# SAFETY DATA SHEET

**Revision date:** 18-Jun-2024

**Revision Number** 3

## Section 1: Identification

**Product identifier**

**Product Name** TANFLOC SG POWDER

**Product Code(s)** 000000054059

**Other means of identification**

**CAS No.** 85029-52-3

**Pure substance/mixture** Substance

**Recommended use of the chemical and restrictions on use**

**Recommended use** Flocculant for the treatment of drinking water.

**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**
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**

| | |
|---|---|
| **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<br>50-00-0 | TWA: 1 ppm<br>TWA: 1.2 mg/m³<br>STEL: 2 ppm<br>STEL: 2.5 mg/m³ | TWA: 0.3 ppm<br>STEL: 0.6 ppm | TWA: 0.1 ppm<br>STEL: 0.3 ppm<br>dermal sensitizer;respiratory sensitizer |

| Chemical name | European Union | United Kingdom | Germany DFG |
|---|---|---|---|
| Formaldehyde<br>50-00-0 | TWA: 0.37 mg/m³<br>TWA: 0.3 ppm<br>* | TWA: 2 ppm<br>TWA: 2.5 mg/m³<br>STEL: 2 ppm<br>STEL: 2.5 mg/m³ | TWA: 0.3 ppm<br>TWA: 0.37 mg/m³<br>Peak: 0.6 ppm<br>Peak: 0.74 mg/m³<br>skin sensitizer |

Formaldehyde: 8hr TWA = 1.2 mg/m³ (1 ppm), 15 min STEL = 2.5 mg/m³ (2 ppm), Carcinogen Category 2, Sen
Dusts not otherwise classified: 8hr TWA = 10 mg/m³

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 - sensitiser. 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)<br>LC50: =1510µg/L (96h, Lepomis macrochirus)<br>LC50: =41mg/L (96h, Brachydanio rerio)<br>LC50: 0.032 - 0.226mL/L (96h, Oncorhynchus mykiss)<br>LC50: 100 - 136mg/L (96h, Oncorhynchus mykiss)<br>LC50: 23.2 - 29.7mg/L (96h, Pimephales promelas) | - | LC50: =2mg/L (48h, Daphnia magna)<br>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**

**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**

**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 |
|---|---|---|

| 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

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| | |
|---|---|
| **Reason(s) For Issue:** | Revised Primary SDS<br>Updated Formulation<br>Change in Hazardous Chemical Classification<br>Change in Fire Management Requirements<br>Change in Physical Properties |
| **Prepared By** | This Safety Data Sheet has been prepared by IXOM Operations Pty Ltd (Toxicology and SDS Services). |
| **Revision date:** | 18-Jun-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 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**