SAFETY DATA SHEET



Revision date: 15-Jun-2022

Revision Number 4

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

Product Name PROTEOL APL

Product Code(s) 000000035989

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended use Cosmetics applications

Uses advised against No information available.

Details of the supplier of the safety data sheet

Supplier

Ixom Operations Pty Ltd (Bronson & Jacobs division) - incorporated in Australia

Street Address: 166 Totara Street

Mt Maunganui South

New Zealand

Telephone Number: +64 9 309 2528 Facsimile: +64 9 0508 366 364

For further information, please contact

Contact Point Product Safety Department

Emergency telephone number

Emergency Telephone 0 800 734 607 (ALL HOURS)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

Not classified as a Dangerous Good under NZS 5433 Transport of Dangerous Goods on Land; NON-DANGEROUS GOODS.

Classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

GHS Classification

SIGNAL WORD

Warning

Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2020

Approval Number: HSR002503

Serious eye damage/eye irritation Category 2

Label elements



Hazard statements

H319 - Causes serious eye irritation

Precautionary Statements - Prevention

Wash hands thoroughly after handling Wear eye protection/ face protection Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Precautionary Statements - Storage

No storage statements

Precautionary Statements - Disposal

No disposal statements.

Other hazards which do not result in classification

Harmful to aquatic life
No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

| Chemical name | CAS No. | Weight-% |
|---------------------------------|----------|----------|
| Hexylene glycol | 107-41-5 | 1-5 |
| Dodecanoic acid | 143-07-7 | 1-5 |
| Sodium Cocoyl Apple Amino Acids | - | to 100 |

4. FIRST AID MEASURES

Description of first aid measures

General advice For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New

Zealand 0800 764 766) or a doctor.

Emergency telephone number Poisons Information Center, New Zealand: 0800 764 766

Poisons Information Center, Australia: 13 11 26

Inhalation Remove to fresh air. Call a physician if symptoms occur.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do

not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if symptoms occur.

Skin contact Wash skin with soap and water. Call a physician if symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Get

medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

Symptoms Irritation. May cause redness and tearing of the eyes.

Indication of any immediate medical attention and special treatment needed

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing MediaUse extinguishing agent suitable for type of surrounding fire.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

Combustible liquid. On burning will emit toxic fumes, including those of oxides of carbon. halogenated compounds and metal oxides. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Hazardous combustion products Oxides of carbon. Halogenated compounds. Metal oxides.

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin and eyes. Avoid breathing vapors or mists. Ensure adequate

ventilation. Do not touch or walk through spilled material. Wash thoroughly after handling.

Use personal protective equipment as required.

For emergency responders Shut off ignition sources. Clear area of all unprotected personnel. Use personal protection

recommended in Section 8.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Remove ignition sources. Provide

adequate ventilation. Dike far ahead of spill to collect runoff water. Absorb with earth, sand

or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled

containers.

Precautions to prevent secondary hazards

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin and eyes. Avoid breathing vapors or mists. Ensure adequate

ventilation. Wash thoroughly after handling. Keep away from open flames, hot surfaces and sources of ignition. Use according to package label instructions. Handle in accordance with

good industrial hygiene and safety practice.

General hygiene considerations Regular cleaning of equipment, work area and clothing is recommended. Wash hands

before breaks and immediately after handling the product. Wear suitable gloves and

eye/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from direct

sunlight. Store between 15°C and 25°C. Store away from sources of heat or ignition. Store away from incompatible materials described in Section 10. Keep container closed when not

in use.

Incompatible materials None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits No value assigned for this specific material by the New Zealand Workplace Health & Safety

Authority. However, Workplace Exposure Standard(s) for constituent(s):

Hexylene glycol: Ceiling 25 ppm, 121 mg/m³

As published by the New Zealand Workplace Health & Safety Authority.

WES - Ceiling (Workplace Exposure Standard - Ceiling). A concentration that should not be exceeded during any part of the working day.

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.

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Apply technical measures to

comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal

Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES.



Eye/face protection Goggles.

Hand protection Impervious gloves.

Skin and body protection Wear suitable protective clothing. Boots. Overalls.

Respiratory protection If spraying wear an organic vapour/particulate respirator meeting the requirements of

AS/NZS 1715 and AS/NZS 1716.

Environmental exposure controls No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical stateLiquidAppearanceClearColorYellowish

Odor Slight , Characteristic Odor threshold No information available.

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH6.5 - 7.5None knownMelting point / freezing pointNo data availableNone knownBoiling point / boiling range100 °CNone known

Flash point 97 °C Pensky-Martens Closed Cup (PMCC)

Evaporation rateNo data availableNone knownFlammability (solid, gas)No data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

No data available None known Vapor pressure None known No data available Vapor density Relative density 1.11 @ 20°C None known None known 395 (g/L) Water solubility Solubility(ies) Miscible in cold water. None known Partition coefficient log Pow = -0.69None known **Autoignition temperature** No data available None known **Decomposition temperature** No data available None known Kinematic viscosity No data available None known

Dynamic viscosity 9 - 10 mPa.s @20°C None known

Other information

10. STABILITY AND REACTIVITY

Reactivity

Reactivity No information available.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid Heat, flames and sparks. Direct sunlight.

