

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
HPR, Schedule 1

**Revision date** Not Applicable

**Revision Number** N/A

## 1. Identification

### Product identifier

**Product Name** 2-Bromofluorene

### Other means of identification

**Product Code(s)** TRC-B685225-25G

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

**Recommended use** Laboratory use

**Restrictions on use** No information available

### Details of the supplier of the safety data sheet

Will be updated as per company.

### Emergency telephone number

#### **Emergency Telephone**

Will be updated as per company.

## 2. Hazard identification

### Classification

Classification according to WHIMIS

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity — single exposure	Category 3

# SAFETY DATA SHEET

TRC-B685225-25G - 2-Bromofluorene

Revision date N/A

Chronic aquatic toxicity	Category 1
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## Labels/elements

### Warning

### Hazard statements

Classification according to WHIMIS  
Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation  
Very toxic to aquatic life with long lasting effects



### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling  
Avoid breathing dust, fume, gas, mist, vapors and spray  
Use only outdoors or in a well-ventilated area  
Avoid release to the environment  
Wear protective gloves, protective clothing, eye protection and face protection

### Eyes

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 and attention

### Skin

IF ON SKIN: Wash with plenty of water and soap  
If skin irritation occurs: Get medical advice and attention  
Take off all contaminated clothing and wash it before reuse

### Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing  
Call a POISON CENTRE or doctor if you feel unwell

### Spill

Collect spillage

### Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed  
Store locked up

### Precautionary Statements - Disposal

Dispose of contents and container to an approved waste disposal plant

## Other information

Very toxic to aquatic life.

# SAFETY DATA SHEET

TRC-B685225-25G - 2-Bromofluorene

Revision date N/A

## 3. Composition/information on ingredients

### Substance

Formula C13H9Br

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
2-Bromofluorene	1133-80-8	90 - 100%	-	

## 4. First-aid measures

### Description of first aid measures

#### General advice

Show this safety data sheet to the doctor in attendance.

#### Inhalation

Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur.

#### Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

#### Skin contact

Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

#### Ingestion

Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a doctor.

#### Self-protection of the first aider

Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

### Most important symptoms and effects, both acute and delayed

#### Symptoms

May cause redness and tearing of the eyes. Burning sensation.

### Indication of any immediate medical attention and special treatment needed

#### Note to doctors

Treat symptomatically.

## 5. Fire-fighting measures

#### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the

# SAFETY DATA SHEET

TRC-B685225-25G - 2-Bromofluorene

Revision date N/A

surrounding environment.

**Large Fire** CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

**Specific hazards arising from the chemical** No information available.

## Explosion data

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**Special protective equipment and precautions 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** Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing.

**Other information** Refer to protective measures listed in Sections 7 and 8.

### 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** Pick up and transfer to properly labelled containers.

## 7. Handling and storage

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Ensure adequate ventilation. Avoid breathing vapours or mists. In case of insufficient ventilation, wear suitable respiratory equipment.

### Conditions for safe storage, including any incompatibilities

# SAFETY DATA SHEET

TRC-B685225-25G - 2-Bromofluorene

Revision date N/A

## Storage Conditions#

Keep containers tightly closed in a dry, cool and well-ventilated place. Please refer to the manufacturer's certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on the CoA.

## 8. Exposure controls/personal protection

### Control parameters

#### Exposure Limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Appropriate engineering controls

#### Engineering controls

Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

If splashes are likely to occur, wear safety glasses with side-shields. Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

#### Hand protection

Wear suitable gloves. Impervious gloves. The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374.

#### Skin and body protection

Long sleeved clothing. Wear suitable protective clothing.

#### Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

#### Environmental exposure controls

Do not allow into any sewer, on the ground or into any body of water.

#### General hygiene considerations

Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

#### Physical state

Solid

#### Appearance

Solid

#### Colour

white to off-white

#### Odour

No information available

#### Odour threshold

No information available

# SAFETY DATA SHEET

TRC-B685225-25G - 2-Bromofluorene

Revision date N/A

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	No data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	None known
Lower flammability or explosive limits	No data available	None known
Vapour pressure	No data available	None known
Relative vapour density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Other information		
Explosive properties	No information available.	
Oxidising properties	No information available.	
Softening point	No information available	
Molecular weight	245.11	
VOC content	No information available	
Liquid Density	No information available	
Bulk density	No information available	

## 10. Stability and reactivity

### Reactivity

No information available.

