

# SAFETY DATA SHEET

according to WHS and ADG requirements

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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

<b>Precautionary Statement: Prevention</b>	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.
<b>Precautionary Statement: Response</b>	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.
<b>Precautionary Statement: Storage</b>	P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
<b>Precautionary Statement: Disposal</b>	P501 - Dispose of contents/container to an approved hazardous/special waste disposal facility in accordance with local and national regulations

## 2.3. Other hazards

<b>Other hazards</b>	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

<b>Inhalation</b>	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.
<b>Eye contact</b>	Rinse immediately with plenty of water. Contact lenses should be removed. Seek medical attention if irritation or symptoms persist.
<b>Skin contact</b>	Rinse immediately with plenty of water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.
<b>Ingestion</b>	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

## Kovac's Indole Reagent

Revision 2  
Revision date 2019-10-30**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 <sub>2</sub> ), 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. Vapour 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.
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## 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.
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## 7.3. Specific end use(s)

	See Section 1.2 for further information.
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## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

## 8.1.1. Exposure Limit Values

Hydrogen chloride	TWA ppm: 5 Peak limitation STEL ppm: - Advisory Carc Cat: -	TWA mg/m3: 7.5 Peak limitation STEL mg/m3: -
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## 8.2. Exposure controls

	
8.2.1. Appropriate engineering controls	Ensure adequate ventilation of the working area.
8.2.2. Individual protection measures	Use as appropriate: Protective equipment.
Eye / face protection	Wear: Chemical safety goggles, Face shield.
Skin protection - Handprotection	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 feedingstuffs. 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

<b>Appearance</b>	Liquid
<b>Colour</b>	Colourless/Light yellow
<b>Odour</b>	Alcoholic
<b>Odour threshold</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Vapour pressure</b>	No data available
<b>Vapour density</b>	No data available
<b>Relative density</b>	No data available
<b>Partition coefficient</b>	No data available
<b>Autoignition temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidising properties</b>	No data available
<b>Freezing Point</b>	No data available
<b>Initial boiling point</b>	No data available
<b>Flash point</b>	< 60 °C
<b>pH</b>	No data available
<b>Melting point</b>	No data available
<b>Solubility</b>	Soluble in water

## 9.2. Other information

<b>VOC (Volatile organic compounds)</b>	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 oxidising 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

<b>Acute toxicity</b>	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 sensitisation	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 Harmonised 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)

ADG	3
Subsidiary risk	8
IMDG / GGVSee	3
Subsidiary risk	8
IATA / ICAO / DGR	3
Subsidiary risk	8

## 14.4. Packing group

Packing group II

## 14.5. Environmental hazards

Environmental hazards	No
Marine pollutant	No

## ADG

Hazard ID	338
Tunnel Category	(D/E)

## IMDG / GGVSee

EmS Code F-E S-C

## IATA / ICAO / DGR

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

<b>Regulations</b>	This document has been prepared in accordance with the requirements set out in the Work Health and Safety Regulation 2017 under the Work Health and Safety Act 2011.
<b>Chemical Inventories/Right-to-Know Lists:</b>	<p>--International--.</p> <p>Basel Convention (Hazardous Waste): H3, H8.            Chemical Weapons Convention (OPCW): This material contains no reportable components.            Kyoto Protocol Greenhouse Gases: This material contains no reportable components.            Mercosur Agreement: Applicable.            Montreal Protocol: This material contains no reportable components.            The Rotterdam Convention: This material contains no reportable components.            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].            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].

Authorisation 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 Proposition 65: This material contains no reportable components.

## SECTION 16: Other information

## Other information

## Revision

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

1 - Product Use.

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## Other information

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 - Handprotection.  
 8 - Eye / face protection.  
 9 - 9.1. Information on basic physical and chemical properties (Odour).  
 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 - ADG.  
 14 - IMDG / GGVSee.  
 14 - IATA / ICAO / DGR.  
 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: U.S. Hazard Communication Standard (2012 revision).  
 IATA: International Air Transport Association.  
 ICAO: International Civil Aviation Organisation.  
 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, Authorisation, 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.

## 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.

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## Other information

Skin Corr. 1A: H314 - Causes severe skin burns and eye damage.  
Acute Tox. 3: H331 - Toxic if inhaled.

## Further information

DISCLAIMER: The information and recommendations set forth herein ("Information") are presented in good faith and believed to be correct as of the date issued. No representation is made regarding the completeness or accuracy of the Information. Further, because of the many factors that affect the use of this product, the Information is supplied upon the condition that the person(s) receiving it will make their own determination regarding its suitability for their own unique purpose(s), prior to use.

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