

SAFETY DATA SHEET

Conforms to EU Directive 91/155/EEC, as amended by 2001/58/EC - United Kingdom (UK)
English

1. Identification of the substance/preparation and company/undertaking

Product name 2 M Imidazole; part of 'HisTrap™ FF crude Kit'

Catalogue Number 28-4014-77



Hazard symbol or symbols



Corrosive

Product type Liquid.

Company/undertaking identification

Supplier GE Healthcare Bio-Sciences AB
SE-751 84 Uppsala
Sweden
+46 (0)18 612 0000

Emergency telephone number
Swedish Poisons Information Centre :
+46 (0)8 331 231

Person who prepared the MSDS : msdslifesciences@ge.com

United Kingdom (UK) GE Healthcare UK Ltd
Amersham Place
Little Chalfont
Buckinghamshire
HP7 9NA
0870 606 1921

2. Hazards identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification C; R34

Human health hazards Causes burns.

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

3. Composition/information on ingredients

Substance/preparation Preparation

<u>Ingredient name</u>	<u>CAS number</u>	<u>%</u>	<u>EC number</u>	<u>Classification</u>
Imidazole	288-32-4	10 - 20	206-019-2	Xn; R22 C; R34

See section 16 for the full text of the R-phrases declared above

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



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4. First-aid measures

First-aid measures

Inhalation	Get medical attention immediately. Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. 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. 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.
Ingestion	Get medical attention immediately. Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. 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.
Skin contact	Get medical attention immediately. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing 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.
Eye contact	Get medical attention immediately. 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.
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 or wear gloves.

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

5. Fire-fighting measures

Extinguishing media

Suitable	Use an extinguishing agent suitable for the surrounding fire.
Not suitable	None known.
Special exposure hazards	In a fire or if heated, a pressure increase will occur and the container may burst. 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.

6. Accidental release measures

Personal precautions	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
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).
Large spill	Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

Handling	Put on appropriate personal protective equipment (see section 8). 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. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
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Storage	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 unlabelled containers. Use appropriate containment to avoid environmental contamination.
Packaging materials	
Recommended	Use original container.

8. Exposure controls/personal protection

Exposure limit values Not available.

Exposure controls

Occupational exposure controls	<p>☑ If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.</p>
Respiratory protection	<p>☑ 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.</p>
Hand protection	<p>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.</p>
Eye protection	<p>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.</p>
Skin protection	<p>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.</p> <p>☑ 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.</p>
Environmental exposure controls	<p>☑ 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.</p>

9. Physical and chemical properties

General information

Appearance

Physical state	Liquid.
Colour	Colourless.
Odour	Odourless.

Important health, safety and environmental information

Explosive properties	☑ Not considered to be a product presenting a risk of explosion.
Solubility	☑ Easily soluble in the following materials: cold water and hot water.

10. Stability and reactivity

Stability	☑ The product is stable. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Materials to avoid	☑ No specific data.

11. Toxicological information

Potential acute health effects

Inhalation	☑ May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion	May cause burns to mouth, throat and stomach.
Skin contact	☑ Corrosive to the skin. Causes burns.
Eye contact	☑ Corrosive to eyes. Causes burns.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
☑ Imidazole	LD50 Oral	Rat	220 mg/kg	-
	LD50 Subcutaneous	Rat	626 mg/kg	-
Conclusion/Summary	Not available.			

Potential chronic health effects

Chronic effects	☑ No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Reproductive toxicity	No known significant effects or critical hazards.
Developmental effects	☑ No known significant effects or critical hazards.



Fertility effects ☒ No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation ☒ No specific data.

Ingestion ☒ Adverse symptoms may include the following:
stomach pains

Skin ☒ Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Eyes ☒ Adverse symptoms may include the following:
pain
watering
redness

12. Ecological information

Environmental effects No known significant effects or critical hazards.

Aquatic ecotoxicity

Conclusion/Summary ☒ Not available.

Conclusion/Summary Not available.

<u>Product/ingredient name</u>	<u>Aquatic half-life</u>	<u>Photolysis</u>	<u>Biodegradability</u>
<input checked="" type="checkbox"/> Imidazole	-	-	Readily

Bioaccumulative potential

<u>Product/ingredient name</u>	<u>LogP_{ow}</u>	<u>BCF</u>	<u>Potential</u>
<input checked="" type="checkbox"/> Imidazole	-0.02	-	low

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




13. Disposal considerations

Methods of disposal ☒ The generation of waste should be avoided or minimised wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

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

14. Transport information

International transport regulations

<u>Regulatory information</u>	<u>UN number</u>	<u>Proper shipping name</u>	<u>Class</u>	<u>Packing group</u>	<u>Label</u>	<u>Additional information</u>
ADR/RID Class	<input checked="" type="checkbox"/> UN3267	<input checked="" type="checkbox"/> Corrosive liquid, basic, organic, n.o.s. solution (Imidazole)	8	III		-
IMDG Class	<input checked="" type="checkbox"/> UN3267	<input checked="" type="checkbox"/> Corrosive liquid, basic, organic, n.o.s. solution (Imidazole). Marine pollutant (Imidazole)	8	III		Marine pollutant Marine pollutant (P)
IATA-DGR Class	<input checked="" type="checkbox"/> UN3267	<input checked="" type="checkbox"/> Corrosive liquid, basic, organic, n.o.s. solution (Imidazole)	8	III		-

15. Regulatory information

EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Hazard symbol or symbols



Corrosive

Risk phrases

R34- Causes burns.



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Safety phrases	S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39- Wear suitable protective clothing, gloves and eye/face protection. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Contains	 C ₃ H ₄ N ₂ 206-019-2
Product use	 Industrial applications.
Europe inventory	 Europe inventory: All components are listed or exempted.

Other EU regulations

16. Other information

Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK)R22- Harmful if swallowed.
R34- Causes burns.

Full text of classifications referred to in sections 2 and 3 - United Kingdom (UK)C - Corrosive
Xn - Harmful



Indicates information that has changed from previously issued version.

History

Date of printing	13 July 2007	Date of previous issue	24 May 2006
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Notice to reader

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.

