

SAFETY DATA SHEET

according to 29 CFR 1910.1200 and GHS

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Kovac's Indole Reagent

Revision 2
Revision date 2019-10-30

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

1.1. Product identifier

Product name	Kovac's Indole Reagent
Product code	KO-122, BLX-KOV

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

Product Use	[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [PC21] Laboratory chemicals;
Description	Intended for laboratory use only.

1.3. Details of the supplier of the safety data sheet

Company	Neogen Corporation
Address	620 Leshler Place Lansing MI 48912 USA
Web	www.neogen.com
Telephone	517-372-9200/800-234-5333
Email	SDS@neogen.com

1.4. Emergency telephone number


	24 hours: Medical: 1-800-498-5743 (U.S. and Canada) or 1-651-523-0318 (international) Spill/CHEMTREC: 1-800-424-9300 (U.S. and Canada) or 1-703-527-3887 (international)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.2. Classification - GHS	Flam. Liq. 3: H226; Skin Corr. 1A: H314; Acute Tox. 4: H332; STOT SE 3: H335;
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2.2. Label elements

Hazard pictograms	
Signal Word	Danger
Hazard Statement	Flam. Liq. 3: H226 - Flammable liquid and vapour. Skin Corr. 1A: H314 - Causes severe skin burns and eye damage. Acute Tox. 4: H332 - Harmful if inhaled. STOT SE 3: H335 - May cause respiratory irritation.

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2.2. Label elements

Precautionary Statement: Prevention	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P264 - Wash thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary Statement: Response	P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 - Call a POISON CENTER/doctor/ if you feel unwell. P363 - Wash contaminated clothing before reuse.
Precautionary Statement: Storage	P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to an approved hazardous/special waste disposal facility in accordance with local and national regulations

2.3. Other hazards

Other hazards	Contains substance(s) which are hazardous to the environment.
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SECTION 3: Composition/information on ingredients

3.2. Mixtures

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
1-pentanol	603-200-00-1	71-41-0	200-752-1		70 - 80%	Flam. Liq. 3: H226; Acute Tox. 4: H332; STOT SE 3: H335; Skin Irrit. 2: H315;
Hydrogen chloride	017-002-00-2	7647-01-0	231-595-7		20 - 30%	Acute Tox. 3: H331; Skin Corr. 1A: H314;

Description

	Concentrations listed are not product specifications.
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Further information

	Full text of Hazard Statements listed in this Section is provided in Section 16.
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SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air. If breathing is difficult give oxygen. If breathing stops, provide artificial respiration. Seek medical attention if irritation or symptoms persist.
Eye contact	Rinse immediately with plenty of water. Contact lenses should be removed. Seek medical attention if irritation or symptoms persist.
Skin contact	Rinse immediately with plenty of water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.
Ingestion	DO NOT INDUCE VOMITING unless advised to do so by a doctor. Rinse mouth thoroughly. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

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4.2. Most important symptoms and effects, both acute and delayed

Inhalation	Harmful if inhaled. Inhalation may cause coughing, tightness of the chest and irritation of the respiratory system.
Eye contact	Causes burns. Causes severe inflammation and may damage the cornea. Danger of very serious irreversible effects.
Skin contact	Causes burns. Corrosive to living tissue.
Ingestion	Causes severe burns. Ingestion may cause nausea and vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

	Remove the affected person from the source of contamination immediately. Transfer to hospital if there are burns or symptoms of poisoning. IF exposed or concerned: Get medical advice/attention. If medical advice is needed, have product container or label at hand.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

	In case of fire, use carbon dioxide (CO ₂), Alcohol resistant foam, Dry chemical, Foam. Use extinguishing media appropriate to the surrounding fire conditions.
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5.2. Special hazards arising from the substance or mixture

	In case of fire and/or explosion do not breathe fumes. Fire will produce dense black smoke. Vapor may travel considerable distance to source of ignition and flash back. Heat will increase pressure in sealed containers.
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5.3. Advice for firefighters

	Flammable liquid and vapour. In case of fire and/or explosion do not breathe fumes. Wear self contained breathing apparatus and protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

	Flammable liquid. Adopt best Manual Handling considerations when handling, carrying and dispensing. Avoid sparks, flames, heat and sources of ignition. Ensure adequate ventilation of the working area. Use as appropriate: Protective equipment. Avoid prolonged or repeated exposure.
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6.2. Environmental precautions

	Prevent further spillage if safe. Clean spillage area thoroughly with plenty of water. Do not flush into surface water. Do not let product contaminate subsoil.
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6.3. Methods and material for containment and cleaning up

