SAFETY DATA SHEET

Revision date: 05-Jul-2022

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier **Product Name** CRANBERRY FLAVOUR (FACRA43962) 00000037715 Product Code(s) Other means of identification **UN number** 1197 Recommended use of the chemical and restrictions on use Flavour. **Recommended use** 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

Classified as a Dangerous Good according to NZS 5433 Transport of Dangerous Goods on Land; DANGEROUS GOODS.

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

GHS Classification

SIGNAL WORD Warning

Food Additives and Fragrance Materials (Flammable) Group Standard 2020 Approval Number: HSR002576



| Flammable liquids | Category 3 |
|--------------------|------------|
| Skin sensitization | Category 1 |

Label elements



Hazard statements H226 - Flammable liquid and vapor

H317 - May cause an allergic skin reaction

Precautionary Statements - Prevention

Avoid breathing dust / fume / gas / mist / vapours / spray Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking Keep container tightly closed Ground and bond container and receiving equipment Use explosion-proof electrical, ventilating, lighting equipment Use non-sparking tools Take action to prevent static discharges Contaminated work clothing should not be allowed out of the workplace Wear protective gloves / protective clothing / eye protection / face protection **Precautionary Statements - Response**

IF ON SKIN: Wash with plenty of water and soap If skin irritation or rash occurs: Get medical advice/attention IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower 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 to an approved waste disposal plant

Other hazards which do not result in classification

Causes mild skin irritation

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Mixture</u>

Contains propylene glycol.

| Chemical name | CAS No. | Weight-% |
|--------------------------------------|-----------|----------|
| Ethyl alcohol (Ethanol) | 64-17-5 | 1-<10 |
| Lemon oil | 8008-56-8 | 0.1-<1 |
| 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. |
|--|--|
| 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 thoroughly with plenty of water, also under the eyelids. Get medical attention 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. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical attention if symptoms 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 effe | ects, both acute and delayed |
| Symptoms | May cause allergic skin reaction. Redness. Rashes. Hives. |
| Indication of any immediate medic | al attention and special treatment needed |
| Note to physicians | May cause sensitization by skin contact. Treat symptomatically. |
| 5. FIRE FIGHTING MEASU | IRES |
| 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 o | <u>chemical</u> |
| Specific hazards arising from the chemical | Flammable. 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- | ighters_ |
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |
| Hazchem code | 3Y |
| 6. ACCIDENTAL RELEASI | - MEASURES |

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

| Personal precautions | Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid contact with skin, eyes, and clothing. Avoid breathing vapors or mists. Use personal protective equipment as required. See section 8 for more information. Keep people away from and upwind of spill/leak. 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 grounded. Do not touch or walk through spilled material. |
|-----------------------------------|---|
| Other information | Ventilate the area. Refer to protective measures listed in Sections 7 and 8. |
| 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. Prevent product from entering drains. Refer to protective measures listed in Sections 7 and 8. See Section 12 for additional Ecological Information. |
| Methods and material for containm | ent and cleaning up |
| Methods for containment | Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce 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. |
| Methods for cleaning up | Slippery when spilt. Avoid accidents, clean up immediately. Take precautionary measures against static discharges. Use non-sparking tools. 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, eyes, and clothing. Avoid breathing vapors or mists. Use personal protection equipment. Take off contaminated clothing and wash before reuse. 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 with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. |
|--------------------------------|--|
| General hygiene considerations | Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. 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. Do not get in eyes, on skin, or on clothing. 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. 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. Store away from incompatible materials (refer to SDS).

Incompatible materials

Oxidizing agents.

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):

Ethyl alcohol (Ethanol): WES-TWA 1,000 ppm, 1,880 mg/m³ Propane-1,2-diol (propylene glycol) (vapour & particulates): WES-TWA 150 ppm, 474 mg/m³; (particulates only): WES-TWA 10 mg/m³.

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

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure.

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.



| Skin and body protection | Wear suitable protective clothing. Antistatic boots. Overalls. |
|---------------------------------|--|
| 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 o | | |
|-------------------------------------|------------------------------|------------------|
| Physical state | Liquid | |
| Appearance | Clear | |
| Color | Colourless | |
| Odor | Fresh, Sweet, Ripe Cranberry | |
| Odor threshold | No information available. | |
| | | |
| Property_ | Values | Remarks • Method |
| pH | 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 | 44 °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 | 1.009 - 1.029 @20°C | None known |
| 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. |
| Sensitivity to static discharge | res. |

| Possibility of hazardous reactions | |
|------------------------------------|---|
| Possibility of hazardous reactions | None under normal processing. 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 | <u>_</u> |

Hazardous decomposition products Oxides of carbon.

