

SAFETY DATA SHEET



Revision date: 18-Sep-2024

Revision Number 4

Section 1: Identification

Product identifier

Product Name DSF 611
Product Code(s) 000000018795

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended use Frother.

Uses advised against

Details of manufacturer or importer

Supplier

IXOM Operations Pty Ltd
ABN: 51 600 546 512
Level 8, 1 Nicholson Street
Melbourne 3000
Australia

Telephone Number: +61 3 9906 3000

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.

Section 2: Hazard identification

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

GHS Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3

Label elements

Exclamation mark



Signal word

WARNING

Hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray.

Wash hands thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/clothing and eye/face protection.

Use personal protective equipment as required.

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention.

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.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

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

Harmful to aquatic life with long lasting effects.

Section 3: Composition and information on ingredients

Chemical name	CAS No.	Weight-%
2-Ethyl hexanol	104-76-7	10-<30%
Non hazardous component(s)	-	to 100%

Section 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. Get medical attention immediately if symptoms occur.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if symptoms occur.

Skin contact

Wash off immediately with soap and plenty of water for at least 15 minutes. (Call a physician if symptoms occur).

Ingestion

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

Symptoms Irritating. May cause redness and tearing of the eyes. Erythema (skin redness). Coughing and/ or wheezing. Difficulty in breathing.

Effects of Exposure No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Section 5: Firefighting measures**Suitable Extinguishing Media**

Suitable extinguishing media Foam. Dry chemical or CO2.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Specific hazards arising from the chemical Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Hazardous combustion products Carbon oxides.

Special protective actions for fire-fighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Section 6: Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Personal precautions Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Do not touch or walk through spilled material. Remove all sources of ignition. Use personal protective equipment as required. Wash thoroughly after handling.

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

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk.

Methods for cleaning up Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Section 7: Handling and storage**Precautions for safe handling****Advice on safe handling**

Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse. Remove all sources of ignition. Use personal protection equipment. Wash thoroughly after handling. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities**Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from sources of heat or ignition. Store locked up. 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

Strong acids. Strong bases. Strong oxidizing agents.

Section 8: Exposure controls and personal protection**Control parameters****Exposure Limits**

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

Chemical name	Australia	New Zealand	ACGIH TLV
2-Ethyl hexanol 104-76-7	-	-	TWA: 5 ppm
Chemical name	European Union	United Kingdom	Germany DFG
2-Ethyl hexanol 104-76-7	-	TWA: 1 ppm TWA: 5.4 mg/m ³ STEL: 3 ppm STEL: 16.2 mg/m ³	TWA: 10 ppm TWA: 54 mg/m ³ Peak: 10 ppm Peak: 54 mg/m ³

2-Ethyl hexanol: 8hr TWA = 200 ppm (recommended standard)

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 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, RESPIRATOR.



Eye/face protection	Goggles.
Skin and body protection	Wear suitable protective clothing. Overalls. Boots.
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. When handling this product in bulk quantities, and/or in Intermediate Bulk Containers (IBC's), wear overalls, safety shoes, impervious gloves, chemical goggles, and a face shield. If determined by a risk assessment an inhalation risk exists, wear appropriate respiratory protection as mentioned above.
Environmental exposure controls	No information available.
Thermal hazards	No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	No information available
Color	Yellow
Odor	Mild
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	7-8	None known
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	180-230°C	
Flash point	>94°C (estimated)	None known
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 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	ca. 0.9	
Water solubility	No data available	
Solubility(ies)	Immiscible in water	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	

Other information**Section 10: Stability and reactivity**Reactivity

Reactivity No information available.

Chemical stability

Stability Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

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, flames and sparks.

Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products Carbon oxides.

Section 11: Toxicological informationInformation 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 Irritating to respiratory system.

Eye contact Causes serious eye irritation.

Skin contact Causes skin irritation.

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

Symptoms Irritating. May cause redness and tearing of the eyes. Erythema (skin redness). Coughing and/ or wheezing. Difficulty in breathing.

Acute toxicity

Numerical measures of toxicity - Product Information

No information available

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2-Ethyl hexanol	= 3730 mg/kg (Rat)	= >3000 mg/kg (Rat)	> 227 ppm (Rat) 6 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	Causes skin irritation. Classification is based on mixture calculation methods based on component data.
Serious eye damage/eye irritation	Causes serious eye irritation. Classification is based on mixture calculation methods based on component data.
Respiratory or skin sensitization	Not a skin sensitiser (guinea pig). 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	May cause respiratory irritation. Classification is based on mixture calculation methods based on component data.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Section 12: Ecological information**Ecotoxicity****Aquatic ecotoxicity** Keep out of waterways. Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
2-Ethyl hexanol	EC50: =11.5mg/L (72h, Desmodesmus subspicatus)	LC50: 32 - 37mg/L (96h, Oncorhynchus mykiss) LC50: >7.5mg/L (96h, Oncorhynchus mykiss) LC50: 27 - 29.5mg/L	-	EC50: =39mg/L (48h, Daphnia magna)

		(96h, Pimephales promelas) LC50: =29.7mg/L (96h, Pimephales promelas) LC50: 10.0 - 33.0mg/L (96h, Lepomis macrochirus)		
--	--	--	--	--

Terrestrial ecotoxicity There is no data for this product.

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
2-Ethyl hexanol	2.9

Mobility

Mobility No information available.

Other adverse effects

Other adverse effects No information available.

Section 13: Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with federal, state and local regulations.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

See section 8 for more information

Section 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.

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. Not regulated

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. Not regulated

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available

Section 15: Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Australia**

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

See section 8 for national exposure control parameters

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

No poisons schedule number allocated

Poison Schedule Number Not applicable**Australian Industrial Chemicals Introduction Scheme (AICIS)**

Contact supplier for inventory compliance status

Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
2-Ethyl hexanol - 104-76-7	Present	-

Illicit Drug Precursors/Reagents

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory
2-Ethyl hexanol - 104-76-7	20 MWh 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.

NZIoC

Contact supplier for inventory compliance status.

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.

Legend:**AIIIC- Australian Inventory of Industrial Chemicals****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****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**Section 16: Other information****Reason(s) For Issue:** Reissue of an obsolete SDS**Prepared By** This Safety Data Sheet has been prepared by IXOM Operations Pty Ltd (Toxicology and SDS Services).**Revision date:** 18-Sep-2024**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**

SVHC: Substances of Very High Concern for Authorization:

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances

vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

STOT: Specific Target Organ Toxicity

ATE: Acute Toxicity Estimate

LC50: 50% Lethal Concentration

LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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)

Environmental Protection Agency

Acute Exposure Guideline Level(s) (AELG(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)
National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
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)
U.S. 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
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 IXOM 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.

End of Safety Data Sheet