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SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier

Product No.:	Product name:	Common name(s), synonym(s)
261187	BD BBL™ DMACA Indole Reagent Dropper	No data available

Recommended restrictions

Recommended use: Laboratory Chemicals
Restrictions on use: None known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name: BD, Integrated Diagnostic Solutions
Address: 7 Loveton Circle
Sparks, MD 21152
USA

Telephone: 1 844 823 5433
Fax: not available
Contact Person: Tech Services

Emergency telephone number: CHEMTREC 1 800 424 9300

2. Hazard(s) identification

Hazard Classification

Health Hazards

Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Specific Target Organ Toxicity - Single Exposure	Category 3

Label Elements

Hazard Symbol:

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Signal Word:	Danger
Hazard Statement:	H314: Causes severe skin burns and eye damage. H335: May cause respiratory irritation.
Precautionary Statements	
Prevention:	P260: Do not breathe dust/fume/gas/mist/vapors/spray. P280: Wear protective gloves/protective clothing/eye protection/face protection. P264: Wash thoroughly after handling. P271: Use only outdoors or in a well-ventilated area.
Response:	P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P310: Immediately call a POISON CENTER or doctor/ physician. P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P363: Wash contaminated clothing before reuse. P337+P313: If eye irritation persists: Get medical advice/attention.
Storage:	P405: Store locked up. P403: Store in a well-ventilated place. P233: Keep container tightly closed.
Disposal:	P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Other hazards which do not result in GHS classification:	None.

3. Composition/information on ingredients



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Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%) [*]
Hydrochloric acid	No data available.	7647-01-0	10%
p-dimethylaminocinnamaldehyde	No data available.	6203-18-5	1%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Description of necessary first-aid measures

General information:	Causes severe skin burns and eye damage. Get immediate medical advice/attention. May cause respiratory irritation.
Inhalation:	Move to fresh air. Get medical attention if any discomfort continues. May cause respiratory irritation.
Skin Contact:	Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Get medical attention promptly if symptoms occur after washing.
Eye contact:	Important! Immediately rinse with water for 60 minutes. Get medical attention immediately. Continue to rinse.
Ingestion:	Call a physician or poison control center immediately. Rinse mouth thoroughly. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.
Personal Protection for First-aid Responders:	No data available.
Most important symptoms and effects, both acute and delayed	
Symptoms:	Symptoms may be delayed.
Hazards:	Causes severe skin burns and eye damage. May cause respiratory irritation.

Indication of immediate medical attention and special treatment needed

Treatment:	IF exposed or concerned: Get medical advice/attention.
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5. Fire-fighting measures



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General Fire Hazards:	Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Use water to keep fire exposed containers cool and disperse vapors.
Suitable (and unsuitable) extinguishing media	
Suitable extinguishing media:	Use water fog, alcohol-resistant foam, dry chemical or carbon dioxide (CO ₂) to extinguish flames.
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.
Special hazards arising from the substance or mixture:	Fire or excessive heat may produce hazardous decomposition products.
Special protective equipment and precautions for firefighters	
Special fire fighting procedures:	No unusual fire or explosion hazards noted.
Special protective equipment for fire-fighters:	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area. Ventilate closed spaces before entering them. Avoid breathing mists or vapors. Keep unauthorized personnel away.
Accidental release measures: Methods and material for containment and cleaning up:	No data available. Stop leak if possible without any risk. Prevent runoff from entering drains, sewers, or streams. Dike far ahead of larger spills for later disposal. Absorb in vermiculite, dry sand or earth and place into containers. See Section 8 of the SDS for Personal Protective Equipment. For waste disposal, see section 13 of the SDS.
Environmental Precautions:	Do not contaminate water sources or sewer.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):	Adequate ventilation should be provided so that exposure limits are not exceeded. Eye wash facilities and emergency shower must be available when handling this product.
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Safe handling advice: Avoid contact with eyes and prolonged or repeated contact with skin. Avoid inhalation of vapors and spray mists. Observe good industrial hygiene practices. Wear appropriate personal protective equipment. Provide good ventilation.

Contact avoidance measures: No data available.

Storage

Safe storage conditions: Store in original tightly closed container. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures.

Safe packaging materials: No data available.

