SAFETY DATA SHEET

Revision date: 09-Nov-2020

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

| Product identifier | |
|---|---|
| Product Name | MALT FLAVOUR NATURAL E49105 (FAMAL49105) |
| Product Code(s) | 00000026418 |
| Other means of identification | |
| 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 & Ja ABN:51 600 546 512 70 Marple Avenue Villawood NSW 2163 Australia Telephone Number: +61 2 8717 2929 Facsimile: +61 2 9755 9611 | acobs division) - incorporated in Australia |
| 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)

Not classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS)

Label elements

Hazard statements



Other hazards which do not result in classification Causes mild skin irritation

Poisons Schedule (SUSMP) None allocated

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

| Chemical name | CAS No. | Weight-% |
|---------------------------|-------------|----------|
| Propylene glycol | 57-55-6 | >60 |
| Non-hazardous ingredients | Proprietary | Balance |

4. FIRST AID MEASURES

Description of first aid measures

| Emergency telephone number | Poisons Information Center, Australia: 13 11 26 Poisons Information Center, New Zealand: 0800 764 766 |
|------------------------------------|--|
| Inhalation | Remove to fresh air. 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. |
| Skin contact | Wash skin with soap and water. Call a physician if symptoms occur. |
| Ingestion | Rinse mouth thoroughly with water. Get medical attention if symptoms occur. |
| Most important symptoms and effect | cts, both acute and delayed |
| Symptoms | Prolonged contact may cause redness and irritation. |
| Indication of any immediate medica | l attention and special treatment needed |
| Note to physicians | Treat symptomatically. |

5. FIRE FIGHTING MEASURES

| Suitable Extinguishing Media | |
|--|---|
| Suitable Extinguishing Media | Dry chemical, CO2, water spray or regular foam. |
| | |
| Unsuitable extinguishing media | No information available. |
| Specific hazards arising from the cl | hemical |
| Specific hazards arising from the chemical | Combustible material. |
| Hazardous combustion products | Carbon oxides. |
| Special protective actions for fire-fi | <u>ghters</u> |

| 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. Avoid breathing vapors or mists. Stop leak if you can do it without risk. Use personal protective equipment as required. |
|------------------------------------|---|
| For emergency responders | Use personal protection recommended in Section 8. |
| Environmental precautions | |
| Environmental precautions | See Section 12 for additional Ecological Information. |
| Methods and material for containme | ent and cleaning up |
| Methods for containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | Soak up with inert absorbent material. Pick up and transfer to properly labelled containers. |

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Wash thoroughly after handling.

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. |
|--------------------------|---|
| | 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 | Oxidizing agents. |
| Poisons Schedule (SUSMP) | None allocated |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure LimitsNo value assigned for this specific material by Safe Work Australia. However, Workplace
Exposure Standard(s) for constituent(s):

| Chemical name | Australia | ACGIH TLV |
|-----------------------------|---|-----------|
| Propylene glycol 57-55-6 | 8hr TWA = 474 mg/m ³ (150 ppm) 8hr TWA = 10 mg/m ³ (particulates | |
| | only) | |

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.

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 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. Protective shoes or boots. Overalls. |
| Hand protection | Impervious gloves. |
| Respiratory protection | If determined by a risk assessment an inhalation risk exists, 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 state | Liquid |
|----------------|---------------------------|
| Appearance | Clear |
| Color | Pale Yellow to Yellow |
| Odor | Malt |
| Odor threshold | No information available. |

Method

Revision Number 1

| Property | <u>Values</u> | Remarks • Meth |
|---------------------------------|-------------------|-----------------|
| рН | 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 | 105 °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 | | |
| Vapor pressure | No data available | None known |
| Vapor density | No data available | None known |
| Relative density | 1.0134 - 1.0534 | @ 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 | None. | | |
| Possibility of hazardous reactions | | | |
| Possibility of hazardous reactions | None under normal processing. | | |
| Conditions to avoid | | | |
| Conditions to avoid | Heat. | | |
| Incompatible materials | | | |
| Incompatible materials | Oxidizing agents. | | |
| Hazardous decomposition products | | | |
| Hazardous decomposition products Carbon 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. Specific test data for the substance or mixture is not available. | |
| Eye contact | Not expected to cause eye irritation. Specific test data for the substance or mixture is not available. | |
| Skin contact | Causes mild skin irritation. Specific test data for the substance or mixture is not available. | |
| Ingestion | May cause gastrointestinal discomfort if consumed in large amounts. Specific test data for the substance or mixture is not available. | |
| Symptoms | Prolonged contact may cause redness and irritation. | |
| Numerical measures of toxicity - Product Information | | |

The following values are calculated based on chapter 3.1 of the GHS document ATEmix (oral) >5,000 mg/kg

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|------------------|-----------------|------------------------|-----------------|
| Propylene glycol | = 20 g/kg (Rat) | = 20800 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 | Classification based on data available for ingredients. May cause skin irritation. |
|-----------------------------------|--|
| Serious eye damage/eye irritation | No information available. |
| 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 exposure | No information available. |
| Aspiration hazard | No information available. |

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity

Keep out of waterways.

Revision Number 1

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|------------------|---|---|-------------------------------|---|
| Propylene glycol | EC50: =19000mg/L (96h, Pseudokirchneriella subcapitata) | LC50: =51600mg/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) |

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation

There is no data for this product.

Component Information

<u>Mobility</u>

Mobility in soil

No information available.

Other adverse effects

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

| Waste from residues/unused | Dispose of in accordance with local regulations. Dispose of waste in accordance with |
|----------------------------|--|
| products | environmental legislation. |

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

<u>Australia</u>

Not classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG)

Not 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) National pollutant inventory Subject to reporting requirement | None allocated | |
|--|----------------|---|
| 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 AICS

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

Legend:

- 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

Issuing Date: 09-Nov-2020

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 S | ection 8: EXPOSURE CONTROLS/PERSONAL | <u>_PROTECTION</u> | |
|----------|--------------------------------------|--------------------|----------------------------------|
| TŴA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |
| 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

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.

End of Safety Data Sheet