

SAFETY DATA SHEET



Spot Indole Reagent

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Identification of the substance or mixture

Product name	: Spot Indole Reagent	Code	
Trade name	: Spot Indole Reagent	Code	PL.391-10
Product type	: Liquid.		
Material uses	: To be used in the qualitative method to determine the ability of an organism to split indole from the tryptophan molecule.		
Supplier/Manufacturer	: Pro-Lab Diagnostics 7 Westwood Court Clayhill Industrial Estate, Neston, Cheshire CH64 3UJ, UK Phone: +44 (0)151 353 1613 Fax: +44 (0)151 353 1614		
e-mail address of person responsible for this SDS	: uksupport@pro-lab.com		
Emergency telephone number (with hours of operation)	: +44 (0)151 353 1613 -Monday to Friday 9:00 am to 5:00 pm. +44 (0)7714 429 646 -Outside the above hours.		

2. HAZARDS IDENTIFICATION

The product 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 : Mixture

Ingredient name	CAS number	%	Number	Classification
Hydrochloric acid	7647-01-0	3 - 5	231-595-7	T; R23 C; R35 [1] [2]
See section 16 for the full text of the R-phrases declared above				

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.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] PBT-substance

[4] vPvB-substance

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

4. FIRST AID MEASURES

First-aid measures

Inhalation	: 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. Get medical attention immediately. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.
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4. FIRST AID MEASURES

- Ingestion** : Wash out mouth with water. 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. Get medical attention immediately. 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.
- Skin contact** : Flush contaminated skin with plenty of water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention immediately. Chemical burns must be treated promptly by a physician.
- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Continue to rinse for at least 20 minutes. Get medical attention immediately. 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 it, or wear gloves.
- 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.

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** : No specific fire or explosion hazard.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
halogenated compounds

- 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. Do not breathe 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).
- Methods for 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.

6. ACCIDENTAL RELEASE MEASURES

- 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). The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. 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.

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. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container.
- 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. Separate from alkalis. 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. Store at 2°C to 30°C (36°F to 86°F).
- Packaging materials**
- Recommended** : Use original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
Hydrochloric acid	EH40/2005 WELs (United Kingdom (UK), 8/2007). STEL: 8 mg/m ³ 15 minute(s). Form: Gas and aerosol mists STEL: 5 ppm 15 minute(s). Form: Gas and aerosol mists TWA: 2 mg/m ³ 8 hour(s). Form: Gas and aerosol mists TWA: 1 ppm 8 hour(s). Form: Gas and aerosol mists
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 European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.
Exposure controls	
Occupational exposure controls	: If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
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.
Respiratory protection	: A respirator is not needed under normal and intended conditions of product use.
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.
Eye 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 or dusts. Recommended: Splash goggles.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Skin 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.
Body: Recommended: Synthetic apron.
- 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

General information

Appearance

- Physical state** : Liquid.
- Colour** : Deep yellow solution.

Important health, safety and environmental information

- pH** : <1
- Solubility** : Easily soluble in the following materials: cold water and hot water.

10. STABILITY AND REACTIVITY

- 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.
- Materials to avoid** : Highly reactive or incompatible with the following materials: metals and alkalis.
Reactive or incompatible with the following materials: oxidizing materials.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Toxicokinetics

- Absorption** : Routes of entry anticipated: Oral, Dermal, Inhalation.
- Distribution** : Contains material which may cause damage to the following organs: lungs, upper respiratory tract, skin, eyes.
- Metabolism** : Not available.
- Elimination** : Not available.

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
Hydrochloric acid	LC50 Inhalation LD50 Oral	Rat Rabbit	1562 ppm 900 mg/kg	4 hours -

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.
- Teratogenicity** : 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

11. TOXICOLOGICAL INFORMATION

- 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

Ecotoxicity : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Hydrochloric acid	Acute LC50 240000 ug/L Marine water Acute LC50 282000 ug/L Fresh water	Crustaceans - Carcinus maenas - Adult Fish - Gambusia affinis - Adult	48 hours 96 hours

Other ecological information

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Hydrochloric acid	0.25	-	low

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

PBT : Not applicable.

vPvB : Not applicable.





13. DISPOSAL CONSIDERATIONS

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. 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

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADR/RID Class	UN1789	HYDROCHLORIC ACID solution	8	II		Check for applicable exemption under this transport mode.
ADN/ADNR Class	UN1789	HYDROCHLORIC ACID solution	8	II		Check for applicable exemption under this transport mode.
IMDG Class	UN1789	HYDROCHLORIC ACID solution	8	II		Check for applicable exemption under this transport mode.
IATA Class	UN1789	HYDROCHLORIC ACID solution	8	II		Check for applicable exemption under this transport mode.

14. TRANSPORT INFORMATION

PG* : Packing group

Exemption to the above classification may apply.

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.

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 : Hydrochloric acid

Product use : Industrial applications.

Europe inventory : All components are listed or exempted.

Black List Chemicals : Not listed

Priority List Chemicals : Not listed

Integrated pollution prevention and control list (IPPC) - Air : Not listed

Integrated pollution prevention and control list (IPPC) - Water : Not listed

International regulations

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

16. OTHER INFORMATION

Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK) : R23- Toxic by inhalation.
R34- Causes burns.
R35- Causes severe burns.

Full text of classifications referred to in sections 2 and 3 - United Kingdom (UK) : T - Toxic
C - Corrosive

History

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16. OTHER INFORMATION

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.