	Flammable liquid. Absorb with inert, absorbent material. Collect spillage. Transfer to suitable, labelled containers for disposal. Dispose of this material and its container to hazardous or special waste collection point. Do not contaminate water by cleaning of equipment or disposal of wastes. Clean with detergents. Avoid solvents.
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6.4. Reference to other sections

	See section 2, 8 & 13 for further information.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

	Adopt best Manual Handling considerations when handling, carrying and dispensing. Avoid contact with eyes. Do not eat, drink or smoke in areas where this product is used or stored. Ensure adequate ventilation of the working area. Do not contaminate water by cleaning of equipment or disposal of wastes. Use as appropriate: Protective clothing.
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7.1. Precautions for safe handling

Read the entire label and follow all use directions, restrictions, and precautions.

7.2. Conditions for safe storage, including any incompatibilities

Flammable liquid and vapour. Contact with combustible material may cause fire. Store in correctly labelled containers. Keep container tightly closed. Do not contaminate water, food, or feed by storage or disposal. Follow label instructions.

7.3. Specific end use(s)

See Section 1.2 for further information.


SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limit Values

Hydrogen chloride	ACGIH TLV TWA: -	ACGIH TLV STEL: C 2 ppm
	Notations: A4	OSHA PEL 8hr TWA ppm: (C)5
	OSHA PEL 8hr TWA mg m3: (C)7	Skin Designation: -
	NIOSH REL 10hr TWA ppm:	NIOSH REL 10hr TWA mg m3:
	NIOSH REL 15 min ST ppm:	NIOSH REL 15 min ST mg m3:

8.2. Exposure controls

	
Appropriate engineering controls	Ensure adequate ventilation of the working area.
Individual protection measures	Use as appropriate: Protective equipment.
Eye / face protection	Wear: Chemical safety goggles, Face shield.
Skin protection - Hand protection	Wear: Chemical resistant gloves.
Skin protection - Other	Use as appropriate: Protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Occupational exposure controls	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from food, drink and animal feed and/ or feed products. Provide chemical shower. Provide eye wash station.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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9.1. Information on basic physical and chemical properties

State	Liquid
Color	Colorless/Light yellow
Odor	Alcoholic
Odor threshold	No data available
Evaporation rate	No data available
Flammability limits	Not applicable.
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Partition coefficient	No data available
Autoignition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Freezing Point	No data available
Boiling point	No data available
Flash point	< 60 °C
pH	No data available
Melting point	No data available
Solubility	Soluble in water

9.2. Other information

VOC (Volatile organic compounds)	No data available
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SECTION 10: Stability and reactivity

10.1. Reactivity

	Stable under normal conditions.
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10.2. Chemical stability

	Stable under normal conditions.
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10.3. Possibility of hazardous reactions

	Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.
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10.4. Conditions to avoid

	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
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10.5. Incompatible materials

	Contact with combustible material may cause fire. Keep away from oxidizing agents, Combustible materials, Amines.
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10.6. Hazardous decomposition products

	Carbon oxides.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	Harmful by inhalation.
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11.1. Information on toxicological effects

Skin corrosion/irritation	Causes severe burns. Corrosive to living tissue.
Serious eye damage/irritation	Causes burns. Causes severe inflammation and may damage the cornea. Danger of very serious irreversible effects.
Respiratory or skin sensitization	May cause allergic reactions in susceptible people.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	Listed by the International Agency for Research on Cancer (IARC) as a group 3 substance: evidence does not support the substance as a human carcinogen. Not listed in the National Toxicology Program (NTP) 14th Report on Carcinogens. Not listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. Not listed in the OSHA standard 1910.1003 Carcinogens.
Reproductive toxicity	No teratogenic effects reported.
STOT-single exposure	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT-repeated exposure	Component(s) may cause damage to human organs based on animal data.
Aspiration hazard	No Significant Hazard.
Repeated or prolonged exposure	Avoid prolonged or repeated exposure. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible. Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects.

11.1.2. Mixtures

	See Section(s) 3 for further information.
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11.1.3. Hazard Information

	See Section(s) 2 and 3 for further information.
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11.1.4. Toxicological information

	No data available
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11.1.5. Hazard Class

	See Section(s) 2 and 14 for further information.
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11.1.6. Classification Criteria

	Based on the Globally Harmonized System (GHS) considerations for the classification of mixtures. See Section 15 for regulatory citations.
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11.1.7. Information on likely routes of exposure

	Eye contact. Ingestion. Skin contact. Inhalation.
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11.1.8. Symptoms related to the physical, chemical and toxicological characteristics

	See Section(s) 4.2 for further information.
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11.1.9. Delayed and immediate effects as well as chronic effects from short and long-term exposure

	See Section(s) 4.2 for further information.
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11.1.10. Interactive effects

	No data available.
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11.1.11. Absence of specific data

	<1% of this mixture consists of ingredients of unknown acute toxicity.
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11.1.12. Mixture versus substance information

	See Section(s) 3 for further information.
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11.1.13. Other information

Caution - substance not yet fully tested.

