

Infosafe No™ 3CHOU Issue Date : January 2021 RE-ISSUED by AMBERSCI




Product Name **KOVAC'S REAGENT**

Classified as hazardous

1. Identification

GHS Product Identifier	KOVAC'S REAGENT
Product Code	KOVC
Company Name	AMBER SCIENTIFIC PTY LTD
Address	24 - 28 Stratton Drive Traralgon Victoria 3844 Australia
Telephone/Fax Number	Tel: (03) 5176 2855
Emergency phone number	CHEMCALL (24 hours): 1800 127 406 (Australia) / +64-4-917-98888 (International)
Recommended use of the chemical and restrictions on use	Used in hospital and pathology laboratories only.
Other Information	Amber Scientific Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon Amber Scientific Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of Amber Scientific Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

2. Hazard Identification

GHS classification of the substance/mixture	This product is classified as HAZARDOUS according to Approved Criteria for Classifying Hazardous Substances [NOSHC:1008] and/or list of Designated Hazardous Substances [NOHSC:10005] and the Hazardous Chemical Information System [HCIS] Worksafe Australia May 2014. DANGEROUS GOOD: Dangerous good classification according to the Australian Dangerous Goods Code. Flammable Liquids: Category 3 Corrosive to Metals: Category 1 Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 1 Acute Toxicity - Inhalation: Category 4 Specific Target Organ Toxicity - Single Exposure Category 3 (respiratory tract irritation)
Signal Word (s)	DANGER
Hazard Statement (s)	H226 Flammable liquid and vapour. H290 May be corrosive to metals H315 Causes skin irritation. H318 Causes serious eye damage. H332 Harmful if inhaled. H335 May cause respiratory irritation.
Pictogram (s)	Flame, Corrosion, Exclamation mark
Precautionary statement - Prevention	   P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P233 Keep container tightly closed. P240 Ground/bond container and receiving equipment. P242 Use only non-sparking tools.

Infosafe No™ 3CHOU	Issue Date : January 2021	RE-ISSUED by AMBERSCI
--------------------	---------------------------	-----------------------

 Product Name **KOVAC'S REAGENT**

Classified as hazardous

Precautionary statement – Response	P243 Take precautionary measures against static discharge. P264 Wash thoroughly after handling. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection. P234 Keep only in original container. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P332+P313 If skin irritation occurs: Get medical advice/attention. P362 Take off contaminated clothing and wash before reuse. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician. P370+P378 In case of fire: Use foam, dry chemical, CO2 or water spray for extinction. P390 Absorb spillage to prevent material damage.
Precautionary statement – Storage	P403+P233 Store in a wellventilated place. Keep container tightly closed. P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. P406 Store in corrosive resistant container with a resistant inner liner.
Precautionary statement – Disposal	P501 Dispose of contents/container to an approved waste disposal plant.

3. Composition/information on ingredients

Ingredients	Name	CAS	Proportion
	Isoamyl alcohol	123-51-3	72.5 %
	Hydrochloric Acid	7647-01-0	22.5 %
	p-Dimethylaminobenzaldehyde	100-10-7	5 %

4. First-aid measures

Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop. Do not use mouth-to-mouth method, use an alternative method or a proper respiratory device.
Ingestion	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek immediate medical advice.
Skin	Immediately remove contaminated clothing and wash affected area with water for at least 15 minutes. Ensure contaminated clothing is washed before re-use. Seek medical advice /attention depending on the severity.
Eye contact	In case of eye contact, hold eyelids open and rinse with water for at least 15 minutes. Seek immediate medical attention.
First Aid Facilities	Maintain eyewash fountain and safety shower in work area.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of the patient.
Most important symptoms/effects, acute and delayed	Symptoms Caused by Exposure: Inhalation: May be harmful if inhaled. May cause respiratory irritation leading to headache, cough, dizziness incoordination and chest pains. Skin Contact: Causes skin irritation, itchiness and redness. Eye Contact: Causes serious eye irritation, stinging, tearing and blurred vision. May cause eye damage. Ingestion: Harmful if swallowed. May cause irritation of mouth, throat and stomach, mucous build up and stomach pain.
Other Information	For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

Infosafe No™ 3CHOU	Issue Date : January 2021	RE-ISSUED by AMBERSCI
--------------------	---------------------------	-----------------------

Product Name **KOVAC'S REAGENT**

Classified as hazardous

5. Fire-fighting measures

Hazards from Combustion Products	Oxides of carbon.
Specific Methods	Caution: Use of water spray when fighting fire may be inefficient. Small fire: Use foam, dry chemical, CO2 or water spray. Large fire: Use foam, fog or water spray - Do NOT use water jets. If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out. Avoid getting water inside the containers.
Specific hazards arising from the chemical	FLAMMABLE: This product has a low flash point. Will be easily ignited by heat, sparks or flames. Vapours will form explosive mixtures with air. Vapours will travel to source of ignition and flash back. Many vapours are heavier than air and will collect in low or confined areas (drains, basements, tanks). Many liquids are lighter than water. Containers may explode on heating. Fire will produce irritating, poisonous or corrosive gases. Vapours from run-off may create an explosion hazard.
Hazchem Code	•3WE
Precautions in connection with Fire	Wear SCBA and fully encapsulating, gas-tight suit when handling these substances. Structural firefighter's uniform is NOT effective for these materials.