8. Exposure controls/personal protection

**Control Parameters
Occupational Exposure Limits**

Chemical Identity	Type	Exposure Limit Values	Source	
Hydrochloric acid	Ceiling	5 ppm 7 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended	
	Ceiling	5 ppm 7 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended	
	ST ESL		130 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL		5.7 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL		8.4 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL		190 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	Ceiling	5 ppm 7 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended	
	Ceiling	2 ppm	US. ACGIH Threshold Limit Values, as amended	
	Ceil_Time	5 ppm 7 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended	
	Ceiling	5 ppm 7 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended	
	IDLH	50 ppm	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended	



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Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls Adequate ventilation should be provided so that exposure limits are not exceeded. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection: Wear safety glasses with side shields (or goggles) and a face shield.

Skin Protection

Hand Protection: Material: Suitable gloves can be recommended by the glove supplier.

Skin and Body Protection: Chemical resistant clothing

Respiratory Protection: In case of inadequate ventilation use suitable respirator.

Hygiene measures: Observe good industrial hygiene practices. Wash at the end of each work shift and before eating, smoking and using the toilet.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state: liquid
Form: liquid
Color: According to product specification.
Odor: Characteristic
Odor Threshold: No data available.
Freezing point: No data available.
Boiling Point: No data available.
Flammability: No data available.

Upper/lower limit on flammability or explosive limits

Explosive limit - upper: No data available.
Explosive limit - lower: No data available.
Flash Point: Not applicable
Self Ignition Temperature: No data available.
Decomposition Temperature: No data available.



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pH:	1.2 - 1.8
Viscosity	
Dynamic viscosity:	Not determined.
Kinematic viscosity:	Not determined.
Flow Time:	No data available.
Solubility(ies)	
Solubility in Water:	Completely Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Vapor pressure:	No data available.
Relative density:	No data available.
Density:	No data available.
Bulk density:	No data available.
Relative vapor density:	No data available.
Particle characteristics	
Particle Size:	No data available.
Particle Size Distribution:	No data available.
Specific surface area:	No data available.
Surface charge/Zeta potential:	No data available.
Shape:	No data available.
Crystallinity:	No data available.
Surface treatment:	No data available.

10. Stability and reactivity

Reactivity:	Material is stable under normal conditions.
Chemical Stability:	No data available.
Possibility of hazardous reactions:	Stable; however, may decompose if heated.
Conditions to avoid:	Avoid exposure to high temperatures or direct sunlight. Do not freeze.
Incompatible Materials:	Avoid contact with oxidizers or reducing agents.



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Hazardous Decomposition Products:

By heating and fire, corrosive vapors/gases may be formed.

11. Toxicological information

Information on toxicological effects

- Inhalation:** May cause respiratory irritation.
- Skin Contact:** Causes severe skin burns.
- Eye contact:** Risk of serious damage to eyes.
- Ingestion:** No data available.

Information on likely routes of exposure

Acute toxicity (list all possible routes of exposure)

Oral

- Product:** No data available.
- Components:**
 - Hydrochloric acid No data available.
 - p-dimethylaminocinnamaldehyde No data available.

Dermal

- Product:** ATEmix: 14,490 mg/kg
- Components:**
 - Hydrochloric acid LD 50 (Mouse): 1,449 mg/kg
 - p-dimethylaminocinnamaldehyde No data available.

Inhalation

- Product:** No data available.
- Components:**
 - Hydrochloric acid LC 50 (Rat, 4 h): 1405 ppm LC 50 (Rat, 1 h): 2810 ppm LOAEL (Guinea pig, 30 min): <= 320 ppm Gas; 2 = reliable with restrictions; Experimental result, Supporting study, Gas LC 50 (Mouse, 5 min): 2644 ppm Inhalation; 2 = reliable with restrictions; Experimental result, Supporting study, Inhalation LC 50 (Rat, 5 min): 40989 ppm Inhalation; 2 = reliable with restrictions; Experimental result, Key study, Inhalation LC 50 (Rat, 5 min): 4701 ppm Inhalation; 2 = reliable with restrictions; Experimental result, Key study, Inhalation LC 50 (Mouse, 5 min): 13745 ppm Inhalation; 2 = reliable with restrictions; Experimental result, Supporting study, Inhalation LC 50 (Mouse, 5 min): 3.2 mg/l Inhalation; 2 = reliable with restrictions; Experimental result, Supporting study,



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Inhalation LC 50 (Rat, 5 min): 8.3 mg/l Inhalation; 2 = reliable with restrictions; Experimental result, Key study, Inhalation LD (Guinea pig, 30 min): >= 1040 ppm Gas; 2 = reliable with restrictions; Experimental result, Supporting study, Gas LC 50 (Mouse, 5 min): 16.5 mg/l Inhalation; 2 = reliable with restrictions; Experimental result, Supporting study, Inhalation LC 50 (Rat, 5 min): 45.6 mg/l Inhalation; 2 = reliable with restrictions; Experimental result, Key study, Inhalation
No data available.

p-
dimethylaminocinnamaldehyde

Repeated dose toxicity

Product:

No data available.

