SAFETY DATA SHEET



Revision date: 13-Feb-2023

Revision Number 1

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

Product Name Whiskey Flavour Synthetic E49786 (FAWHI49786)

Product Code(s) 000000026942

Other means of identification

UN number 1197

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Flavour.

Uses advised against No information available

Supplier

Ixom Operations Pty Ltd (Bronson & Jacobs division) - incorporated in Australia ABN:51 600 546 512 70 Marple Avenue Villawood NSW 2163 Australia

Telephone Number: +61 2 8717 2929

Facsimile: +61 2 9755 9611

Emergency telephone number

Emergency telephone number 1 800 033 111 (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

GHS Classification

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

Flammable liquids	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1

Revision Number 1

Revision date: 13-Feb-2023

SIGNAL WORD

Danger

Label elements

Flame



Hazard statements

H226 - Flammable liquid and vapor

H315 - Causes skin irritation

H318 - Causes serious eye damage

Precautionary Statements - Prevention

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

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical, ventilating, lighting equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Wash hands thoroughly after handling

Wear protective gloves / protective clothing / eye protection / face protection

Precautionary Statements - Response

Specific treatment (see First aid on this SDS)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

If skin irritation occurs: Get medical advice/attention

Wash contaminated clothing before reuse

In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Other hazards which do not result in classification

Poisons Schedule (SUSMP) None allocated

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Contains propylene glycol.

Chemical name	CAS No.	Weight-%
Isoamyl alcohol	123-51-3	1-<10
n-Butyl alcohol	71-36-3	1-<10
n-Propyl acetate	109-60-4	1-<10
Ingredients determined not to be hazardous	-	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.

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

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

not rub affected area. Get medical attention immediately if symptoms occur.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get medical attention if irritation develops and persists.

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth Ingestion

to an unconscious person. Do NOT induce vomiting. Get medical attention if symptoms

Revision Number 1

occur.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s)

involved, take precautions to protect themselves and prevent spread of contamination. Use

personal protective equipment as required. See section 8 for more information.

Most important symptoms and effects, both acute and delayed

Irritation/Corrosion. May cause redness and tearing of the eyes. **Symptoms**

Indication of any immediate medical attention and special treatment needed

Can cause corneal burns. Treat symptomatically. Note to physicians

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media Foam. Carbon dioxide (CO2). Dry chemical.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

Flammable. On burning will emit toxic fumes, including those of oxides of carbon, Risk of ignition. Keep product and empty container away from heat and sources of ignition. Containers may explode when heated. In the event of fire, cool tanks with water spray. Runoff may create fire or explosion hazard. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Hazardous combustion products Oxides of carbon.

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.

3Y Hazchem code

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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

adequate ventilation. Do not touch or walk through spilled material. Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be

Revision Number 1

arounded.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

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

recommended in Section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Refer to protective measures listed in **Environmental precautions**

Sections 7 and 8. Prevent product from entering drains.

Methods and material for containment and cleaning up

Stop leak if you can do it without risk. A vapor suppressing foam may be used to reduce Methods for containment

> vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to

containers for later disposal.

Slippery when spilt. Avoid accidents, clean up immediately. Dam up. Soak up with inert Methods for cleaning up

absorbent material. Use non-sparking tools. Pick up and transfer to properly labelled

containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep away from heat,

hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Use with local exhaust ventilation. Keep in an area equipped with sprinklers. Take off contaminated clothing and wash before reuse. Use personal protection equipment. Use according to package label

instructions.

General hygiene considerations Contaminated work clothing should not be allowed out of the workplace. Regular cleaning

of equipment, work area and clothing is recommended. Wash hands before breaks and

immediately after handling the product.

Conditions for safe storage, including any incompatibilities

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

heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labelled containers. Do not store near combustible materials. Protect from direct sunlight. Keep in an area equipped with sprinklers. Store in accordance

with the particular national regulations. Store in accordance with local regulations.

Oxidizing agents. Incompatible materials

Poisons Schedule (SUSMP) None allocated

Revision Number 1

Revision date: 13-Feb-2023

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Propane-1,2-diol (propylene glycol) (total: vapour & particulates): 8hr TWA = 474 mg/m³ (150 ppm); (particulates only): 8hr TWA $= 10 \text{ mg/m}^3$

n-Butyl alcohol (n-Butanol): Peak Limitation = 152 mg/m³ (50 ppm), Sk

n-Propyl acetate: 8hr TWA = 835 mg/m ³ (200 ppm), 15 min STEL = 1040 mg/m³ (250 ppm)

Isoamyl alcohol: 8hr TWA = 361 mg/m³ (100ppm), 15 min STEL = 452 mg/m³ (125 ppm)

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

Peak Limitation - a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

`Sk' (skin) Notice - absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

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

Engineering controls

Ensure adequate ventilation, especially in confined areas. Eyewash stations, 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.

(FAWHI49786)

Revision date: 13-Feb-2023

Revision Number 1









Eye/face protection Tight sealing safety goggles.

Skin and body protection Wear suitable protective clothing. Antistatic boots. Overalls.

Hand protection Impervious gloves.