6. Accidental release measures

Spills & Disposal	Eliminate all ignition sources (no smoking, flares, sparks or flame) within at least 50m. All equipment used when handling the product must be earthed. Do NOT touch or walk through spilled material. Stop leak if safe to do so. Prevent entry into waterways, drains, confined areas. Vapour-suppressing foam may be used to control vapours. Water spray may be used to knock down or divert vapour clouds. Absorb with earth, sand or other non-combustible material. Use clean, non-sparking tool to collect absorbed material and place it into loosely-covered metal or plastic containers for later disposal. SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.
Personal Precautions	Remove ignition sources Evacuate the area of all non-essential personnel. Avoid inhalation, contact with skin, eyes and clothing.
Personal Protection	Wear protective clothing specified for normal operations (see Section 8)
Clean-up Methods - Small Spillages	Absorb or contain liquid with sand, earth or spill control material. Shovel up using non sparking tools and place in a labelled, sealable container for subsequent safe disposal. Put leaking containers in a labelled drum or overdrum.

7. Handling and storage

Precautions for Safe Handling	Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area. Take precautionary measures against static discharge. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry and well ventilated area out of direct sunlight. Keep in original container tightly closed when not in use. Protect from heat, sparks, open flames and other sources of ignition. Keep away from strong oxidising agents and alkalies.
Storage Regulations	Refer Australian Standard AS 1940-2017 'The storage and handling of flammable and combustible liquids'.
Unsuitable Materials	Various plastics, rubber.

8. Exposure controls/personal protection

Infosafe No™ 3CHOU Issue Date : January 2021 RE-ISSUED by AMBERSCI

Product Name **KOVAC'S REAGENT**

Classified as hazardous

Occupational exposure limit values	Name	STEL		TWA		Footnote
		mg/m3	ppm	mg/m3	ppm	
	Isoamyl alcohol	452	125	361	100	
	Hydrochloric Acid			7.5	5	Peak limitation
Other Exposure Information	<p>These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.</p> <p>The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.</p> <p>'Peak Limitation' - a ceiling concentration which should not be exceeded over a measurement period which should be as short as possible but not exceeding 15 minutes.</p>					
Appropriate engineering controls	<p>Maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.</p>					
Respiratory Protection	<p>Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.</p>					
Eye Protection	<p>The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.</p>					
Hand Protection	<p>Wear gloves of impervious material conforming to AS/NZS 2161: Occupational protective gloves - Selection, use and maintenance. Final choice of appropriate glove type will vary according to individual circumstances. This can include methods of handling, and engineering controls as determined by appropriate risk assessments. Avoid skin contact when removing gloves from hands, do not touch the gloves outer surface. Dispose of gloves as hazardous waste.</p>					
Personal Protective Equipment	<p>Personal protective equipment should not solely be relied upon to control risk and should only be used when all other reasonably practicable control measures do not eliminate or sufficiently minimise risk. Guidance in selecting personal protective equipment can be obtained from Australian, Australian/New Zealand or other approved standards.</p>					
Footwear	<p>Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.</p>					
Body Protection	<p>Wear suitable protective clothing to prevent skin contact. Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.</p>					
Hygiene Measures	<p>Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.</p>					

9. Physical and chemical properties

Form Liquid
Colour Straw

Infosafe No™ 3CHOU	Issue Date : January 2021	RE-ISSUED by AMBERSCI
--------------------	---------------------------	-----------------------

Product Name **KOVAC'S REAGENT**

Classified as hazardous

Odour	Mild pleasant odour.
Flash Point	43 °C (C.C.) isoamyl alcohol
Flammability	FLAMMABLE.
Flammable Limits - Lower	1.2 vol% isoamyl alcohol
Flammable Limits - Upper	8 vol% isoamyl alcohol

10. Stability and reactivity

Chemical Stability	Stable under normal use conditons.
Conditions to Avoid	Light. Heat, flames, ignition sources and incompatibles.
Incompatible Materials	Strong oxidising agents, acid chlorides, acid anhydrides, alkali metals, alkaline earth metals, fluorine, oxygen and reducing agents.
Hazardous Decomposition Products	Oxides of carbon. May produce acrid smoke and irritating fumes when heated to decomposition.
Possibility of hazardous reactions	Contact with strong oxidising agents increases the risk of fire and explosion. Contact with reducing agents and hydrogen trisulfide causes a vigorous reaction and explosion.
Hazardous Polymerization	Will not occur.

