SAFETY DATA SHEET

Revision date: 04-Mar-2021

Revision Number 5

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

Product Name CARBOPOL 941 POLYMER

Product Code(s) 000000035210

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended use Cosmetics.

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)**

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
Danger

EPA New Zealand HSNO approval code or group standard Additives, Process Chemicals and Raw Materials (Toxic [6.7])
Group Standard 2017
Approval Number: HSR002512

Subclass 6.6 Category A - Substances that are known or presumed human mutagens.
Subclass 6.7 Category A - Substances that are known or presumed human carcinogens.
Subclass 6.8 Category A - Substances that are known or presumed human reproductive or developmental toxicants.

Label elements

Hazard statements
H340 - May cause genetic defects
H350 - May cause cancer
H360 - May damage fertility or the unborn child

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Precautionary Statements - Response
If exposed or concerned: Get medical advice/attention
Precautionary Statements - Storage
Store locked up
Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other hazards which do not result in classification
Dust can form an explosive mixture with air

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
Benzene	71-43-2	<0.5
Acrylic acid	79-10-7	<0.1
2-Propenoic acid, homopolymer	9003-01-4	to 100

4. FIRST AID MEASURES

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Emergency telephone number Poisons Information Center, New Zealand: 0800 764 766
Poisons Information Center, Australia: 13 11 26

Inhalation Remove to fresh air. If breathing is difficult, (trained personnel should) give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately.

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 Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

Symptoms Symptoms may be delayed.

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 Dry chemical, CO2, water spray or regular foam. Carbon dioxide (CO2) may be ineffective on large fires.

Unsuitable extinguishing media High volume water jet.

Specific hazards arising from the chemical

Specific hazards arising from the chemical Combustible material. Fine dust dispersed in air may ignite. Avoid generation of dust.

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 and eyes. Do not breathe dust. Avoid generation of dust. Ensure adequate ventilation. Do not touch or walk through spilled material. Remove all sources of ignition. Take precautionary measures against static discharges. Evacuate personnel to safe areas. 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 appropriate personal protective equipment (PPE). Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Use only non-sparking tools.

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. Do not breathe dust. Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Ground and bond all lines and equipment associated with product system. All equipment should be non-sparking and explosion proof. Remove all sources of ignition. Take precautionary measures against static discharges. Handle in accordance with good industrial hygiene and safety practice. Remove contaminated clothing and shoes. Use personal protection equipment.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Protect from direct sunlight. Protect from moisture. Keep at temperatures below 80°C / 176°F. Keep container closed when not in use.

Incompatible materials Alkalis. Bases.

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) recommended by supplier:

Chemical name	New Zealand	ACGIH
Benzene 71-43-2	25 µg/g creatinine urine end of shift S-Phenylmercapturic acid	

Acrylic acid: WES-TWA 2 ppm, 5.9 mg/m^3, dsen, skin
Benzene: WES-TWA 0.05 ppm, 6.7A Known or presumed human carcinogen, skin
Polyacrylic acid: WES-TWA 0.05 mg/m^3

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.

WES - STEL (Workplace Exposure Standard - Short Term Exposure Limits) - The 15 minute average exposure standard. Applies to any 15 minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both short-term and eight-hour, time-weighted average exposures should be determined.

(dsen) - Dermal sensitiser.

`Skin' Notice - absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

Carcinogen Category 1 - established human carcinogen. There is sufficient evidence to establish a causal association between human exposure and the development of cancer.

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, DUST MASK.

Eye/face protection Glasses.

Hand protection Impervious gloves.

Skin and body protection Wear suitable protective clothing. Overalls. Antistatic boots.

Respiratory protection If determined by a risk assessment an inhalation risk exists, wear a dust mask/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	Solid
Appearance	Powder
Color	White
Odor	Slight Acetic acid
Odor threshold	No information available.

Property	**Values**	**Remarks • Method**
pH	2.5 - 3	1 % aqueous solution

Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash point	Not applicable °C	
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	130 g/m³	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	1.4	@ 20 °C
Water solubility	Product swells on contact with water.	
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	ca. 480 °C	
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information

Maximum Rate of Pressure Rise (bar/sec)	380
Minimum Ignition Energy (mJ)	25-50
Minimum Ignition Temperature (°C)	ca. 480

10. STABILITY AND REACTIVITY

Reactivity

Reactivity Hygroscopic.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid Dust formation. Heat, flames and sparks. Static discharge (electrostatic discharge). Protect from moisture.

Incompatible materials

Incompatible materials Alkalis. Bases.

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 Dust contact with the eyes can lead to mechanical irritation.

Skin contact Contact with dust can cause mechanical irritation or drying of the skin.

Ingestion May cause gastrointestinal discomfort if consumed in large amounts.