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 | Causes mild skin irritation. May cause sensitization by skin contact. |
| Ingestion | Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. May cause gastrointestinal discomfort if consumed in large amounts. |
| Symptoms | May cause allergic skin reaction. Redness. Rashes. Hives. |
| Acute toxicity | |

Numerical measures of toxicity No information available.

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-------------------------|-------------------|-----------------------|-----------------------|
| Ethyl alcohol (Ethanol) | = 7060 mg/kg(Rat) | - | = 124.7 mg/L (Rat)4 h |
| Lemon oil | = 2840 mg/kg(Rat) | > 5000 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 | No information available. |
|-----------------------------------|---|
| Serious eye damage/eye irritation | No information available. |
| Respiratory or skin sensitization | May cause sensitization by skin contact. Classification is based on mixture calculation |

| | methods based on component data. |
|--------------------------|----------------------------------|
| 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. |

Ecotoxicity

Ecotoxicity Keep out of waterways.

Terrestrial ecotoxicity

| Chemical name | Algae/aquatic plants | Fish | Crustacea |
|-------------------------|----------------------|--|--|
| Ethyl alcohol (Ethanol) | - | LC50: 12.0 - 16.0mL/L (96h, Oncorhynchus mykiss) LC50: >100mg/L (96h, Pimephales promelas) LC50: 13400 - 15100mg/L (96h, Pimephales promelas) | LC50: 9268 - 14221mg/L (48h, Daphnia magna) EC50: =2mg/L (48h, Daphnia magna) EC50: =10800mg/L (24h, Daphnia magna) |

There is no data for this product.

| Persistence and degradability | | |
|---------------------------------------|---------------------------|-----------------------|
| Persistence and degradability | No information available. | |
| Bioaccumulative potential | | |
| Bioaccumulation | No information available. | |
| <u>Mobility</u> | | |
| Mobility in soil | No information available. | |
| Component Information | | |
| Chemical na | ime | Partition coefficient |
| Ethyl alcohol (E | | |
| | thanol) | -0.32 |
| Other adverse effects | thanol) | -0.32 |
| · · · · · · · · · · · · · · · · · · · | thanol) | -0.32 |
| Other adverse effects | No information available. | -0.32 |

Waste from residues/unused Dispose of product in packaging/container in a way that is consistent with the Hazardous

| products | 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. Class 2, 3 and 4 chemicals - may not be disposed of into or onto a landfill or sewage facility. They may only be burnt in certain situations. Class 2.1.1, 3.1 and 4.1.1 chemicals may only be discharged into the environment as waste if the substance will not at any time come into contact with class 1 or class 5 substances; and there will be no ignition source in the vicinity of the disposal site at any time and if the substance were to ignite, no person, or place where a person may legally be, would be exposed to an unsafe level of heat radiation. |
|------------------------|--|
| 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 | Classified as a Dangerous Good according to NZS 5433 Transport of Dangerous Goods on Land; DANGEROUS GOODS. |
|----------------------------|--|
| UN number | 1197 |
| Proper shipping name | EXTRACTS, FLAVOURING, LIQUID |
| Hazard class | 3 |
| Packing group | III |
| Environmental hazard | No |
| 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 | 1197 |
| UN proper shipping name | EXTRACTS, FLAVOURING, LIQUID |
| Transport hazard class(es) | 3 |
| Packing group | III |
| IMDG | Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS. |
| UN number | 1197 |
| UN proper shipping name | EXTRACTS, FLAVOURING, LIQUID |
| Transport hazard class(es) | 3 |
| Packing group | III |
| 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

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 or are regulated through the Food Standards Australia New Zealand (FSANZ). |
| 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. |
| IECSC | Contact supplier for inventory compliance status. |
| KECL | Contact supplier for inventory compliance status. |
| PICCS | Contact supplier for inventory compliance status. |
| 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:

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
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

| Prepared By | This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services). |
|----------------------|--|
| Issuing Date: | 05-Jul-2022 |
| Reason(s) For Issue: | 5 Yearly Revised Primary SDS |

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

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database STEL (Short Term Exposure Limit)

Skin designation

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