11. Toxicological Information

Acute Toxicity - Oral	LD50 (rat): 1300 mg/kg isoamyl alcohol
Acute Toxicity - Dermal	LD50 (rabbit): > 3000 mg/kg isoamyl alcohol
Ingestion	May be harmful if swallowed. Absorption of large quantities may cause the following symptoms: weakness, pain, burning sensations in the chest and stomach, abdominal pain, headache, dizziness, nausea, CNS disorders, feeling of drunkenness or intoxication, inability to move, unconsciousness, coma.
Inhalation	Harmful by inhalation. Vapour causes irritation of the mucous membranes in the nose, throat and respiratory tract. Symptoms include of headache, difficulting in breathing, chest pains, coughing, dizziness, nausea, vomiting, feelings of drunkenness and unconsciousness. Exposure to high concentrations may result in a narcotic effect, central nervous system disturbances and death.
Skin	May cause skin irritation. Symptoms include redness and pain.
Eye	Causes serious eye damage. Contact with liquid may cause severe pain and irritation.
Respiratory sensitisation	Not classified based on available information.
Skin Sensitisation	Not classified based on available information.
Germ cell mutagenicity	Not classified based on available information.
Carcinogenicity	Not classified based on available information.
Reproductive Toxicity	Not classified based on available information.
STOT-single exposure	Not classified based on available information.
STOT-repeated exposure	Not classified based on available information.
Chronic Effects	Repeated or prolonged skin exposure may cause dermatitis. Prolonged or repeated exposure may cause irreversible damage to health, lung damage or death.

Infosafe No™ 3CHOU Issue Date : January 2021 RE-ISSUED by AMBERSCI

Product Name **KOVAC'S REAGENT**

Classified as hazardous

Serious eye damage/irritation	Serious eye damage/eye irritation Category 1 H318 Causes serious eye damage.
Mutagenicity	Not classified based on available information.
Respiratory Irritation	Specific Target Organ Toxicity - Single Exposure Category 3 (respiratory tract irritation) H335 May cause respiratory irritation.
Skin corrosion/irritation	Skin corrosion/irritation Category 2 H315 Causes skin irritation.

12. Ecological information

Persistence and degradability	Readily biodegradable - isoamyl alcohol.
Mobility	No data available.
Bioaccumulative Potential	No data available.
Other Information	Do not allow to enter waters, waste water, or soil!

13. Disposal considerations

Disposal Considerations	Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and disposed of according to relevant local, state and federal government regulations.
--------------------------------	--

14. Transport information

Transport Information	Dangerous goods of Class 3 (Flammable Liquid) are incompatible in a placard load with any of the following: Class 1, Class 2.1, if both the Class 3 and Class 2.1 dangerous goods are in bulk, Class 2.3, Class 4.2, Class 5, Class 6, if the Class 3 dangerous goods are nitromethane, Class 7.
U.N. Number	2924
UN proper shipping name	FLAMMABLE LIQUID, CORROSIVE, N.O.S. - (PENTANOLS, 4-dimethylaminobenzaldehyde)
Transport hazard class(es)	3
Sub.Risk	8
Hazchem Code	•3WE
Packing Group	II
EPG Number	3A4
IERG Number	18

15. Regulatory information

Regulatory Information	All the constituents of this product are listed on the Australian Inventory of Chemical Substances (AICS), or exempted. Not listed under WHS Regulation 2011, Schedule 10 - Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
Poisons Schedule	Not Scheduled

16. Other Information

Literature References	'Standard for the Uniform Scheduling of Medicines and Poisons .', Commonwealth of Australia. National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'. Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals'. Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand.
------------------------------	--

Infosafe No™ 3CHOU	Issue Date : January 2021	RE-ISSUED by AMBERSCI
--------------------	---------------------------	-----------------------

Product Name **KOVAC'S REAGENT**

Classified as hazardous

Safe Work Australia, 'Hazardous Chemical Information System'.
Safe Work Australia, 'National Code of Practice for the Labelling of Safe Work Hazardous Substances'.
Safe Work Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment'.

Contact Person/Point

Amber Scientific Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon Amber Scientific Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of Amber Scientific Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.
...End Of MSDS...

© Copyright Chemical Safety International Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe MSDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe MSDS displayed is the intellectual property of Chemical Safety International Pty Ltd. The compilation of MSDS's displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copying of any MSDS displayed is permitted for personal use only and otherwise is not permitted. In particular the MSDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of MSDS without the express written consent of Chemical Safety International Pty Ltd.