SAFETY DATA SHEET

Revision date: 22-Nov-2024

TANAFLOC
black wattle extracts

Section 1: Identification

Product identifier

Product Name TANFLOC SG POWDER

Product Code(s) TFSGP25

Other means of identification

CAS No. 85029-52-3

Pure substance/mixture Substance

Recommended use of the chemical and restrictions on use

Recommended use Coagulant for the treatment of drinking water and wastewater.

Uses advised against No information available.

Illicit Drug Precursors/Reagents This product contains one or more substance(s) on the Illicit Drug Precursors/Reagents list. Verify requirements related to using, handling, and storing these substances.

Details of manufacturer or importer

Supplier
TANAFLOC AUSTRALIA PTY LTD
ABN: 35 640 456 846
4/560 Canning Hwy, Attadale Western, 6156
Australia
Telephone Number: +61 0 420 348 609

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

Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Germ cell mutagenicity	Category 2
Carcinogenicity	Category 1B

Label elements
Health hazard
Exclamation mark

Signal word
DANGER

Hazard statements
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H341 - Suspected of causing genetic defects
H350i - May cause cancer by inhalation

Precautionary Statements - Prevention
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Wash hands thoroughly after handling.
Wear protective gloves/clothing and eye/face protection.
Use personal protective equipment as required.
Contaminated work clothing must not be allowed out of the workplace.
Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention.
Specific measures (see First aid on this label).
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 or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.
Precautionary Statements - Storage
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.

Section 3: Composition and information on ingredients

Chemical name	CAS No.	Weight-%
Acacia mearnsi, ext., reaction products with ammonium chloride and formaldehyde	85029-52-3	>=93
Formaldehyde	50-00-0	<=3
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 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

(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 skin with soap and water. Get medical attention if symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms Irritation. May cause redness and tearing of the eyes. May cause allergic skin reaction. Redness. Rashes. Hives.

Effects of Exposure No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treatment: stomach wash. Administration of 100 mL of a solution containing 2% ammonium carbonate and 20% urea. Pulmonary oedema prophylaxis.

Section 5: Firefighting measures

Suitable Extinguishing Media

Suitable extinguishing media Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing media High volume water jet.

Specific hazards arising from the chemical

Specific hazards arising from the chemical May cause sensitization by skin contact. Non-combustible.

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 eyes. Avoid breathing dust or spray mist. Do not touch or walk through spilled material. 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.

Section 7: Handling and storage

Precautions for safe handling

Advice on safe handling Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Use personal protection equipment. Wash thoroughly after handling.

General hygiene considerations Avoid contact with skin, eyes or clothing. Do not breathe dust. Do not eat, drink or smoke when using this product. Wash hands and face before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from sunlight. Store away from foodstuffs. Keep container closed when not in use.

Incompatible materials Strong bases.

Section 8: Exposure controls and personal protection

Control parameters

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

Chemical name	Australia	New Zealand	ACGIH TLV
Formaldehyde 50-00-0	TWA: 1 ppm TWA: 1.2 mg/m^3 STEL: 2 ppm STEL: 2.5 mg/m^3	TWA: 0.3 ppm STEL: 0.6 ppm	TWA: 0.1 ppm STEL: 0.3 ppm dermal sensitizer;respiratory sensitizer

Chemical name	European Union	United Kingdom	Germany DFG
Formaldehyde 50-00-0	TWA: 0.37 mg/m^3 TWA: 0.3 ppm *	TWA: 2 ppm TWA: 2.5 mg/m^3 STEL: 2 ppm STEL: 2.5 mg/m^3	TWA: 0.3 ppm TWA: 0.37 mg/m^3 Peak: 0.6 ppm Peak: 0.74 mg/m^3 skin sensitizer

Formaldehyde: 8hr TWA = 1.2 mg/m^3 (1 ppm), 15 min STEL = 2.5 mg/m^3 (2 ppm), Carcinogen Category 2, Sen
Dusts not otherwise classified: 8hr TWA = 10 mg/m^3

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

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.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

Carcinogen Category 2 - substances suspected of having carcinogenic potential. The available information is not adequate for making a satisfactory assessment.

`Sen' Notice - sensitizer. The substance can cause a specific immune response in some people. An affected individual may subsequently react to exposure to minute levels of that substance and should not be further exposed to the substance.

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, DUST MASK.

Eye/face protection Goggles.

Skin and body protection Overalls. Wear suitable protective clothing. Boots.

Hand protection Impervious gloves.

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.

Thermal hazards No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Solid
Appearance	Powder
Color	Brown
Odor	Characteristic
Odor threshold	No information available

Property	Values	Remarks • Method
pH	1.8-2.7 (10% aqueous solution)	None known
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	-10.4°C at 101.3 kPa	None known
Boiling point / boiling range	103°C at 101.3 kPa	None known

Flash point	No data available	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	0.832 hPa at 20°C	None known
Vapor density	No data available	None known
Relative density	0.45–0.65 g/cm³ (absolute density)	None known
Water solubility		None known
Solubility(ies)	No data available	None known
Partition coefficient	log Kow = <3	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

Section 10: Stability and reactivity

Reactivity

Reactivity Hygroscopic.

Chemical stability

Stability Stable under normal conditions. Darkens on exposure to air and/or light.

Explosion data
Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Hazardous polymerization Hazardous polymerization when in presence of any aldehyde, proteins and strong acids.

