent E L2FOD2-RE Folic Acid Adjustors LFOL, LFOH
Product type	: Liquid.

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

Not applicable.

Manufactured/supplied	: Siemens Healthcare Diagnostics Inc. 511 Benedict Avenue Tarrytown, NY 10591-5097 USA 1-877-229-3711 (800) 424-9300 (CHEMTREC) (24/365)
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Section 2. Hazards identification

OSHA/HCS status	: Folic Acid "A" Reagent Wedge Reagent A This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Folic Acid "A" Reagent Wedge Reagent B This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Folic Acid "A" Reagent Wedge Reagent C This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Folic Acid "D" Reagent Wedge Reagent D This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Folic Acid "D" Reagent Wedge Reagent E This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Folic Acid Adjustors This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: Folic Acid "A" Reagent Wedge Reagent A Not classified. Folic Acid "A" Reagent Wedge Reagent B Not classified. Folic Acid "A" Reagent Wedge Reagent C SKIN CORROSION/IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 Folic Acid "D" Reagent Wedge Reagent D Not classified. Folic Acid "D" Reagent Wedge Reagent E Not classified. Folic Acid Adjustors Not classified.

GHS label elements

Date of issue/Date of revision	: 7/27/2015.	Date of previous issue	: 6/30/2015.	Version	: 1.03	1/22
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Section 2. Hazards identification

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 | No signal word. |
| | Folic Acid "D" Reagent Wedge Reagent E | No signal word. |
| | Folic Acid Adjustors | No signal word. |

Hazard statements

- | | | |
|---|--|---|
| : | 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 | H314 - Causes severe skin burns and 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. |

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 | P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection. |
| | Folic Acid "D" Reagent Wedge Reagent D | Not applicable. |
| | Folic Acid "D" Reagent Wedge Reagent E | Not applicable. |
| | Folic Acid Adjustors | Not applicable. |

Response

- | | | |
|---|--|--|
| : | 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 | P304 + P340 + P310 - IF INHALED:
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician.
P301 + P310 + P330 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 + P363 + P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician.
P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician. |
| | Folic Acid "D" Reagent Wedge Reagent D | Not applicable. |
| | Folic Acid "D" Reagent Wedge Reagent E | Not applicable. |
| | Folic Acid Adjustors | Not applicable. |

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. |
| | Folic Acid Adjustors | Not applicable. |

Section 2. Hazards identification

Disposal	: Folic Acid "A" Reagent Wedge Reagent A Folic Acid "A" Reagent Wedge Reagent B Folic Acid "A" Reagent Wedge Reagent C	Not applicable. Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, and national regulations.
	Folic Acid "D" Reagent Wedge Reagent D Folic Acid "D" Reagent Wedge Reagent E Folic Acid Adjustors	Not applicable. Not applicable. Not applicable.
Supplemental label elements	: 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	None known. None known. None known. None known. None known. None known.
Hazards not otherwise classified	: 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	None known. None known. None known. None known. None known. None known.

Section 3. Composition/information on ingredients

Substance/mixture	: 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	Mixture Mixture Mixture Mixture Mixture Mixture
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Ingredient name	%	CAS number
Folic Acid "A" Reagent Wedge Reagent C sodium hydroxide	9.1	1310-73-2
Folic Acid "D" Reagent Wedge Reagent D boric acid	2	10043-35-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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

Section 4. First aid measures

Description of necessary first aid 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	Get medical attention immediately. Call 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.

Date of issue/Date of revision	: 7/27/2015.	Date of previous issue	: 6/30/2015.	Version	: 1.03	3/22
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Section 4. First aid measures

	Folic Acid "D" Reagent Wedge Reagent D	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 "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. Get medical attention if irritation occurs.
Inhalation	: 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 mouth-to-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. Get medical attention if symptoms occur.
	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.
	Folic Acid Adjustors	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.
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.

