SAFETY DATA SHEET

Revision date: 03-Mar-2022

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier **Product Name** BREAD FLAVOUR NAT E49539 (FABRE49539) Product Code(s) 00000026754 Other means of identification Recommended use of the chemical and restrictions on use **Recommended use** Food flavour. No information available. Uses advised against 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

Not 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).

Skin sensitization	Category 1
Carcinogenicity	Category 2

SIGNAL WORD Warning

Label elements



Revision Number 1

Health hazard Exclamation mark



Hazard statements

H317 - May cause an allergic skin reaction H351 - Suspected of causing cancer

Precautionary Statements - Prevention

Obtain special instructions before use Do not handle until all safety precautions have been read and understood Avoid breathing dust / fume / gas / mist / vapours / spray Contaminated work clothing should not be allowed out of the workplace Wear protective gloves / protective clothing / eye protection / face protection **Precautionary Statements - Response** If exposed or concerned: Get medical advice/attention Specific measures (see First aid on this label) IF ON SKIN: Wash with plenty of soap and water If skin irritation or rash occurs: Get medical advice/attention Take off contaminated clothing and wash it before reuse **Precautionary Statements - Storage** Store locked up **Precautionary Statements - Disposal** Dispose of contents/container to an approved waste disposal plant

Other hazards which do not result in classification

Poisons Schedule (SUSMP) None allocated

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Mixture</u>

Chemical name	CAS No.	Weight-%
Propylene glycol	57-55-6	>60
Furfuryl alcohol	98-00-0	1-<10
Flavour ingredients at non-hazardous	-	to 100
concentrations		

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 and keep at rest in a position comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Call a physician if symptoms occur.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. Get medical attention if symptoms occur.

Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician if symptoms occur.	
Ingestion	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.	
Most important symptoms and effe	ects, both acute and delayed	
Symptoms	May cause allergic skin reaction. Redness. Rashes. Hives.	
Indication of any immediate medical attention and special treatment needed		
Note to physicians	May cause sensitization by skin contact. Treat symptomatically.	
5. FIRE FIGHTING MEASURES Suitable Extinguishing Media		
Suitable Extinguishing Media Unsuitable extinguishing media	Dry chemical, CO2, water spray or regular foam.	
Specific hazards arising from the c	nemical	
Specific hazards arising from the chemical	Combustible liquid. 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	Carbon monoxide. Carbon dioxide (CO2).	
Special protective actions for fire-f	ighters	
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	Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing vapors or mists. Avoid contact with skin, eyes, and clothing. Use personal protective equipment as required. Wash thoroughly after handling. Remove all sources of ignition.	
For emergency responders	Shut off ignition sources. Clear area of all unprotected personnel. Use personal protection recommended in Section 8.	
Environmental precautions		
Environmental precautions	Prevent further leakage or spillage if safe to do so. See Section 12 for additional Ecological Information.	
Methods and material for containment and cleaning up		
Methods for containment	Stop leak if you can do it without risk. 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. Use personal protective equipment as
	required. Pick up and transfer to properly labelled containers.

7. HANDLING AND STORAGE

Precautions for safe handling		
Advice on safe handling	Obtain special instructions before use. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Wash thoroughly after handling. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Do not handle until all safety precautions have been read and understood.	
General hygiene considerations	Regular cleaning of equipment, work area and clothing is recommended. Wash hands and face before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection.	
Conditions for safe storage, including any incompatibilities		
Storage Conditions	Store locked up. Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from direct sunlight. Keep container closed when not in use.	
	Classified as a C2 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and	
	transport requirements.	
Incompatible materials		

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 mg/m³

Furfuryl alcohol: 8hr TWA = 40 mg/m³ (10 ppm), 15 min STEL = 60 mg/m³ (15 ppm), Carcinogen Category 2, Sk

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

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.

Carcinogen Category 2 - substances suspected of having carcinogenic potential. The available information is not adequate for making a satisfactory assessment.

