GF Healthcare

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - Switzerland

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

1.1 Product identifier

Product name Immobiline™ II pK 7.0 for IEF

29-0048-69 Catalogue Number

Product description Not available.

Liquid. Other means of identification Acrylamide derivative solved in 1-Propanol

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

Identified uses

Use in laboratories

Product type

1.3 Details of the supplier of the safety data sheet

Supplier GE Healthcare UK Ltd Hours of operation Amersham Place 08.30 - 17.00

Little Chalfont

Buckinghamshire HP7 9NA

England

+44 0870 606 1921

Person who prepared the MSDS: msdslifesciences@ge.com

1.4 Emergency telephone number

0848 8028 10 Switzerland GE Healthcare Europe GmbH

Europastrasse 31 CH-8152 Glattbrugg

National advisory body/Poison Centre

Switzerland Centre Suisse d'Information Toxicologique

(Swiss Toxicological Information Centre)

Freiestrasse 16 CH-8032 Zurich

Telephone: +41 44 251 66 66

Emergency telephone: +41 44 251 51 51 (145 from within Switzerland and Liechtenstein)

Fax: +41 44 252 88 33 E-mail: info@toxi.ch Web site: http://www.toxi.ch

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 2, H225 Eye Dam. 1, H318 STOT SE 3. H336

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Ingredients of unknown toxicity Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 3%



Article Number 29004869

Validation date 3 March 2016

Page: 1/11



Ingredients of unknown ecotoxicity. Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 3%

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.

2.2 Label elements

Hazard pictograms







Signal word Danger

Hazard statements

Highly flammable liquid and vapour.

Causes serious eye damage.

May cause drowsiness or dizziness.

Precautionary statements

Prevention Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot

surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling

equipment

Response IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF ON

SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF IN

EYES: Immediately call a POISON CENTER or physician.

Storage Keep cool.

Disposal Dispose of contents and container in accordance with all local, regional, national and international

regulations.

Hazardous ingredients propan-1-ol
Supplemental label elements Not applicable.

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

Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings

Not applicable.

Tactile warning of danger Not applicable.

2.3 Other hazards

Other hazards which do not result None known.

in classification

SECTION 3: Composition/information on ingredients

Substance/mixture

Mixture

| | | | Classification | |
|-------------------------|---|----------|--|---------|
| Product/ingredient name | Identifiers | % | Regulation (EC) No. 1272/2008 [CLP] | Туре |
| gropan-1-ol | REACH #: 01-2119486761-29 EC: 200-746-9 CAS: 71-23-8 Index: 603-003-00-0 | 80 - 100 | Flam. Liq. 2, H225 Acute Tox. 4, H302 Eye Dam. 1, H318 STOT SE 3, H336 See Section 16 for the full text of the H statements declared above. | [1] [2] |

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, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

<u>Type</u>



Article Number

29004869

Page: 2/11

Immobiline™ II pK 7.0 for IEF 29-0048-69

[1] Substance classified with a health or environmental hazard

- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact 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.

Inhalation 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.

Skin contact 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.

Ingestion 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.

Protection of first-aiders 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.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact Causes serious eye damage.

Inhalation Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May give off

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

Skin contact No known significant effects or critical hazards.

Ingestion Can cause central nervous system (CNS) depression. May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact Adverse symptoms may include the following:

pain watering redness

Inhalation Adverse symptoms may include the following:

nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness

Skin contact Adverse symptoms may include the following:

pain or irritation redness

blistering may occur

Ingestion Adverse symptoms may include the following:

stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

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

ingested or inhaled.

Specific treatments No specific treatment.



Article Number

Page: 3/11
Validation date 3 March 2016

29004869



SECTION 5: Firefighting measures

5.1 Extinguishing media

Use dry chemical, CO2, water spray (fog) or foam. Suitable extinguishing media

Unsuitable extinguishing media Do not use water iet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or

mixture

Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Hazardous combustion products

Decomposition products may include the following materials:

carbon dioxide carbon monoxide

5.3 Advice for firefighters

Special precautions for fire-

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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe 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 materials for containment and cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Use spark-proof tools and explosion-proof equipment. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

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

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. 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.