Incompatible materials

Incompatible materials None known.

Hazardous decomposition products

Hazardous decomposition products Oxides of carbon. Halogenated compounds. Metal oxides.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

Product Information No adverse health effects expected if the chemical is handled in accordance with this

Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the

chemical is mishandled and overexposure occurs are:

Inhalation May cause irritation.

Eye contact Causes serious eye irritation.

Skin contact May cause irritation.

Ingestion May cause gastrointestinal discomfort if consumed in large amounts.

Symptoms Irritation. May cause redness and tearing of the eyes.

Acute toxicity

Numerical measures of toxicity

No information available.

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-----------------|----------------------|--|-----------------------|
| Hexylene glycol | = 3700 mg/kg (Rat) | = 12300 mg/kg (Rabbit) = 8560 uL/kg (Rabbit) | > 310 mg/m³ (Rat) 1 h |
| | | 8560 μL/kg (Rabbit) | |
| Dodecanoic acid | = 12 000 mg/kg (Rat) | - | - |

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritationNo information available.

Serious eye damage/eye irritation Causes serious eye irritation. Classification is based on mixture calculation methods based

on component data.

Germ cell mutagenicity Not expected to be mutagenic.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposureNo information available.

Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity Avoid contaminating waterways.

Terrestrial ecotoxicity There is no data for this product.

| Chemical name | Algae/aquatic plants | Fish | Crustacea |
|------------------------------------|--|---|---|
| Hexylene glycol | - | LC50: 10500 - 11000mg/L (96h, Pimephales promelas) LC50: =10000mg/L (96h, Lepomis macrochirus) LC50: =8690mg/L (96h, Pimephales promelas) LC50: =10700mg/L (96h, Pimephales promelas) | EC50: 2700 - 3700mg/L (48h, Daphnia magna) |
| Dodecanoic acid | ı | LC50: =5mg/L (96h, Oryzias latipes) | - |
| Sodium Cocoyl Apple Amino Acids | EC50: 76 mg/L (72hr, algae, Selenastrum capricornutum) | LC50: >100 mg/L (96hr, Brachydanio rerio) | EC50: 45 mg/L (48hr, Daphnia magna) |

Persistence and degradability

Persistence and degradability This product is readily biodegradable. Biodegradation: 95% (28 days).

Bioaccumulative potential

Bioaccumulation Expected to have a low bioaccumulation potential.

Mobility

Mobility in soil Koc = <1.25.

Component Information

| Chemical name | Partition coefficient |
|-----------------|-----------------------|
| Hexylene glycol | <0.14 |
| Dodecanoic acid | 4.2 |

Other adverse effects

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products

Dispose of product in packaging/container in a way that is consistent with the Hazardous Substances (Disposal) Notice 2017 and the Act, and Hazardous Substances (Amendments and Revocations) Notice 2020. Treat the chemical using a method that changes the characteristics or composition of the chemical so that the chemical is no longer a hazardous chemical; or export the chemical from New Zealand as waste.

Contaminated packaging

For packages that have been in direct contact with hazardous chemicals, the person must ensure that the package is rendered incapable of containing any chemical. It must be disposed of in a manner that is consistent with the requirements for disposal of the chemical that it contained, taking into account the material the package is manufactured from. Packages may only be reused or recycled if the package has been treated to remove any residual contents of the hazardous chemical (class 1, 2, 3, 4, or 5); or the contents of the residue in the package are below the threshold for the chemical to be classified as hazardous (class 6, 8, or 9 chemical).

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT Not classified as a Dangerous Good under NZS 5433 Transport of Dangerous Goods on

Land; NON-DANGEROUS GOODS.

IATA Not classified as Dangerous Goods by the criteria of the International Air Transport

Association (IATA) Dangerous Goods Regulations for transport by air;

NON-DANGEROUS GOODS.

IMDGNot classified as Dangerous Goods by the criteria of the International Maritime Dangerous

Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

15. REGULATORY INFORMATION

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

New Zealand

National regulations See section 8 for national exposure control parameters

International Inventories

NZIOC All the constituents of this material are listed on the New Zealand Inventory of Chemicals.

TSCA Contact supplier for inventory compliance status. **DSL/NDSL** Contact supplier for inventory compliance status. **EINECS/ELINCS** Contact supplier for inventory compliance status. **ENCS** Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. **IECSC KECL** Contact supplier for inventory compliance status. Contact supplier for inventory compliance status. **PICCS AIIC** Contact supplier for inventory compliance status.

Legend:

NZIoC - New Zealand Inventory of Chemicals

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. OTHER INFORMATION

Supplier Safety Data Sheet 01/2015 PROTEOL is a registered trademark.

Prepared By This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and

SDS Services).

Issuing Date: 15-Jun-2022

Reason(s) For Issue: 5 Yearly Revised Primary SDS

Alignment to GHS requirements

Revision Note:

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
TWA TWA (time-weighted average) STEL

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

C Carcinogen

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian Industrial Chemicals Introduction Scheme (AICIS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

Disclaimer

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Bronson & Jacobs representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

Bronson and Jacobs incorporating the businesses of Woods and Woods and Keith Harris and Australian Botanical Products.

End of Safety Data Sheet