`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. 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, SAFETY GLASSES, GLOVES.

Eye/face protection	Glasses.
Skin and body protection	Wear suitable protective clothing. Boots. Overalls.
Hand protection	Impervious gloves.
Respiratory protection	If determined by a risk assessment an inhalation risk exists due to processing vapours, 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	
Appearance	
Color	
Odor	
Odor threshold	

pH (as aqueous solution)

Property

pН

Liquid No information available. Pale Yellow to Yellow Characteristic bread aroma and flavour No information available. Values <u>Remarks • Method</u>

No data available

No data available

Remarks • None known None known

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Melting point / freezing point Boiling point / boiling range Flash point Evaporation rate Flammability (solid, gas) Flammability Limit in Air	No data available No data available 97 °C No data available No data available	None known None known CC (closed cup) None known None known None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	1.0171 - 1.0571	@ 20 °C
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
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		
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. 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 Carbon monoxide. Carbon dioxide (CO2).		

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	May cause irritation.
Skin contact	May cause irritation. May cause sensitization by skin contact.
Ingestion	May cause gastrointestinal discomfort if consumed in large amounts.
Symptoms	May cause allergic skin reaction. Redness. Rashes. Hives.

Numerical measures of toxicity - Product Information

No information available.

Component Information

component morn	ation			
Chemical n	ame	Oral LD50	Dermal LD50	Inhalation LC50
Propylene g	lycol	= >20 000 mg/kg(Rat)	= >2000 mg/kg (Rabbit)	= >317042 mg/m³/2H(Rabbit)
Furfuryl alc	ohol	= 110 mg/kg (Rat) = 177 mg/kg (Rat)	= 657 mg/kg (Rabbit)= 3825 mg/kg (Rat)= 400 mg/kg (Rabbit)	= 233 ppm (Rat)4 h

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	No information available.	
Serious eye damage/eye irritation	No information available.	
Respiratory or skin sensitization	May cause an allergic skin based on component data	reaction. Classification is based on mixture calculation methods
Germ cell mutagenicity	No information available.	
Carcinogenicity	Suspected of causing cano on component data.	cer. Classification is based on mixture calculation methods based
Chemical name		Australia
Chemical name Furfuryl alcohol - 98-00-0		Australia Carc. 2
	No information available.	
Furfuryl alcohol - 98-00-0 Reproductive toxicity		

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity

Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Propylene glycol	EC50: =19000mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =40613mg/L (96h, Oncorhynchus mykiss) LC50: 41 - 47mL/L (96h, Oncorhynchus mykiss) LC50: =51400mg/L (96h, Pimephales promelas) LC50: =710mg/L (96h, Pimephales promelas)	-	EC50: >1000mg/L (48h, Daphnia magna) EC50: >10000mg/L (24h, Daphnia magna)
Furfuryl alcohol	-	LC50: =32mg/L (96h, Pimephales promelas)	-	EC50: =328mg/L (24h, Daphnia magna)

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation

No information available.

Component Information

Chemical name	Partition coefficient
Propylene glycol	-1.07

Mobility

Mobility in soil

No information available.

Other adverse effects

Endocrine Disruptor Information

Chemical name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Endocrine disrupting potential
Furfuryl alcohol	Group III Chemical	-	-

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products	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.

14. TRANSPORT INFORMATION

ADG

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

<u>IATA</u>

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.

IMDG

Not 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

National regulations

Australia

Not 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

National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory
Propylene glycol - 57-55-6	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 or are regulated through the Food Standards Australia New Zealand (FSANZ).

Legend:

AllC - 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

Reason(s) For Issue: First Issue Primary SDS

STEL (Short Term Exposure Limit)

Skin designation

Issuing Date:

03-Mar-2022

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

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
Ceiling	Maximum limit value	*
С	Carcinogen	

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

<u>Disclaimer</u>

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