GF Healthcare

SAFETY DATA SHEET

United States

Section 1. Identification

Product name

KvickLab™ 1.0 ft², 30 kD, PES

Catalogue Number UFELA0030010ST

90 U.F.F.L.A.O.3.O.O.1.O.S

Other means of identification

Product type

Not available. Liquid.

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

Identified uses

Use in laboratories

Industrial applications: Analytical chemistry. Chemical synthesis. Manufacture of chemicals. Research.

Supplier GE Healthcare UK Ltd Amersham Place

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In case of emergency ChemTrec US (available 24/7) 1-800-424-9300

Section 2. Hazards identification

OSHA/HCS statusThis material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or

mixture

SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment:

21%

GHS label elements

Hazard pictograms



Signal word Warning

Hazard statements Causes serious eye irritation.

Causes skin irritation.

Precautionary statements

Prevention Wear protective gloves. Wear eye or face protection. Wash hands thoroughly after handling.

Response IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated

clothing before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye

irritation persists: Get medical attention.

Storage Not applicable.

Disposal Not applicable.

Hazards not otherwise classified None known.



9 5 5 6 4 1 1 3 2 7

ticle Number : 56411327 Page: 1/7

Section 3. Composition/information on ingredients

Substance/mixtureMixtureOther means of identificationNot available.

CAS number/other identifiers

CAS number Not applicable.

Product code UFELA0030010ST

Ingredient name%CAS numbersodium hydroxide0.5 - 11310-73-2

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 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. Get medical attention.

Inhalation 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 mouth-to-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.

Skin contact Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to

rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly

before reuse.

Ingestion 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. 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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact Causes serious eye irritation.

Inhalation No known significant effects or critical hazards.

Skin contact Causes skin irritation.

Ingestion Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation No specific data.

Skin contact Adverse symptoms may include the following:

irritation redness

Ingestion No specific data.

$\underline{Indication\ of\ immediate\ medical\ attention\ and\ special\ treatment\ needed,\ if\ necessary}$

Notes to physician Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been

ingested or inhaled.

Specific treatments No specific treatment.

Protection of first-aidersNo 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)



9 5 5 6 4 1 1 3 2 7

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Use an extinguishing agent suitable for the surrounding fire.

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 may include the following materials: decomposition products carbon dioxide

carbon monoxide

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

For emergency responders

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

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding For non-emergency personnel

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.

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

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Small spill

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.

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 between the following temperatures: 0 to 50°C (32 to 122°F). 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 sodium hydroxide

Exposure limits

ACGIH TLV (United States, 6/2013).

C: 2 mg/m³

NIOSH REL (United States, 10/2013).

CEIL: 2 mg/m³

OSHA PEL (United States, 2/2013).

TWA: 2 mg/m³ 8 hours

OSHA PEL 1989 (United States, 3/1989).

CEIL: 2 mg/m³



Article Number

56411327 Page: 3/7

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 aggales.

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 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

Appearance

Physical state Liquid. Color Colorless Odor Odorless Not available Odor threshold Not available. рН Not available. Melting point Not available. **Boiling point** Not applicable. Flash point **Burning time** Not applicable. **Burning rate** Not applicable. **Evaporation rate** Not available. Flammability (solid, gas) Not available. Lower and upper explosive Not available.

(flammable) limits

Vapor pressureNot available.Vapor densityNot available.Relative densityNot available.

Solubility Easily soluble in the following materials: cold water and hot water.

Solubility in water Not available.

Partition coefficient: n-octanol/ Not available.

water

Auto-ignition temperature Not available.

Decomposition temperature Not available.

SADT Not available.

Viscosity Not available.





Section 10. Stability and reactivity

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

Chemical stability 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 Under normal conditions of storage and use, hazardous decomposition products should not be produced.

products

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

 Product/ingredient name
 OSHA
 IARC
 NTP

 Sodium hypochlorite solution Cl active
 3

Reproductive toxicity

Not available.

Teratogenicity

Not available.

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 Routes of entry anticipated: Oral, Dermal, Inhalation.

exposure

Potential acute health effects

Eye contact Causes serious eye irritation.

Inhalation No known significant effects or critical hazards.

Skin contact Causes skin irritation.

Ingestion Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact Adverse symptoms may include the following:

pain or irritation watering

redness

Inhalation No specific data.

Skin contact Adverse symptoms may include the following:

irritation redness

No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects Not available.



Ingestion

9 5 5 6 4 1 1 3 2 7

56411327

Page: 5/7

Potential delayed effects

Not available.

Long term exposure

Potential immediate effects Not available.
Potential delayed effects Not available.

Potential chronic health effects

Not available.

GeneralNo known significant effects or critical hazards.CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.TeratogenicityNo known significant effects or critical hazards.Developmental effectsNo known significant effects or critical hazards.Fertility effectsNo known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient nameResultSpeciesExposuresodium hydroxideAcute EC50 40.38 mg/l Fresh waterCrustaceans - Ceriodaphnia dubia -48 hours

Acute LC50 125 ppm Fresh water Fish - Gambusia affinis - Adult 96 hours

Neonate

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (Koc) Not available

Other adverse effects No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methodsThe 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.

Section 14. Transport information

Product is not regulated as dangerous goods for transport.

Section 15. Regulatory information

U.S. Federal regulations TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Water Act (CWA) 311: sodium hydroxide

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)Not listedClean Air Act Section 602 Class I SubstancesNot listedClean Air Act Section 602 Class II SubstancesNot listedDEA List I Chemicals (Precursor Chemicals)Not listedDEA List II Chemicals (Essential Chemicals)Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ Not applicable.

SARA 311/312



9 5 5 6 4 1 1 3 2 7

e Number : 56411327 Page: 6/7

Classification Immediate (acute) health hazard

Composition/information on ingredients

Sudden Name % Fire Reactive **Immediate** Delayed hazard release of (acute) (chronic) health hazard health pressure hazard sodium hydroxide 0.5 - 1No Nο No Yes Nο

State regulations

Massachusetts The following components are listed: GLYCERINE MIST

New York None of the components are listed.

New Jersey The following components are listed: GLYCERIN; 1,2,3-PROPANETRIOL

Pennsylvania The following components are listed: 1,2,3-PROPANETRIOL

International regulations

Canada inventory All components are listed or exempted.

International lists Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Japan inventory: All components are listed or exempted.

Korea inventory: All components are listed or exempted.

Malaysia Inventory (EHS Register): All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

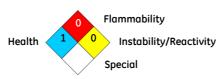
Philippines inventory (PICCS): All components are listed or exempted.

Taiwan inventory (CSNN): Not determined.

Chemical Weapons Convention List Schedule I ChemicalsNot listedChemical Weapons Convention List Schedule II ChemicalsNot listedChemical Weapons Convention List Schedule III ChemicalsNot listed

Section 16. Other information

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of printing 2/24/2015.

Date of issue/Date of revision 2/24/2015.

Date of previous issue 4/16/2009.

Version 5

Key to abbreviationsATE = 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

Not available

Indicates information that has changed from previously issued version.

Notice to reader

References

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named 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.



9 5 5 6 4 1 1 3 2 7

Article Number: 56411327 Page: 7/7