7.2 Conditions for safe storage, including any incompatibilities



Page: 4/11 Article Number

Validation date 3 March 2016

Store between the following temperatures: 4 to 8°C (39.2 to 46.4°F). Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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.

Seveso II Directive - Reporting thresholds (in tonnes)

Danger criteria

CategoryNotification and MAPP thresholdSafety report threshold thresholdP5c: Flammable liquids 2 and 3 not falling under P5a or P5b500050000C7b: Highly flammable (R11)500050000

7.3 Specific end use(s)

Recommendations Analytical chemistry. Laboratory chemicals Research and Development

Industrial sector specific solutions Not available.

SECTION 8: Exposure controls/personal protection

The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|-------------------------|---|
| propan-1-ol | SUVA (Switzerland, 6/2013). Absorbed through skin. Notes: not temporary TWA: 500 mg/m³ 8 hours. TWA: 200 ppm 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 monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

No DELs available.

PNECs

No PECs available.

8.2 Exposure controls

Appropriate engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

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.



Article Number

9529004869

Page: 5/11

the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

ersonal protective equipment for the body should be selected based on the task being performed and

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 protectionUse 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.

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

9.1 Information on basic physical and chemical properties

Appearance

Body protection

Physical state Liquid.

Colour Colourless.

Odour Alcohol-like.

Odour threshold Not available.

PH Not available.

Melting point/freezing point -126.05°C

Initial boiling point and boiling range

3

Flash point Closed cup: -18 to 23°C

Evaporation rate 0.933 ((n-BUTYL ACETATE=1) = 1)

Flammability (solid, gas) Flammable in the presence of the following materials or conditions: open flames, sparks and static

discharge and heat.

Burning time Not applicable.
Burning rate Not applicable.
Upper/lower flammability or explosive limits Lower: 2.1%
Upper: 13.5%

Vapour pressure 4.2 kPa [room temperature]

Vapour density 2.1 [Air = 1]
Relative density 0.803

Solubility(ies) Easily soluble in the following materials: cold water, hot water, diethyl ether and acetone.

Partition coefficient: n-octanol/

water

Not available.

Auto-ignition temperature 371°C

Decomposition temperature Not available.

Viscosity Not available.

Explosive propertiesNot considered to be a product presenting a risk of explosion.

Oxidising properties Not available.

9.2 Other information

No additional information.

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 Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill,

grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas

0.0

Article Number

Page: 6/11

29004869

Validation date 3 March 2016



Immobiline™ II pK 7.0 for IEF 29-0048-69

10.5 Incompatible materials

Reactive or incompatible with the following materials:

oxidizing materials

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 |
|-------------------------|--------------------------|---------------|--------------------------|----------|
| Fropan-1-ol | LD50 Dermal LD50 Oral | Rabbit Rat | 5040 mg/kg 1870 mg/kg | - |

Conclusion/Summary

Not available.

Acute toxicity estimates

| Route | ATE value |
|-------|--------------|
| Oral | 2077.8 mg/kg |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|---------|-------|---------------------------|-------------|
| Fropan-1-ol | Eyes - Moderate irritant | Rabbit | | 24 hours 20 milligrams | - |
| | Skin - Mild irritant | Human | | 47 hours 100 Percent | - |
| | Skin - Mild irritant | Human | | 24 hours 100 Percent | - |
| | Skin - Mild irritant | Rabbit | - | 500 milligrams | - |

Conclusion/Summary

Eyes Causes severe eye irritation.

Sensitisation

Conclusion/Summary Not available.

<u>Mutagenicity</u>

Conclusion/Summary Not available.

<u>Carcinogenicity</u>

Conclusion/Summary Not available.

Reproductive toxicity

Conclusion/Summary Not available.

 $\underline{\text{Teratogenicity}}$

Conclusion/Summary Not available.

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-------------------------|------------|-------------------|------------------|
| propan-1-ol | Category 3 | Not applicable. | Narcotic effects |

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

Inhalation Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May give off

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

Ingestion Can cause central nervous system (CNS) depression. May cause burns to mouth, throat and stomach.

Skin contactNo known significant effects or critical hazards.