Components:

Hydrochloric acid

NOAEL (Mouse(Female, Male), Inhalation, 4 - 91 d): 20 ppm(m)
Experimental result, Key study Inhalation

NOAEL (Rat(Female, Male), Inhalation, 4 - 91 d): 10 ppm(m)

Experimental result, Key study Inhalation

NOAEL (Rat(Female, Male), Inhalation, 4 - 91 d): 20 ppm(m)

Experimental result, Key study Inhalation

LOAEL (Mouse(Female, Male), Inhalation, 4 - 91 d): 50 ppm(m)

Experimental result, Key study Inhalation

NOAEL (Guinea pig; Monkey; Rabbit(female), Inhalation, 2 - 20 d): 0.05 mg/l
Experimental result, Supporting study Inhalation

No data available.

p-
dimethylaminocinnamaldehyde

Skin Corrosion/Irritation

Product:

Causes severe burns.

Components:

Hydrochloric acid

No data available.

p-
dimethylaminocinnamaldehyde

No data available.

Serious Eye Damage/Eye Irritation

Product:

Risk of serious damage to eyes.

Components:

Hydrochloric acid

Category 1 in vivo Rabbit, 1 hrs: EU

Category 1 in vivo Rabbit, 1 d: EU

Category 1 in vivo Rabbit, 1 - 21 d: EU

Category 1 in vivo Rabbit, 3 - 7 d: EU

Category 1 in vivo Rabbit, 1 - 24 hrs: EU

Category 1 in vivo Rabbit, 1 - 7 d: EU

Category 1 in vivo Rabbit, 1 - 2 d: EU

p-
dimethylaminocinnamaldehyde

No data available.

Respiratory or Skin Sensitization



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Product: No data available.

Components:
Hydrochloric acid No data available.
p- dimethylaminocinnamaldehyde No data available.

Carcinogenicity

Product: No data available.

Components:
Hydrochloric acid No data available.
p- dimethylaminocinnamaldehyde No data available.
hyde

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogens present or none present in regulated quantities

ACGIH: US.ACGIH Threshold Limit Values:

No carcinogens present or none present in regulated quantities

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogens present or none present in regulated quantities

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity

In vitro

Product: No data available.

Components:
Hydrochloric acid No data available.
p- dimethylaminocinnamaldehyde No data available.
hyde

In vivo

Product: No data available.

Components:
Hydrochloric acid No data available.
p- dimethylaminocinnamaldehyde No data available.
hyde

Reproductive toxicity

Product: No data available.

Components:
Hydrochloric acid No data available.
p- dimethylaminocinnamaldehyde No data available.
hyde



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Specific Target Organ Toxicity - Single Exposure

Product: Category 3 with respiratory tract irritation. May cause respiratory irritation.

Components:

Hydrochloric acid	No data available.
p-dimethylaminocinnamaldehyde	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Components:

Hydrochloric acid	No data available.
p-dimethylaminocinnamaldehyde	No data available.

Aspiration Hazard

Product: No data available.

Components:

Hydrochloric acid	No data available.
p-dimethylaminocinnamaldehyde	No data available.

Information on health hazards

Other hazards

Product: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: Not expected to be harmful to aquatic organisms.

Components:

Hydrochloric acid	LC 50 (Western mosquitofish (<i>Gambusia affinis</i>), 96 h): 282 mg/l Mortality LC 50 (Western mosquitofish (<i>Gambusia affinis</i>), 48 h): 282 mg/l Mortality LC 50 (Western mosquitofish (<i>Gambusia affinis</i>), 24 h): 282 mg/l Mortality
p-dimethylaminocinnamaldehyde	LC 50 (<i>Pimephales promelas</i> , 96 h): 5.9 mg/l

Aquatic Invertebrates

Product: No data available.