SECTION 12: Ecological information

12.1. Toxicity

No data available

12.2. Persistence and degradability

No data is available on this product.

12.3. Bioaccumulative potential

No data is available on this product.

Partition coefficient

Kovac's Indole Reagent No data available

12.4. Mobility in soil

No data is available on this product.

12.5. Results of PBT and vPvB assessment

No data is available on this product.

12.6. Other adverse effects

Contains substance(s) which are hazardous to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of as special waste in compliance with local and national regulations.

Disposal methods

Do not contaminate water by cleaning of equipment or disposal of wastes. Do not flush into surface water. Dispose of in compliance with all local and national regulations.

Disposal of packaging

Nonrefillable container. Do not reuse or refill this container.
 If empty: Do not reuse this container. Place in trash or offer for recycling, if available.
 If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

SECTION 14: Transport information

Hazard pictograms



14.1. UN number

UN2924

14.2. UN proper shipping name

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14.2. UN proper shipping name

FLAMMABLE LIQUID, CORROSIVE, N.O.S. (1-Pentanol, Hydrochloric acid)

14.3. Transport hazard class(es)

DOT	3
Subsidiary risk	8
IMDG	3
Subsidiary risk	8
IATA	3
Subsidiary risk	8

14.4. Packing group

Packing group II

14.5. Environmental hazards

Environmental hazards	No
Marine pollutant	No

DOT

Hazard ID	338
Tunnel Category	(D/E)

IMDG

EmS Code	F-E S-C
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IATA

Packing Instruction (Cargo)	363
Maximum quantity	5 L
Packing Instruction (Passenger)	352
Maximum quantity	1 L

SECTION 15: Regulatory information

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

Regulations	Hazard Communication Standard: 29 Code of Federal Regulations 1910.1200: Occupational Safety and Health Standards: Z: Toxic and Hazardous Substances: Hazard Communication.
Chemical Inventories/Right-to-Know Lists:	<p>--International--.</p> <p>Basel Convention (Hazardous Waste): H3, H8.</p> <p>Chemical Weapons Convention (OPCW): This material contains no reportable components.</p> <p>Kyoto Protocol Greenhouse Gases: This material contains no reportable components.</p> <p>Mercosur Agreement: Applicable.</p> <p>Montreal Protocol: This material contains no reportable components.</p> <p>The Rotterdam Convention: This material contains no reportable components.</p> <p>The Stockholm Convention: This material contains no reportable components.</p> <p>--Asia and the ASEAN Nations--.</p> <p>Catalog of Hazardous Chemicals (China): [2165, 1-Pentanol, CAS No. 71-41-0], [2507, Hydrochloric acid, CAS No. 7647-01-0].</p> <p>Regulation of Minister of Trade of the Republic of Indonesia, Number 75, Year 2014, regarding The Second Amendment of Minister of Trade, Number 44, Year 2009, Regarding Provision, Distribution, and Control of Hazardous Substances: Usable hazardous and toxic material, [Hydrochloric acid, CAS No. 7647-01-0].</p>

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

Chemical Substances Control Law (Japan): Air Pollution Control Law., Specified substance, Water Pollution Control Law., Designated substance, [Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0].

Industrial Safety and Health Act, Dangerous Substances (Japan): Labeling/Notification required, Group-2 specified substance, [Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0].

Poisonous and Deleterious Substances Act (Japan): Deleterious substance, [Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0].

Chemical Substances Subject to Permission (Korea): Accident precaution, [42, Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0].

Restricted or Prohibited Substances (Korea): Toxic substance, [97-1-203, Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0].

Use and Standards of Exposure of Chemicals Hazardous to Health (USECHH), Regulation 2000 (Malaysia): CLASS regulation, Schedule I exposure standard, [Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0].

Philippine Inventory of Chemicals and Chemical Substances (PICCS): Toxic Substances and Hazardous and Nuclear Wastes Control Act (RA6969):, [1-Pentanol, CAS No. 71-41-0], [Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0].

Republic Act 9165, Comprehensive Dangerous Drugs, Table II, Controlled Precursor and Essential Chemical (CPEC) (Philippines):. [Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0].

Taiwan Toxic and Concerned Chemical Substances Control Act (TCCSCA): This material contains no reportable components.