Section 4. First aid measures

	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. Get medical attention if symptoms occur.
	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.
	Folic Acid Adjustors	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Folic Acid "A" Reagent Wedge Reagent A	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 "A" Reagent Wedge Reagent B	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 "A" Reagent Wedge Reagent C	Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. 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 victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the

Section 4. First aid measures

Folic Acid "D" Reagent Wedge Reagent E

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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 victim to fresh air and keep at rest in a position comfortable for breathing. 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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye 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 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

May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.

Folic Acid "D" Reagent Wedge Reagent D

No known significant effects or critical hazards.

Folic Acid "D" Reagent Wedge Reagent E

Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Folic Acid Adjustors

Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

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

No known significant effects or critical hazards.

Section 4. First aid measures

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	May cause burns to mouth, throat and stomach.
	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.

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	No specific data.
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.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	: 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	: No specific treatment.
Protection of first-aiders	: 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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : In case of fire, use water spray (fog), foam or dry chemical.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
metal oxide/oxides

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 mode.

Section 6. Accidental release measures

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 spilled material. Avoid breathing vapor 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".

Environmental precautions : Avoid dispersal of spilled 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).

Methods and materials 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 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 spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. 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 residue and can be hazardous. Do not reuse container.

Section 7. Handling and storage

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.

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. 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Folic Acid "A" Reagent Wedge Reagent C sodium hydroxide	ACGIH TLV (United States, 6/2013). C: 2 mg/m ³ NIOSH REL (United States, 10/2013). CEIL: 2 mg/m ³ OSHA PEL (United States, 2/2013). TWA: 2 mg/m ³ 8 hours. OSHA PEL 1989 (United States, 3/1989). CEIL: 2 mg/m ³
Folic Acid "D" Reagent Wedge Reagent D boric acid	ACGIH TLV (United States, 6/2013). STEL: 6 mg/m ³ 15 minutes. Form: Inhalable fraction TWA: 2 mg/m ³ 8 hours. Form: Inhalable fraction

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

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.

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. 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.

Section 8. Exposure controls/personal protection

- 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** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

- Physical state** : Folic Acid "A" Reagent Wedge Reagent A Liquid.
Folic Acid "A" Reagent Wedge Reagent B Liquid.
Folic Acid "A" Reagent Wedge Reagent C Liquid.
Folic Acid "D" Reagent Wedge Reagent D Liquid.
Folic Acid "D" Reagent Wedge Reagent E Liquid.
Folic Acid Adjustors Solid.
- Color** : Folic Acid "A" Reagent Wedge Reagent A Colorless.
Folic Acid "A" Reagent Wedge Reagent B Colorless.
Folic Acid "A" Reagent Wedge Reagent C Colorless.
Folic Acid "D" Reagent Wedge Reagent D Colorless.
Folic Acid "D" Reagent Wedge Reagent E Colorless.
Folic Acid Adjustors Colorless.
- Odor** : Folic Acid "A" Reagent Wedge Reagent A Odorless.
Folic Acid "A" Reagent Wedge Reagent B Odorless.
Folic Acid "A" Reagent Wedge Reagent C Odorless.
Folic Acid "D" Reagent Wedge Reagent D Odorless.
Folic Acid "D" Reagent Wedge Reagent E Odorless.
Folic Acid Adjustors Bland.
- pH** : Folic Acid "A" Reagent Wedge Reagent A Not applicable.
Folic Acid "A" Reagent Wedge Reagent B 9.3 to 9.4
Folic Acid "A" Reagent Wedge Reagent C 14
Folic Acid "D" Reagent Wedge Reagent D 6.45 to 6.55
Folic Acid "D" Reagent Wedge Reagent E 7.35 to 7.45
Folic Acid Adjustors Not applicable.
- Flash point** : 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.
- Flammability (solid, gas)** : 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.
- Relative density** : Folic Acid "A" Reagent Wedge Reagent A 1
Folic Acid "A" Reagent Wedge Reagent B 1
Folic Acid "A" Reagent Wedge Reagent C 1
Folic Acid "D" Reagent Wedge Reagent D 1
Folic Acid "D" Reagent Wedge Reagent E 1
Folic Acid Adjustors >1
- Solubility in water** : 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 9. Physical and chemical properties