Components:



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Hydrochloric acid	LC 50 (Common shrimp, sand shrimp (<i>Crangon crangon</i>), 48 h): 260 mg/l Mortality
	LC 50 (Green or European shore crab (<i>Carcinus maenas</i>), 48 h): 240 mg/l Mortality
p-dimethylaminocinnamaldehyde	No data available.

Toxicity to Aquatic Plants

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
p-dimethylaminocinnamaldehyde	No data available.

Toxicity to microorganisms

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
p-dimethylaminocinnamaldehyde	No data available.

Chronic hazards to the aquatic environment:

Fish

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
p-dimethylaminocinnamaldehyde	No data available.

Aquatic Invertebrates

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
p-dimethylaminocinnamaldehyde	No data available.

Toxicity to Aquatic Plants

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
p-dimethylaminocinnamaldehyde	No data available.

Toxicity to microorganisms



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Product: No data available.
Components:
Hydrochloric acid No data available.
p- No data available.
dimethylaminocinnamaldehyde

Persistence and Degradability

Biodegradation

Product: No data available.
Components:
Hydrochloric acid No data available.
p- No data available.
dimethylaminocinnamaldehyde

BOD/COD Ratio

Product: No data available.
Components:
Hydrochloric acid No data available.
p- No data available.
dimethylaminocinnamaldehyde

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.
Components:
Hydrochloric acid No data available.
p- No data available.
dimethylaminocinnamaldehyde

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.
Components:
Hydrochloric acid No data available.
p- No data available.
dimethylaminocinnamaldehyde

Mobility in soil:

Product No data available.
Components:
Hydrochloric acid No data available.
p- No data available.
dimethylaminocinnamaldehyde



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Results of PBT and vPvB assessment:

Product	No data available.
Components:	
Hydrochloric acid	No data available.
p-dimethylaminocinnamaldehyde	No data available.

Other adverse effects:

Other hazards	
Product:	No data available.

13. Disposal considerations

General information:	Dispose of waste and residues in accordance with local authority requirements.
Disposal methods:	This material and/or its container must be disposed of as hazardous waste.
Contaminated Packaging:	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

14. Transport information

DOT

UN number or ID number:	UN 1789
UN Proper Shipping Name:	Hydrochloric acid
Transport Hazard Class(es)	
Class:	8
Label(s):	8
Packing Group:	II
Marine Pollutant:	No
Special precautions for user:	This package conforms to 49 CFR 173.4



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IMDG

UN number or ID number: UN 1789
UN Proper Shipping Name: HYDROCHLORIC ACID
Transport Hazard Class(es)
Class: 8
Subsidiary risk: 8
EmS No.: F-A, S-B
Packing Group: II
Environmental Hazards
Marine Pollutant: No

Special precautions for user: EQ

IATA

UN number or ID number: UN 1789
Proper Shipping Name: Hydrochloric acid
Transport Hazard Class(es):
Class: 8
Subsidiary risk: 8
Packing Group: II
Environmental Hazards
Marine pollutant: No

Special precautions for user: EQ

15. Regulatory information**US Federal Regulations**

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity
Hydrochloric acid



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Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Skin Corrosion or Irritation, Serious eye damage or eye irritation

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

None present or none present in regulated quantities.

US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting

<u>Chemical Identity</u>	<u>% by weight</u>
Hydrochloric acid	1.0%

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

<u>Chemical Identity</u>
Hydrochloric acid
Hydrochloric acid

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

<u>Chemical Identity</u>
Hydrochloric acid

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

US. New Jersey Worker and Community Right-to-Know Act

<u>Chemical Identity</u>
Hydrochloric acid

US. Massachusetts RTK - Substance List

<u>Chemical Identity</u>
Hydrochloric acid

US. Pennsylvania RTK - Hazardous Substances

<u>Chemical Identity</u>
Hydrochloric acid

US. Rhode Island RTK

<u>Chemical Identity</u>
Hydrochloric acid

International regulations



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Montreal protocol
Not applicable

Stockholm convention
Not applicable

Rotterdam convention
Not applicable

Kyoto protocol
Not applicable

16. Other information, including date of preparation or last revision

Issue Date: 03/04/2022

Version #: 2.2

Further Information: No data available.

Disclaimer: Disclaimer:
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