Respiratory protection If determined by a risk assessment an inhalation risk exists, wear an organic vapour

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 state Liquid **Appearance** Clear

Color Yellow to Orange - Brown

Odor Characteristic aroma and flavour of Whiskey

Odor threshold No information available

Property Values Remarks • Method

No data available pН None known pH (as aqueous solution) No data available None known Melting point / freezing point No data available None known Boiling point / boiling range No data available None known Flash point 35 °C CC (closed cup) **Evaporation rate** No data available None known Flammability (solid, gas) No data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

No data available Vapor pressure None known Vapor density No data available None known Relative density 0.9772- 1.0172 @20°C None known Water solubility No data available None known None known Solubility(ies) No data available **Partition coefficient** No data available None known **Autoignition temperature** No data available None known **Decomposition temperature** No data available None known Kinematic viscosity No data available None known Dynamic viscosity No data available None known

Other information

10. STABILITY AND REACTIVITY

Reactivity

00000026942 - Whiskey Flavour Synthetic E49786

(FAWHI49786)

Revision date: 13-Feb-2023

Revision Number 1

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 Heating can cause expansion or decomposition of the material, which can lead to the

containers exploding.

Conditions to avoid

Conditions to avoid Heat, flames and sparks. Static discharge (electrostatic discharge). Avoid contact with

combustible substances. Direct sunlight.

Incompatible materials

Incompatible materials Oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

Product InformationNo 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 damage. May cause irreversible damage to eyes.

Skin contact Causes skin irritation.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

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

Numerical measures of toxicity - Product Information

ATEmix (oral) >5000 mg/kg (calculated, based on data from components)

Numerical measures of toxicity - Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50

Revision Number 1

Isoamyl alcohol	= 1300 mg/kg (Rat)	= 3250 mg/kg (Rabbit) = 3970	-
		μL/kg (Rabbit)	
n-Butyl alcohol	= 700 mg/kg(Rat) = 790 mg/kg(Rat)	= 3402 mg/kg (Rabbit) = 3400 mg/kg (Rabbit)	> 8000 ppm (Rat) 4 h
n-Propyl acetate	= 8700 mg/kg (Rat)	> 17756 mg/kg (Rabbit)	-

See section 16 for terms and abbreviations

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

Skin corrosion/irritation Causes skin irritation. Classification is based on mixture calculation methods based on

component data.

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

on component data.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

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 Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Isoamyl alcohol	EC50: =493mg/L (72h, Desmodesmus subspicatus) EC50: =181mg/L (96h, Desmodesmus subspicatus)	LC50: =700mg/L (96h, Oncorhynchus mykiss) LC50: =700mg/L (96h, Salmo gairdneri)	-	EC50: =260mg/L (48h, Daphnia magna)
n-Butyl alcohol	EC50: >500mg/L (96h, Desmodesmus subspicatus) EC50: >500mg/L (72h, Desmodesmus subspicatus)	LC50: 1730 - 1910mg/L (96h, Pimephales promelas) LC50: =1740mg/L (96h, Pimephales promelas) LC50: 100000 - 500000µg/L (96h, Lepomis macrochirus) LC50: =1910000µg/L (96h, Pimephales promelas)	-	EC50: =1983mg/L (48h, Daphnia magna) EC50: 1897 - 2072mg/L (48h, Daphnia magna)
n-Propyl acetate	-	LC50: 56 - 64mg/L (96h, Pimephales promelas)	-	EC50: =318mg/L (24h, Daphnia magna)

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

No information available. **Bioaccumulation**

Component Information

Chemical name	Partition coefficient
Isoamyl alcohol	1.28
n-Butyl alcohol	0.785

Mobility

Mobility in soil No information available.

Other adverse effects

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused

products

Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers. Dispose of in accordance with federal, state and local regulations.

Revision Number 1

14. TRANSPORT INFORMATION

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and

Rail: DANGEROUS GOODS.

UN number 1197

Proper shipping name EXTRACTS, FLAVOURING, LIQUID

Hazard class Packing group Ш **Special Provisions** 223 Hazchem code 3Y

IATA

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN number

UN proper shipping name EXTRACTS, FLAVOURING, LIQUID

Transport hazard class(es) Packing group Ш

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

00000026942 - Whiskey Flavour Synthetic E49786

Revision date: 13-Feb-2023 (FAWHI49786)

1197 **UN** number

UN proper shipping name EXTRACTS, FLAVOURING, LIQUID

Transport hazard class(es) Packing group Ш **IMDG EMS Fire** F-E **IMDG EMS Spill** S-D Marine pollutant No

15. REGULATORY INFORMATION

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

National regulations

Australia

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

Poisons Schedule (SUSMP) None allocated

Major hazard (accident/incident planning) regulation

Verify that license requirements are met

Hazardous chemical

Liquids that meet the criteria for Class 3 Packing Group II or III

Threshold quantity (T) 50 000

Revision Number 1

National pollutant inventory Subject to reporting requirement

Chemical name	National pollutant inventory
n-Butyl alcohol - 71-36-3	20 MW Threshold category 2b total
	60000 MWH Threshold category 2b total
	1 tonne/h Threshold category 2a total
	25 tonne/yr Threshold category 1a total
	400 tonne/yr Threshold category 2a total
	2000 tonne/yr Threshold category 2b total
n-Propyl acetate - 109-60-4	20 MW Threshold category 2b total
	60000 MWH Threshold category 2b total
	1 tonne/h Threshold category 2a total
	25 tonne/yr Threshold category 1a total
	400 tonne/yr Threshold category 2a total
	2000 tonne/yr Threshold category 2b total

International Inventories

AIIC All the constituents of this material are listed on the Australian Inventory of Industrial

Chemicals.

Legend:

AIIC- Australian Inventory of Industrial Chemicals

International Regulations

Revision Number 1

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

Reason(s) For Issue: First Issue Primary SDS

Issuing Date: 13-Feb-2023

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

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

Ceiling Maximum limit value Skin designation

Carcinogen С

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

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 Ptv 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

000000026942 -	Whiskey Flavour Synthetic E49786
(FAWHI49786)	

Revision Number 1

Products.

End of Safety Data Sheet