SAFETY DATA SHEET

Revision date: 12-Mar-2021

Revision Number 2

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

Product Name RTC-12

Product Code(s) 000000053837

Other means of identification

CAS No. 25265-77-4

Synonyms RTC12; RTC 12; DN-12; DN12; DN 12; 2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate.

Recommended use of the chemical and restrictions on use

Recommended use Raw material for coatings.

Uses advised against No information available.

Details of the supplier of the safety data sheet

Supplier
Ixom Operations Pty Ltd (Incorporated in Australia)
NZBN: 9429041465226 Address: 166 Totara Street
Mt Maunganui South
New Zealand

Telephone Number: +64 9 368 2700
Facimile: +64 9 368 2710

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

Not classified as a Dangerous Good under NZS 5433:2012 Transport of Dangerous Goods on Land.

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 and the Hazardous Substances (Classification) Notice 2017.

GHS Classification

SIGNAL WORD
Warning

Subclass 6.1 Category E - Substances which are acutely toxic.
Subclass 9.1 Category C - Substances that are harmful in the aquatic environment.

Approval Number: HSR003120

Label elements

Hazard statements
H303 - May be harmful if swallowed
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - Prevention
Avoid release to the environment
Precautionary Statements - Response
No response statements.
Precautionary Statements - Storage
No storage statements
Precautionary Statements - Disposal
In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Notice 2017. This may also include any method of disposal that must be avoided.

Other hazards which do not result in classification
No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical name	CAS No.	Weight-%
2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate	25265-77-4	>=99.0%

4. FIRST AID MEASURES

Description of first aid measures

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 for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact Wash with plenty of water. Call a physician if symptoms occur.

Ingestion Rinse mouth thoroughly with water. Drink 1 or 2 glasses of water. Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media Water spray. Dry chemical or CO2.

Unsuitable extinguishing media High volume water jet.

Specific hazards arising from the chemical

Specific hazards arising from the chemical Combustible material.

Hazardous combustion products Carbon oxides.

Special protective actions for fire-fighters

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 Avoid contact with skin, eyes and inhalation of vapors. Do not touch or walk through spilled material. Evacuate personnel to safe areas. Remove all sources of ignition. Use personal protective equipment as required. Wash thoroughly after handling.

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 containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

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. For large amounts, pump off product.

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 and eyes. Avoid breathing vapors or mists. Remove all sources of ignition. Use personal protection equipment. 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. Keep container

closed when not in use.

Incompatible materials Strong acids. Strong bases. Strong 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.

Appropriate engineering controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

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.

Hand protection Impervious gloves.

Skin and body protection 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 chemical properties

Physical state	Liquid
Appearance	No information available.
Color	Colourless
Odor	Slight
Odor threshold	No information available.

Property	**Values**	**Remarks • Method**
pH	3.54 @20°C	
Melting point / freezing point	< -50°C	

Boiling point / boiling range	252-262°C	
Flash point	122°C	Seta 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 limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	1.3 Pa @20°C	
Vapor density	No data available	None known
Relative density	0.9464 @20°C	
Water solubility	0.5-3.79 g/l @ 25 °C	
Solubility(ies)	No data available	None known
Partition coefficient	log Pow = 2.34-3.2 @25°C	None known
Autoignition temperature	388°C	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	13.6 mm2/s @25°C	None known
Dynamic viscosity	12.9 mPa.s @25°C	

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 To avoid thermal decomposition, do not overheat. Heat, flames and sparks.

Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong 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.

Eye contact May cause irritation.

Skin contact May cause irritation.

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

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

Product Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate	= 3200 mg/kg (Rat)	> 15200 mg/kg (Rat)	> 3.55 mg/L (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 No information available.
Product Information

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization Not a skin sensitizer. (guinea pig).
Product Information

Germ cell mutagenicity No information available.
Product Information

Carcinogenicity No information available.
Product Information

Reproductive toxicity No information available.

Product Information

STOT - single exposure No information available.
Product Information

STOT - repeated exposure No information available.
Product Information

Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity Keep out of waterways. Harmful to aquatic life with long lasting effects.

Terrestrial ecotoxicity There is no data for this product.

Chemical name	Algae/aquatic plants	Fish	Crustacea
2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate	EC50: =18.4mg/L (72h, Pseudokirchneriella subcapitata)	LC50: =30mg/L (96h, Pimephales promelas)	LC50: >95mg/L (96h, Daphnia magna)

Persistence and degradability

Persistence and degradability Readily biodegradable.

Bioaccumulative potential

Bioaccumulation No information available.

Mobility

Mobility in soil No information available.

Other adverse effects

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products Dispose of product in packaging in a way that is consistent with the Hazardous Substances (Disposal) Notice 2017 and the Act. Treat the substance using a method that changes the characteristics or composition of the substance so that the substance is no longer a hazardous substance; or export the substance from New Zealand as waste.

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

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT Not classified as a Dangerous Good under NZS 5433:2012 Transport of Dangerous Goods on Land.

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

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

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Chemical name	New Zealand HSNO Chemical Classification
2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate - 25265-77-4	6.1E (All),6.1E (O),9.1C (All),9.1C (A),9.1C (F) 6.1E (All),6.1E (O),9.1C (All),9.1C (F),9.1C (A)

International Inventories

NZIoC	This material is listed on the New Zealand Inventory of Chemicals.
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.
AICS	This material is listed on the Australian Inventory of Industrial Chemicals.

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

Supplier Safety Data Sheet 01/ 2019
RTC is a registered trademark.

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

Issuing Date: 12-Mar-2021

Reason(s) For Issue: Revised Primary SDS
Addition/Change of synonymous name(s)

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	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)
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 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