Partition coefficient: n-octanol/water	:	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.
	:		
Auto-ignition temperature	:	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.
	:		
Viscosity	:	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 10. Stability and reactivity

Reactivity	:	Folic Acid "A" Reagent Wedge Reagent A	No specific test data related to reactivity available for this product or its ingredients.
	:	Folic Acid "A" Reagent Wedge Reagent B	No specific test data related to reactivity available for this product or its ingredients.
	:	Folic Acid "A" Reagent Wedge Reagent C	No specific test data related to reactivity available for this product or its ingredients.
	:	Folic Acid "D" Reagent Wedge Reagent D	No specific test data related to reactivity available for this product or its ingredients.
	:	Folic Acid "D" Reagent Wedge Reagent E	No specific test data related to reactivity available for this product or its ingredients.
	:	Folic Acid Adjustors	No specific test data related to reactivity available for this product or its ingredients.
	:		
Chemical stability	:	Folic Acid "A" Reagent Wedge Reagent A	The product is stable.
	:	Folic Acid "A" Reagent Wedge Reagent B	The product is stable.
	:	Folic Acid "A" Reagent Wedge Reagent C	The product is stable.
	:	Folic Acid "D" Reagent Wedge Reagent D	The product is stable.
	:	Folic Acid "D" Reagent Wedge Reagent E	The product is stable.
	:	Folic Acid Adjustors	The product is stable.
	:		
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.	
Conditions to avoid	:	No specific data.	
Incompatible materials	:	No specific data.	
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.	

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Conclusion/Summary :

Irritation/Corrosion

Section 11. Toxicological information

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

Conclusion/Summary

Skin :

Eyes :

Respiratory :

Sensitization

Not available.

Conclusion/Summary

Skin :

Respiratory :

Mutagenicity

Not available.

Conclusion/Summary :

Carcinogenicity

Not available.

Conclusion/Summary :

Reproductive toxicity

Not available.

Conclusion/Summary :

Teratogenicity

Not available.

Conclusion/Summary :

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Date of issue/Date of revision

: 7/27/2015.

Date of previous issue

: 6/30/2015.

Version : 1.03

12/22

Section 11. Toxicological information

Potential acute health effects

Eye 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 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	May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
Folic Acid "D" Reagent Wedge Reagent D	No known significant effects or critical hazards.
Folic Acid "D" Reagent Wedge Reagent E	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Folic Acid Adjustors	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

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	No known significant effects or critical hazards.

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	May cause burns to mouth, throat and stomach.
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 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.

Section 11. Toxicological information

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	No specific data.
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 and also 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.
Potential delayed 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.

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.
Potential delayed 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.

Potential chronic health effects

Not available.

Conclusion/Summary	:	
General	:	No known significant effects or critical hazards.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.
Teratogenicity	:	No known significant effects or critical hazards.
Developmental effects	:	No known significant effects or critical hazards.

Section 11. Toxicological information

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Folic Acid "D" Reagent Wedge Reagent D Oral	200000 mg/kg

Other information :

Section 12. Ecological information

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 - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 125 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours
Folic Acid "D" Reagent Wedge Reagent D boric acid	Acute LC50 84.28 mg/l Marine water	Crustaceans - Americamysis bahia - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 133000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 100000 µg/l Fresh water	Fish - Ptychocheilus lucius - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 6000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 2100 µg/l Fresh water	Fish - Oncorhynchus mykiss	87 days

Conclusion/Summary :

Persistence and degradability

Conclusion/Summary :

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Folic Acid "D" Reagent Wedge Reagent D boric acid	-1.09	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) :

Mobility :

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

Section 13. Disposal considerations

Disposal methods	: The generation of waste should be avoided or minimized 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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 spilled material and runoff and contact with soil, waterways, drains and sewers.
	Sodium azide may react with lead or copper plumbing to form highly explosive metal azides.