Hazardous Substances Act (Thailand): Type 3, [Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0].

Law on Chemicals (Vietnam): Annex I, Appendix VII, [1-Pentanol, CAS No. 71-41-0]. Annex I, Appendix IV, Appendix V, Appendix VI, Appendix VII, [Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0].

--Australia and New Zealand--.

Australian Dangerous Goods Code: Class 3.

Australian Inventory of Chemical Substances (AICS): All ingredients listed or exempt.

New Zealand Inventory of Chemicals (NZIoC): All ingredients listed or exempt.

--European Union (EU) and the United Kingdom (UK)--.

Annex XVII for REACH: Restricted, Flammable, [1-Pentanol, CAS No. 71-41-0].

Article 95 of the Biocidal Products Regulation (BPR): [PT2, Hydrochloric acid (Hydrogen chloride), CAS No. 7647-01-0].

Authorization List (Annex XIV of REACH): This material contains no reportable components.

--North America--.

Domestic/Non-Domestic Substances Lists (DSL/NDSL): All ingredients listed or exempt.

Toxic Substances Control Act (TSCA): All ingredients listed or exempt.

Massachusetts Right-to-Know Hazardous Substance List: Hydrochloric acid.

New Jersey Worker and Community Right to Know Act: Hydrogen chloride.

Pennsylvania Right to Know Law: Hydrochloric acid.

Rhode Island Right-to-Know General Law: 1-Pentanol, Hydrochloric acid.

California Prop 65: This material contains no reportable components.

Inventories

Ingredient	TSCA	MA	SARA313	CALPROP65	CWA307	CAA112	CWA311	SARA302	SARA304
1-pentanol (1-Pentanol)	Y	N	N	N	N	N	N	N	N
Hydrogen chloride (Hydrochloric acid)	Y	Y	Y 1.0	N	N	Y	Y	Y 500	Y 5,000

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SECTION 16: Other information

Other information

Revision

This document differs from the previous version in the following areas:

- 1 - Product Use.
- 2 - Other hazards.
- 2 - 2.1.2. Classification - GHS.
- 2 - Hazard pictograms.
- 2 - Precautionary Statement: Prevention.
- 2 - Precautionary Statement: Response.
- 2 - Precautionary Statement: Storage.
- 4 - Inhalation.
- 4 - Eye contact.
- 4 - Skin contact.
- 4 - Ingestion.
- 8 - Skin protection - Hand protection.
- 8 - Eye / face protection.
- 9 - 9.1. Information on basic physical and chemical properties (Odor).
- 9 - 9.1. Information on basic physical and chemical properties (Flash point).
- 9 - 9.1. Information on basic physical and chemical properties (Solubility).
- 10 - 10.5. Incompatible materials.
- 11 - Acute toxicity.
- 11 - Skin corrosion/irritation.
- 11 - Repeated or prolonged exposure.
- 11 - Carcinogenicity.
- 11 - Serious eye damage/irritation.
- 11 - 11.1.7. Information on likely routes of exposure.
- 12 - 12.6. Other adverse effects.
- 13 - Disposal of packaging.
- 14 - DOT.
- 14 - IMDG.
- 14 - IATA.
- 15 - Chemical Inventories/Right-to-Know Lists:

Acronyms

ACGIH: American Conference of Governmental Industrial Hygienists.
 ADR/RID: European Agreements Concerning the International Carriage of Dangerous Goods by Rail (RID) and by Road (ADR).
 CAS No.: Chemical Abstracts Service.
 GHS: Globally Harmonized System.
 HCS 2012: Hazard Communication Standard (2012 revision).
 IATA: International Air Transport Association.
 ICAO: International Civil Aviation Organization.
 IMDG: International Maritime Dangerous Goods.
 LC: Lethal concentration.
 LD: Lethal dose.
 OEL: Occupational exposure limit.
 OSHA: U.S. Occupational Safety and Health Administration.
 PEL: Permissible Exposure Limit.
 REACH: Registration, Evaluation, Authorization, and Restriction of Chemicals.
 SVHC: Substance of very high concern.
 UN: United Nations.
 US DOT: United States Department of Transportation.
 VOC: Volatile Organic Compound.
 WEL: Workplace Exposure Limit.

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Other information

Text of Hazard Statements in Section 3	Flam. Liq. 3: H226 - Flammable liquid and vapour. Skin Irrit. 2: H315 - Causes skin irritation. Acute Tox. 4: H332 - Harmful if inhaled. STOT SE 3: H335 - May cause respiratory irritation. Skin Corr. 1A: H314 - Causes severe skin burns and eye damage. Acute Tox. 3: H331 - Toxic if inhaled.
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Further information

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