Safety Data Sheet
according to WHS Regulations

Printing date 14.05.2021 Revision: 14.05.2021

1 Identification

Product Name: BRUNOX® EPOXY (BULK)

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use: Coating

Details of Manufacturer or Importer:
REFINISH IMPORTS PTY LTD
Unit A, 16 -20 Cassola Place
Penrith, NSW 2750

Phone Number: (02) 4709 6377

Emergency telephone number: (CHEMTREC): + (61) -290372994
Email: INFO@REFINISHIMPORTSANZ.COM

2 Hazard(s) Identification

Hazardous Nature:
Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.
Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).


Flame

Flammable Liquids 2	H225	Highly flammable liquid and vapour.


Health hazard

Carcinogenicity 2	H351	Suspected of causing cancer.


Corrosion

Skin Corrosion/Irritation 1A	H314	Causes severe skin burns and eye damage.
Serious Eye Damage/Irritation 1	H318	Causes serious eye damage.

STOT SE 3	H335-H336	May cause respiratory irritation. May cause drowsiness or dizziness.

Signal Word Danger

Hazard Statements
H225 Highly flammable liquid and vapour.
H314 Causes severe skin burns and eye damage.
H351 Suspected of causing cancer.
H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

Precautionary Statements
P201 Obtain special instructions before use.

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P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting] equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P260	Do not breathe dusts or mists.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P321	Specific treatment (see on this label).
P363	Wash contaminated clothing before reuse.
P370+P378	In case of fire: Use to extinguish: CO2, powder or water spray.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national regulations.

Additional Information AUH066 Repeated exposure may cause skin dryness or cracking.

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:

CAS: 108-10-1	2-Pentanone, 4-methyl- Flammable Liquids 2, H225; Carcinogenicity 2, H351; Acute Toxicity (Inhalation) 4, H332; Serious Eye Damage/Irritation 2A, H319; STOT SE 3, H335	10 - <25%
CAS: 64-18-6	Formic acid Skin Corrosion/Irritation 1A, H314; Flammable Liquids 4, H227	2.5 - <10%
CAS: 67-63-0	2-Propanol Flammable Liquids 2, H225; Serious Eye Damage/Irritation 2A, H319; STOT SE 3, H336	2.5 - <10%
CAS: 107-98-2	1-Methoxy-2-propanol [Monopropylene glycol methyl ether] Flammable Liquids 3, H226; STOT SE 3, H336	2.5 - <10%
CAS: 112-34-5	2-(2-butoxyethoxy)ethanol Serious Eye Damage/Irritation 2A, H319	2.5 - <10%

4 First Aid Measures

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

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Skin Contact:
In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

Eye Contact:
In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

Ingestion:
If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:
Inhalation: Harmful if inhaled. May cause respiratory irritation. May cause drowsiness and dizziness.
Skin Contact: Causes severe skin burns.
Eye Contact: Causes serious eye damage.
Ingestion: No adverse health effects expected.

5 Fire Fighting Measures

Suitable Extinguishing Media: Sand, dry chemical or carbon dioxide. Do not use water.

Specific Hazards Arising from the Chemical:
Hazardous combustion products include oxides of carbon.
Product is highly flammable. Vapours may travel considerable distances to a source of ignition where they can ignite, flashback, or explode.
Closed containers may explode when exposed to extreme heat. Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

Special Protective Equipment and Precautions for Fire Fighters:
Mouth respiratory protective device.
When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:
Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots.
Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.
Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

Environmental Precautions:
In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:
Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material.
Collect the spilled material and place into a suitable container for disposal. Use only non-sparking tools. Do not flush with water or aqueous cleaning agents.

7 Handling and Storage

Precautions for Safe Handling:
Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.
Take precautionary measures against static discharge. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

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Conditions for Safe Storage:
Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from heat, sparks, open flames and other sources of ignition.

8 Exposure Controls and Personal Protection

Exposure Standards:	
CAS: 108-10-1 2-Pentanone, 4-methyl-	
WES	STEL: 307 mg/m³, 75 ppm TWA: 205 mg/m³, 50 ppm
CAS: 64-18-6 Formic acid	
WES	STEL: 19 mg/m³, 10 ppm TWA: 9.4 mg/m³, 5 ppm
CAS: 67-63-0 2-Propanol	
WES	STEL: 1230 mg/m³, 500 ppm TWA: 983 mg/m³, 400 ppm
CAS: 107-98-2 1-Methoxy-2-propanol [Monopropylene glycol methyl ether]	
WES	STEL: 553 mg/m³, 150 ppm TWA: 369 mg/m³, 100 ppm

Engineering Controls:
Maintain air concentration below occupational exposure standards, providing adequate ventilation. Use explosion-proof ventilating equipment.

Respiratory Protection:
Use an approved Type AX/P2 vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:
Nitrile and butyl rubber gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information.
When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.
Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:

Tightly sealed goggles

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:
Form: Liquid
Colour: Amber coloured
Odour: Characteristic
Odour Threshold: No information available

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pH-Value at 20 °C:	3.9
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	82 °C
Flash Point:	13 °C
Flammability:	Highly flammable.
Ignition Temperature	270 °C
Auto-ignition Temperature:	Product is not self-igniting.
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	1.7 Vol %
Upper:	9.0 Vol %
Vapour Pressure at 20 °C:	8 hPa
Density at 20 °C:	1 g/cm³
Relative Density:	No information available
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Immiscible
Partition Coefficient (n-octanol/water):	No information available
Viscosity:	No information available
Solvent separation test:	
VOC:	41.47 %

10 Stability and Reactivity

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of storage and use.

Conditions to Avoid: Heat, sparks, open flames and other sources of ignition.

