SAFETY DATA SHEET

Revision date: 26-Oct-2020



Revision Number 3

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier			
Product Name	OPTICAL BRIGHTENING AGENT FB351		
Product Code(s)	00000051779		
Other means of identification			
CAS No.	27344-41-8		
Recommended use of the chemical and restrictions on use			
Recommended use	Optical brighteners.		
Uses advised against	No information available.		

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.

2. HAZARDS IDENTIFICATION

GHS Classification

Not classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG)

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

Serious eye damage/eye irritation

SIGNAL WORD Warning

Label elements

Exclamation mark

Category 2A



Hazard statements

H319 - Causes serious eye irritation

Precautionary Statements - Prevention

Wash hands and face thoroughly after handling

Wear protective gloves / protective clothing / eye protection / face protection

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

Precautionary Statements - Storage No storage statements Precautionary Statements - Disposal No disposal statements.

Other hazards which do not result in classification Causes mild skin irritation

Poisons Schedule (SUSMP) None allocated

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical name	CAS No.	Weight-%
4,4"-Bis(2-sulfostyryl)biphenyl, disodium salt	27344-41-8	>90%
Non hazardous component(s)	-	to 100%

4. FIRST AID MEASURES

Description of first aid measures

Emergency telephone number	Poisons Information Center, Australia: 13 11 26 Poisons Information Center, New Zealand: 0800 764 766
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 skin with soap and water. Get medical attention immediately if symptoms occur.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

Symptoms Irritation.

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.	
Unsuitable extinguishing media	No information available.	
Specific hazards arising from the chemical		
Specific hazards arising from the chemical	Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Cool drums with water spray.	
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. Avoid breathing dust or spray mist. Avoid generation of dust. Ensure adequate ventilation. Do not touch or walk through spilled material. Evacuate personnel to safe areas. 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. After cleaning, flush away traces with water.		

7. HANDLING AND STORAGE

Precautions for safe handling			
Advice on safe handling	Avoid contact with skin and eyes. Avoid breathing dust or spray mist. Avoid generation of dust. 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. Protect from moisture. Keep container closed when not in use.		
Incompatible materials	None known based on information supplied.		

Poisons Schedule (SUSMP)

None allocated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

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

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.

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, 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 meeting the requirements of AS/NZS 1715 and AS/NZS 1716.
Environmental exposure controls	No information available.

Remarks • Method

None known

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state
Appearance
Color
Odor
Odor threshold

Solid Powder Off-white Odourless No information available.

Property Values 10.0-11.0 (at 100 g/L water) pН No data available Melting point / freezing point Boiling point / boiling range No data available Flash point Not applicable **Evaporation rate** No data available Flammability (solid, gas) No data available Flammability Limit in Air Upper flammability or explosive Not applicable limits Lower flammability or explosive Not applicable limits Vapor pressure No data available Vapor density No data available **Relative density** No data available Sparingly soluble Water solubility No data available Solubility(ies) No data available **Partition coefficient** Not applicable Autoignition temperature Decomposition temperature No data available Kinematic viscosity No data available Dynamic viscosity No data available

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	Dust formation. Moisture.	
Incompatible materials		

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

Hazardous decomposition products Carbon oxides. Nitrogen oxides. Oxides of sulfur.

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	Causes serious eye irritation.
Skin contact	Causes mild skin irritation.
Ingestion	May cause gastrointestinal discomfort if consumed in large amounts.
Symptoms	Irritation.

Numerical measures of toxicity - Product Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
4,4"-Bis(2-sulfostyryl)biphenyl,	= 5580 mg/kg (Rat)	= 2500 mg/kg (Rabbit) > 1	= 3.6 mg/L (Rat)4 h
disodium salt		g/kg (Rat)	

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	Mild Irritant.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitization	Not a skin sensitizer.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity

Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
4,4"-Bis(2-sulfostyryl)biph enyl, disodium salt	EC50: =10mg/L (72h, Desmodesmus subspicatus) EC50: 10.0 - 11.0mg/L (96h, Desmodesmus subspicatus)	LC50: =76mg/L (96h, Brachydanio rerio)	-	EC50: =1000mg/L (48h, Daphnia magna)

Persistence and degradability

Persistence and degradability	No information available.
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Bioaccumulative potential

Bioaccumulation No information available.

Mobility

Mobility in soil

No information available.

Other adverse effects

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

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.

<u>IATA</u>

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

National regulations

<u>Australia</u>

Not classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG)

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

Poisons Schedule (SUSMP) None allocated

International Inventories AICS

This material is listed on the Australian Inventory of Industrial Chemicals.

Legend:

- 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 09/ 2019

Reason(s) For Issue: 5 Yearly Revised Primary SDS

Issuing Date:

26-Oct-2020

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

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 Sec	tion 8: EXPOSURE CONTROLS/PERSONAL	<u>PROTECTION</u>	
TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
С	Carcinogen		

Key literature references and sources for data used to compile the SDS

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