Section 14. Transport information

DOT Classification

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.
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 - - -
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 - - -
		
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 - - -
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. Yes. 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	- - Reportable quantity 10989 lbs / 4989 kg [1318 gal / 4989 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. - -

Section 14. Transport information

Folic Acid Adjustors

-

TDG Classification

UN number	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.
	Folic Acid Adjustors	Not regulated.
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	SODIUM HYDROXIDE, SOLUTION
	Folic Acid "D" Reagent Wedge Reagent D	-
	Folic Acid "D" Reagent Wedge Reagent E	-
	Folic Acid Adjustors	-
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	8
	Folic Acid "D" Reagent Wedge Reagent D	-
	Folic Acid "D" Reagent Wedge Reagent E	-
	Folic Acid Adjustors	-
		
Packing group	Folic Acid "A" Reagent Wedge Reagent A	-
	Folic Acid "A" Reagent Wedge Reagent B	-
	Folic Acid "A" Reagent Wedge Reagent C	II
	Folic Acid "D" Reagent Wedge Reagent D	-
	Folic Acid "D" Reagent Wedge Reagent E	-
	Folic Acid Adjustors	-
Environmental hazards	Folic Acid "A" Reagent Wedge Reagent A	No.
	Folic Acid "A" Reagent Wedge Reagent B	No.
	Folic Acid "A" Reagent Wedge Reagent C	Yes.
	Folic Acid "D" Reagent Wedge Reagent D	No.
	Folic Acid "D" Reagent Wedge Reagent E	No.
	Folic Acid Adjustors	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	-

Mexico Classification

UN number	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.
	Folic Acid Adjustors	Not regulated.
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	SODIUM HYDROXIDE, SOLUTION
	Folic Acid "D" Reagent Wedge Reagent D	-
	Folic Acid "D" Reagent Wedge Reagent E	-
	Folic Acid Adjustors	-

Section 14. Transport information

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	8
	Folic Acid "D" Reagent Wedge Reagent D	-
	Folic Acid "D" Reagent Wedge Reagent E	-
	Folic Acid Adjustors	-



Packing group	Folic Acid "A" Reagent Wedge Reagent A	-
	Folic Acid "A" Reagent Wedge Reagent B	-
	Folic Acid "A" Reagent Wedge Reagent C	II
	Folic Acid "D" Reagent Wedge Reagent D	-
	Folic Acid "D" Reagent Wedge Reagent E	-
	Folic Acid Adjustors	-

Environmental hazards	Folic Acid "A" Reagent Wedge Reagent A	No.
	Folic Acid "A" Reagent Wedge Reagent B	No.
	Folic Acid "A" Reagent Wedge Reagent C	Yes.
	Folic Acid "D" Reagent Wedge Reagent D	No.
	Folic Acid "D" Reagent Wedge Reagent E	No.
	Folic Acid Adjustors	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	-

ADR/RID

UN number	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.
	Folic Acid Adjustors	Not regulated.

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	SODIUM HYDROXIDE, SOLUTION
	Folic Acid "D" Reagent Wedge Reagent D	-
	Folic Acid "D" Reagent Wedge Reagent E	-
	Folic Acid Adjustors	-

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	8
	Folic Acid "D" Reagent Wedge Reagent D	-
	Folic Acid "D" Reagent Wedge Reagent E	-
	Folic Acid Adjustors	-



Packing group	Folic Acid "A" Reagent Wedge Reagent A	-
	Folic Acid "A" Reagent Wedge Reagent B	-
	Folic Acid "A" Reagent Wedge Reagent C	II
	Folic Acid "D" Reagent Wedge Reagent D	-
	Folic Acid "D" Reagent Wedge Reagent E	-
	Folic Acid Adjustors	-

Section 14. Transport information

Environmental hazards	Folic Acid "A" Reagent Wedge Reagent A	No.
	Folic Acid "A" Reagent Wedge Reagent B	No.
	Folic Acid "A" Reagent Wedge Reagent C	Yes.
	Folic Acid "D" Reagent Wedge Reagent D	No.
	Folic Acid "D" Reagent Wedge Reagent E	No.
	Folic Acid Adjustors	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	-
IMDG		
UN number	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.
	Folic Acid Adjustors	Not regulated.
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	SODIUM HYDROXIDE, SOLUTION
	Folic Acid "D" Reagent Wedge Reagent D	-
	Folic Acid "D" Reagent Wedge Reagent E	-
	Folic Acid Adjustors	-
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	8
	Folic Acid "D" Reagent Wedge Reagent D	-
	Folic Acid "D" Reagent Wedge Reagent E	-
	Folic Acid Adjustors	-
		