Incompatible Materials: No further relevant information available.

Hazardous Decomposition Products: Oxides of carbon.

11 Toxicological Information

Toxicity:

LD50/LC50 Values Relevant for Classification:		
CAS: 108-10-1 2-Pentanone, 4-methyl-		
Oral	LD50	2,080 mg/kg (rat)
Dermal	LD50	16,000 mg/kg (rabbit)
Inhalation	LC50/4 h	8.3-16.6 mg/l (rat)
CAS: 64-18-6 Formic acid		
Oral	LD50	1,100 mg/kg (rat)
CAS: 67-63-0 2-Propanol		
Oral	LD50	5,045 mg/kg (rat)
Dermal	LD50	12,800 mg/kg (rabbit)
Inhalation	LC50/4 h	30 mg/l (rat)
CAS: 107-98-2 1-Methoxy-2-propanol [Monopropylene glycol methyl ether]		
Oral	LD50	5,660 mg/kg (rat)
Dermal	LD50	13,000 mg/kg (rabbit)

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Product Name: BRUNOX® EPOXY (BULK)

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CAS: 112-34-5 2-(2-butoxyethoxy)ethanol		
Oral	LD50	5,660 mg/kg (rat)
Dermal	LD50	4,000 mg/kg (rabbit)

Acute Health Effects
Inhalation: Harmful if inhaled. May cause respiratory irritation. May cause drowsiness and dizziness.
Skin: Causes severe skin burns.
Eye: Causes serious eye damage.
Ingestion: No adverse health effects expected.

Skin Corrosion / Irritation: Causes severe skin burns.

Serious Eye Damage / Irritation: Causes serious eye damage.

Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity:
Suspected of causing cancer.
Methyl isobutyl ketone is classified by IARC as Group 2B - Possibly carcinogenic to humans.
Isopropyl alcohol, tannic acid and tannins are classified by IARC as Group 3 - Not classifiable as to its carcinogenicity to humans.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Single Exposure:
May cause respiratory irritation. May cause drowsiness and dizziness.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:
Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.

Chronic Health Effects: Repeated exposure may cause skin dryness or cracking.

Existing Conditions Aggravated by Exposure: No information available

Additional toxicological information: No information available

12 Ecological Information

Ecotoxicity:

Aquatic toxicity:	
CAS: 108-10-1 2-Pentanone, 4-methyl-	
EC50/48 h	170 mg/l (daphnia)
EC50/96 h	400 mg/l (selenastrum capricornutum)
LC50/96 h	600 mg/l (rainbow trout)
CAS: 67-63-0 2-Propanol	
EC50/48 h	100 mg/l (daphnia)
EC50/72 h	100 mg/l (scenedesmus subspicatus)
LC50/96 h	1,400 mg/l (bluegill)
	9,640 mg/l (fathead minnow)
LC50/48 h	8,970 mg/l (golden orfe)
CAS: 107-98-2 1-Methoxy-2-propanol [Monopropylene glycol methyl ether]	
EC50/48 h	500 mg/l (daphnia)

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EC50/72 h	1,000 mg/l (selenastrum capricornutum)
LC50/96 h	1,000 mg/l (rainbow trout)
CAS: 112-34-5 2-(2-butoxyethoxy)ethanol	
EC50	>100 mg/l (algae)
EC50/48 h	>100 mg/l (daphnia)
LC50/96 h	1,300 mg/l (lepomis macrochirus)
LC50	>100 mg/l (golden orfe)

Persistence and Degradability: No further relevant information available.

Bioaccumulative Potential: No further relevant information available.

Mobility in Soil: No further relevant information available.

Other adverse effects:
Classified as Water Hazard Class 1 according to the German Regulations - Slightly hazardous for water.

13 Disposal Considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

Special Precautions for Landfill or Incineration:
Please consult your state Land Waste Management Authority for more information.

14 Transport Information

UN Number
ADG, IMDG, IATA UN1866

Proper Shipping Name
ADG, IMDG, IATA RESIN SOLUTION

Dangerous Goods Class
ADG Class: 3 Flammable liquids.
Subsidiary Risk:

Packing Group:
ADG, IMDG, IATA II

Marine pollutant:

EMS Number: F-E,S-C

Hazchem Code: •3YE

Transport/Additional information:

Limited Quantities: 5L

Packagings & IBCs - Packing Instruction: P001, IBC02

Packagings & IBCs - Special Packing Provisions: PP1

Portable Tanks & Bulk Containers - Instructions: T4

Portable Tanks & Bulk Containers - Special Provisions: TP1, TP8

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15 Regulatory Information

Australian Inventory of Industrial Chemicals:

All ingredients are listed.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Poison Schedule:
Poisons Schedule: 5

16 Other Information

Date of Preparation or Last Revision: 18.08.2020

Prepared by: MSDS.COM.AU Pty Ltd www.msds.com.au

Abbreviations and acronyms:
ADG: Australian Dangerous Goods
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
IARC: International Agency for Research on Cancer
STEL: Short Term Exposure Limit
TWA: Time Weighted Average
NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)
Flammable Liquids 2: Flammable liquids – Category 2
Flammable Liquids 3: Flammable liquids – Category 3
Flammable Liquids 4: Flammable liquids – Category 4
Acute Toxicity (Inhalation) 4: Acute toxicity - inhalation – Category 4
Skin Corrosion/Irritation 1A: Skin corrosion/irritation – Category 1A
Serious Eye Damage/Irritation 1: Serious eye damage/eye irritation – Category 1
Serious Eye Damage/Irritation 2A: Serious eye damage/eye irritation – Category 2A
Carcinogenicity 2: Carcinogenicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Disclaimer
This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - July 2020”
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