Conditions to avoid

Conditions to avoid Exposure to air. Exposure to light. Dust formation. Suffers deterioration when in presence of ferrous surfaces, heavy metals salts and acids.

Incompatible materials

Incompatible materials Strong bases.

Hazardous decomposition products

Hazardous decomposition products Carbon monoxide. Carbon dioxide (CO2). Formaldehyde.

Section 11: Toxicological information

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 Causes serious eye irritation.

Skin contact May cause irritation. May cause sensitization by skin contact.

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

Symptoms Irritation. May cause redness and tearing of the eyes. May cause allergic skin reaction. Redness. Rashes. Hives.

Acute toxicity .

Numerical measures of toxicity - Product Information

ATEmix (oral) >5000 mg/kg
ATEmix (dermal) >5000 mg/kg
ATEmix (inhalation-vapor) >20 mg/L (4h)
ATEmix (inhalation-dust/mist) >5 mg/L (4h)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Acacia mearnsi, ext., reaction products with ammonium chloride and formaldehyde	-	> 2000 mg/kg (Rat)	-
Formaldehyde	= 100 mg/kg (Rat)	> 2000 mg/kg (Rat)	< 463 ppm (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 Not classified.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory or skin sensitization A skin sensitizer. Classification is based on mixture calculation methods based on component data.

Germ cell mutagenicity Suspected of causing genetic defects.

Carcinogenicity May cause cancer by inhalation. The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	Australia	European Union	IARC
Formaldehyde - 50-00-0	Carc. 1B	Carc. 1B	Group 1

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

Reproductive toxicity No information available.

STOT - single exposure No information available.

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.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Acacia mearnsi, ext., reaction products with ammonium chloride and formaldehyde	48hr EC50 = ca. 12 mg/L	96hr LC50 = ca. 67.1 mg/L	-	48hr EC50 = ca. 13.2 mg/L (Daphnia sp.)
Formaldehyde	-	LC50: 22.6 - 25.7mg/L (96h, Pimephales promelas) LC50: =1510µg/L (96h, Lepomis macrochirus) LC50: =41mg/L (96h, Brachydanio rerio) LC50: 0.032 - 0.226mL/L (96h, Oncorhynchus mykiss) LC50: 100 - 136mg/L (96h, Oncorhynchus mykiss) LC50: 23.2 - 29.7mg/L (96h, Pimephales promelas)	-	LC50: =2mg/L (48h, Daphnia magna) EC50: 11.3 - 18mg/L (48h, Daphnia magna)

Terrestrial ecotoxicity There is no data for this product.

Persistence and degradability

Persistence and degradability Readily biodegradable.

Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
Acacia mearnsi, ext., reaction products with ammonium chloride and formaldehyde	0.3
Formaldehyde	0.35

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 Refer to Waste Management Authority. Dispose of material through a licensed waste contractor.

Contaminated packaging 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.

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.

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:

New Zealand

TANFLOC SG has been self-assigned the **Water Treatment Chemicals (Carcinogenic) Group Standard 2020 HSR002687.**

TANFLOC SG is intended to be used as a water treatment chemical.

As per HSR002687 Clause 7-Assigning a substance to a group standard and compliance with clause 4 of the Group Standard:

The GHS hazard classification for the product is Eye Irritation Category 2, Skin Sensitiser Category 1,Germ Cell Mutagenicity Category 2, Carcinogenicity Category 1B, which is aligned with subclause (3) & subclause (4).

None of the components present in the finished product are asbestos or chemicals that are persistent organic pollutants within the definition in section 2 of the HSNO Act or exhibits the characteristics of a persistent organic pollutant as set out in paragraph 1 of Annex D to Schedule 1AA of the HSNO Act.

The CMR ingredient in the product is formaldehyde which is listed on the NZ Inventory of Chemicals (NZIOC).

All the other chemicals present in the product are listed on the NZIOC.

Section 15: Regulatory information

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)
Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Poison Schedule Number 6

Australian Industrial Chemicals Introduction Scheme (AICIS)
Contact supplier for inventory compliance status

Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Formaldehyde - 50-00-0	Contact supplier for inventory compliance status Present	Specific information requirement: Obligations to provide information apply. You must tell us within 28 days if the circumstances of your importation or manufacture (introduction) are different to those in our assessment.

Illicit Drug Precursors/Reagents
This product contains one or more substance(s) on the Illicit Drug Precursors/Reagents list. Verify requirements related to using, handling, and storing these substances.

Chemical name	Illicit Drug Precursors/Reagents
Formaldehyde - 50-00-0	Category 2

Major hazard (accident/incident planning) regulation
Verify that license requirements are met

Chemical name	Threshold quantity (T)
Formaldehyde - 50-00-0	50 tonne TQ >90%

National pollutant inventory
Subject to reporting requirement

Chemical name	National pollutant inventory
Formaldehyde - 50-00-0	10 tonne/yr Threshold category 1

International Inventories

AIIC	A constituent of this material is not 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:
AIIC- 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

Supplier Safety Data Sheet 08/ 2023

Reason(s) For Issue:	Revised Primary SDS Updated Formulation Change in Hazardous Chemical Classification Change in Fire Management Requirements Change in Physical Properties
Prepared By	This Safety Data Sheet has been prepared by TANAFLOC AUSTRALIA Pty Ltd
Revision date:	22-Nov-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) (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)
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 TANAFLOC AUSTRALIA 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 TANAFLOC AUSTRALIA representative or at the contact details on page 1.

TANAFLOC AUSTRALIA'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