Eye contact Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics



Article Number

Validation date 3 March 2016



Page: 7/11

Immobiline™ II pK 7.0 for IEF 29-0048-69

Inhalation Adverse symptoms may include the following:

nausea or vomiting headache

drowsiness/fatigue dizziness/vertigo unconsciousness

Ingestion Adverse symptoms may include the following:

stomach pains

Skin contact Adverse symptoms may include the following:

pain or irritation redness

blistering may occur

Eye contact Adverse symptoms may include the following:

pain watering redness

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

Short term exposure

Potential immediate effects Risk of serious damage to eyes.

Potential delayed effects

Not available.

Not available.

Long term exposure

Potential immediate effects Not available.

Potential delayed effects

Potential chronic health effects

Not available.

Conclusion/Summary 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.

Other information Not available.

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|--|---------|--|
| | Acute LC50 1000000 µg/l Fresh water Acute LC50 2950000 µg/l Fresh water | | 96 hours 48 hours 48 hours 96 hours |

Conclusion/Summary Not available.

12.2 Persistence and degradability

Conclusion/Summary Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|----------------|------------------|
| propan-1-ol | - | 73%; 20 day(s) | Readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|--------|-----|-----------|
| Fropan-1-ol | 0.2 | 3 | low |

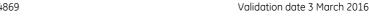
12.4 Mobility in soil

Soil/water partition coefficient (Koc) Not available.

Mobility Not available.



Article Number Page: 8/11





12.5 Results of PBT and vPvB assessment

PBT Not applicable.

vPvB Not applicable.

12.6 Other adverse effectsNo known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

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.

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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil,

waterways, drains and sewers.

SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | IATA |
|---------------------------------|------------|------------|------------|------------|
| 14.1 UN number | UN1274 | UN1274 | UN1274 | UN1274 |
| 14.2 UN proper shipping name | n-Propanol | n-Propanol | n-Propanol | n-Propanol |
| 14.3 Transport hazard class(es) | 3 | 3 | 3 | 3 |
| 14.4 Packing group | II | II | П | П |
| 14.5 Environmental hazards | No. | No. | No. | No. |
| Additional information | - | - | - | - |

14.6 Special precautions for

user

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 Annex II of MARPOL 73/78 and the IBC

Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern



Article Number

29004869 Validation date 3 March 2016



validation date 3 March 2010

Page: 9/11

None of the components are listed.

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

Not applicable.

Other EU regulations

Europe inventory Not determined. **Black List Chemicals** Not listed Not listed **Priority List Chemicals** Integrated pollution prevention

and control list (IPPC) - Air

Not listed

Integrated pollution prevention

and control list (IPPC) - Water

Not listed

Seveso II Directive

This product is controlled under the Seveso II Directive.

Danger criteria

Category

P5c: Flammable liquids 2 and 3 not falling under P5a or P5b

C7b: Highly flammable (R11)

Chemical Weapons Convention List Schedule I Chemicals

Not listed

Chemical Weapons Convention

List Schedule II Chemicals

Not listed

Chemical Weapons Convention

List Schedule III Chemicals

Not listed

15.2 Chemical Safety

This product contains substances for which Chemical Safety Assessments are still required.

Assessment

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration

RRN = REACH Registration Number

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification | Justification |
|--------------------|-----------------------|
| Flam. Liq. 2, H225 | On basis of test data |
| Eye Dam. 1, H318 | Calculation method |
| STOT SE 3, H336 | Calculation method |

Full text of abbreviated H H225 Highly flammable liquid and vapour. statements H302 Harmful if swallowed.

H318 Causes serious eye damage. H336 May cause drowsiness or dizziness

Full text of classifications (CLP/

GHS1

ACUTE TOXICITY: ORAL - Category 4 Acute Tox. 4, H302 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 Eye Dam. 1, H318

FLAMMABLE LIQUIDS - Category 2 Flam. Liq. 2, H225

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] STOT SE 3, H336

- Category 3

Date of printing 03 March 2016 Date of issue/ Date of revision 03 March 2016 Date of previous issue 18 June 2014



Article Number Page: 10/11



iline™ II pK 7.0 for IEF 29-0048-69

Notice to reader

version

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.



29004869

Article Number Page: 11/11

Validation date 3 March 2016