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity
No information available.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Benzene	= 810 mg/kg (Rat) = 1800 mg/kg (Rat)	> 8200 mg/kg (Rabbit)	= 44.66 mg/L (Rat) 4 h
Acrylic acid	= 193 mg/kg (Rat) = 33500 µg/kg (Rat)	= 280 µL/kg (Rabbit) = 295 mg/kg (Rabbit)	= 3.6 mg/L (Rat) 4 h = 11.1 mg/L (Rat) 1 h
2-Propenoic acid, homopolymer	= 2500 mg/kg (Rat)	-	= 1.71 mg/L (Rat) 4 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.

Serious eye damage/eye irritation No information available.

Germ cell mutagenicity May cause genetic defects. Classification based on data available for ingredients. Contains a known or suspected mutagen.

Carcinogenicity May cause cancer. Classification based on data available for ingredients. Contains a known or suspected carcinogen.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	New Zealand	IARC
Benzene - 71-43-2	Confirmed carcinogen	Group 1
Acrylic acid - 79-10-7		Group 3
2-Propenoic acid, homopolymer - 9003-01-4		Group 3

Legend

IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans

Reproductive toxicity H360 - May damage fertility or the unborn child. Classification based on data available for ingredients. Contains a known or suspected reproductive toxin.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Chronic effects: A two-year inhalation study in rats exposed to a respirable, water-absorbent sodium polyacrylate dust resulted in lung effects such as inflammation, hyperplasia and tumors. There were no observed adverse effects at exposures of 0.05 mg/m^3. In addition, long-term medical monitoring of potentially exposed workers has not revealed lung effects such as those observed in the rat. However, the inhalation of respirable dusts should be avoided by implementing respiratory protection measures and observing the recommended permissible exposure limit of 0.05 mg/m^3.
Benzene has been examined for mutagenicity both in vitro and in vivo assays. It has shown mixed results for mutagenicity in vitro although in mammalian cells there is overall evidence for potential mutagenic activity. Benzene has been shown to be mutagenic in vivo in both somatic cells and germ cells. Benzene is recognised as causing leukemia in humans.

Other adverse effects This material readily absorbs moisture and may become thick and gelatinous upon contact with mucous membranes of the eye, or upon inhalation into the nasal passages.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity Keep out of waterways.

Terrestrial ecotoxicity There is no data for this product.

Chemical name	EarthWorm	Avian	Honeybees
Benzene	LC50 0.1 - 1 mg/cm2 (Eisenia foetida 48 h filter paper) LC50 = 0.098 mg/cm2 (Eisenia foetida 48 h filter paper)	-	-

Chemical name	Algae/aquatic plants	Fish	Crustacea
Benzene	EC50: =29mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 10.7 - 14.7mg/L (96h, Pimephales promelas) LC50: =5.3mg/L (96h, Oncorhynchus mykiss) LC50: =22.49mg/L (96h, Lepomis macrochirus) LC50: =28.6mg/L (96h, Poecilia reticulata) LC50: 22330 - 41160µg/L (96h, Pimephales promelas) LC50: 70000 - 142000µg/L (96h, Lepomis macrochirus)	EC50: 8.76 - 15.6mg/L (48h, Daphnia magna) EC50: =10mg/L (48h, Daphnia magna)
Acrylic acid	EC50: =0.17mg/L (96h, Pseudokirchneriella subcapitata) EC50: =0.04mg/L (72h, Desmodesmus subspicatus)	LC50: =222mg/L (96h, Brachydanio rerio)	EC50: =95mg/L (48h, Daphnia magna) LC50: =270mg/L (24h, Daphnia magna)
2-Propenoic acid, homopolymer	-	LC50: =580mg/L (96h, Lepomis macrochirus)	EC50: =168mg/L (96h, water flea)

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation No information available.

Mobility

Mobility in soil No information available.

Chemical name	Partition coefficient
Benzene	2.1
Acrylic acid	0.38 - 0.46

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.

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.

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

New Zealand

National regulations See section 8 for national exposure control parameters

.

EPA New Zealand HSNO approval code or group standard Additives, Process Chemicals and Raw Materials (Toxic [6.7]) Group Standard 2017

Approval Number: HSR002512

Chemical name	New Zealand HSNO Chemical Classification
Benzene - 71-43-2	3.1B,6.1B (All),6.1B (D),6.1D (O),6.3A,6.4A,6.6A,6.7A,6.8A,6.9A (All),6.9A (I),6.9A (O),9.1D (All),9.1D (A),9.1D (C),9.1D (F),9.3C
Acrylic acid - 79-10-7	3.1C,6.1C (All),6.1C (D),6.1C (O),6.1D (I),6.5B,6.9A (All),6.9A (I),8.2B,8.3A,9.1A (All),9.1A (A),9.1D (C),9.1D (F),9.3B

International Inventories

NZIoC	All the constituents of this material are 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	All the constituents of this material are 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 12/ 2015
CARBOPOL is a registered tradename.

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

Issuing Date: 04-Mar-2021

Reason(s) For Issue: Revised Primary SDS
Updated Formulation
Change in Hazardous Chemical Classification

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 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