Packing group	Folic Acid "A" Reagent Wedge Reagent A	-
	Folic Acid "A" Reagent Wedge Reagent B	-
	Folic Acid "A" Reagent Wedge Reagent C	II
	Folic Acid "D" Reagent Wedge Reagent D	-
	Folic Acid "D" Reagent Wedge Reagent E	-
	Folic Acid Adjustors	-
Environmental hazards	Folic Acid "A" Reagent Wedge Reagent A	No.
	Folic Acid "A" Reagent Wedge Reagent B	No.
	Folic Acid "A" Reagent Wedge Reagent C	Yes.
	Folic Acid "D" Reagent Wedge Reagent D	No.
	Folic Acid "D" Reagent Wedge Reagent E	No.
	Folic Acid Adjustors	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	-

IATA

Section 14. Transport information

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.
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 - - -
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 - - -
		
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 - - -
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	- - - - - -

Special precautions for user :

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations	TSCA 8(a) CDR Exempt/Partial exemption: Not determined Commerce control list precursor: potassium cyanide United States inventory (TSCA 8b): Not determined. Clean Water Act (CWA) 307: zinc chloride; potassium cyanide Clean Water Act (CWA) 311: zinc chloride; disodium hydrogenorthophosphate; sodium hydroxide; potassium cyanide
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	Not listed

Section 15. Regulatory information

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
Folic Acid "A" Reagent Wedge Reagent B sodium azide	0.098	Yes.	500	-	1000	-
Folic Acid "A" Reagent Wedge Reagent C potassium cyanide	0.01	Yes.	100	-	10	-
Folic Acid "D" Reagent Wedge Reagent D sodium azide	0.098	Yes.	500	-	1000	-
Folic Acid "D" Reagent Wedge Reagent E sodium azide	0.098	Yes.	500	-	1000	-

SARA 304 RQ : 600000 lbs / 272400 kg

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Folic Acid "A" Reagent Wedge Reagent C sodium hydroxide	9.1	No.	No.	No.	Yes.	No.
Folic Acid "D" Reagent Wedge Reagent D boric acid	2	No.	No.	No.	No.	Yes.

State regulations

Massachusetts : The following components are listed: SODIUM HYDROXIDE

New York : The following components are listed: Sodium hydroxide

New Jersey : The following components are listed: SODIUM HYDROXIDE; CAUSTIC SODA

Pennsylvania : The following components are listed: SODIUM HYDROXIDE (NA(OH))

California Prop. 65

WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Section 15. Regulatory information

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Folic Acid "A" Reagent Wedge Reagent C potassium cyanide	No.	No.	No.	25 µg/day (ingestion)
Folic Acid Adjustors gentamicin, sulfate (salt)	No.	Yes.	No.	No.

Canada inventory :

International regulations

International lists :

- Australia inventory (AICS)**: Not determined.
- China inventory (IECSC)**: Not determined.
- Japan inventory**: Not determined.
- Korea inventory**: Not determined.
- Malaysia Inventory (EHS Register)**: Not determined.
- New Zealand Inventory of Chemicals (NZIoC)**: Not determined.
- Philippines inventory (PICCS)**: Not determined.
- Taiwan inventory (CSNN)**: Not determined.

Chemical Weapons Convention List Schedule I Chemicals :

Chemical Weapons Convention List Schedule II Chemicals :

Chemical Weapons Convention List Schedule III Chemicals :

Section 16. Other information

History

Date of issue/Date of revision : 7/27/2015.

Version : 1.03

Key to abbreviations :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

☑ Indicates information that has changed from previously issued version.

Notice to reader

Allergen : Not available.