### Chemical stability

Stable under normal conditions.

### Possibility of hazardous reactions

None under normal processing.

### Conditions to avoid

None known based on information supplied.

### Incompatible materials

Strong acids. Strong bases. Strong oxidising agents.

**Hazardous decomposition products** None known based on information supplied.

# SAFETY DATA SHEET

TRC-B685225-25G - 2-Bromofluorene

Revision date N/A

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Symptoms</b>	Redness. May cause redness and tearing of the eyes.
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### Acute toxicity

<b>Numerical measures of toxicity</b>	
No information available	

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Skin corrosion/irritation</b>	Classification based on data available for ingredients. Causes skin irritation. May cause skin irritation.
<b>Serious eye damage/eye irritation</b>	Classification based on data available for ingredients. Causes serious eye irritation.
<b>Respiratory or skin sensitisation</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.

# SAFETY DATA SHEET

TRC-B685225-25G - 2-Bromofluorene

Revision date N/A

**STOT - single exposure** May cause respiratory irritation.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

## 12. Ecological information

**Ecotoxicity** Very toxic to aquatic life with long lasting effects.

**Persistence and degradability** No information available.

**Bioaccumulation** No information available.

**Other adverse effects** No information available.

## 13. Disposal considerations

### Disposal methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

## 14. Transport information

### TDG

**UN number or ID number**

UN3077

**UN proper shipping name**

Environmentally hazardous substances, solid, n.o.s. (2-Bromofluorene)

**Transport hazard class(es)**

9

**Packing group**

III

**Special Provisions**

16, 99

**Marine pollutant**

P.

**Description**

UN3077, Environmentally hazardous substances, solid, n.o.s. (2-Bromofluorene), 9, III

### DOT

#Will be updated as per company.

Page 8 / 11

# SAFETY DATA SHEET

TRC-B685225-25G - 2-Bromofluorene

Revision date N/A

<b>UN number or ID number</b>	UN3077
<b>Extended proper shipping name</b>	Environmentally hazardous substances, solid, n.o.s. (2-Bromofluorene)
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>DOT Marine Pollutant</b>	I.
<b>Marine pollutant</b>	2-Bromofluorene
<b>Description</b>	UN3077, Environmentally hazardous substances, solid, n.o.s. (2-Bromofluorene), 9, III, Marine pollutant
<b>Special Provisions</b>	8, 146, 335, 384, 441, A112, B54, B120, IB8, IP3, N20, N91, T1, TP33
<b>Emergency Response Guide Number</b>	171
<b>MEX</b>	
<b>UN number or ID number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substances, solid, n.o.s. (2-Bromofluorene)
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>Description</b>	UN3077, Environmentally hazardous substances, solid, n.o.s. (2-Bromofluorene), 9, III
<b>Special Provisions</b>	274, 331, 335
<b>IATA</b>	
<b>UN number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substances, solid, n.o.s. (2-Bromofluorene)
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>ERG Code</b>	9L
<b>Special Provisions</b>	A97, A158, A179, A197, A215
<b>Description</b>	UN3077, Environmentally hazardous substances, solid, n.o.s. (2-Bromofluorene), 9, III
<b>UN number</b>	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substances, solid, n.o.s. (2-Bromofluorene)
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>EmS-No.</b>	F-A, S-F
<b>Special Provisions</b>	274, 335, 966, 967, 969
<b>Marine pollutant</b>	P
<b>Description</b>	UN3077, Environmentally hazardous substances, solid, n.o.s. (2-Bromofluorene), 9, III, Marine pollutant

## 15. Regulatory information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 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

## International Inventories

<b>TSCA</b>	Complies under research and development exemption or is regulated by a different government agency.
<b>DSL/NDSL</b>	Contact supplier for inventory compliance status.
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>IECSC</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.
<b>AIIC</b>	Contact supplier for inventory compliance status.

### **Legend:**

**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  
**AICS** - Australian Inventory of Chemical Substances

## **16. Other information**

<b>NFPA</b>	<b>Health hazards</b> 2	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Special hazards</b> -
<b>HMIS</b>	<b>Health hazards</b> 2	<b>Flammability</b> 0	<b>Physical hazards</b> 0	<b>Personal protection</b> X

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### **Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

<b>TWA</b>	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
<b>Ceiling</b>	Maximum limit value	Sk*	Skin designation

### **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 National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
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)  
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme  
Organisation for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

Revision date N/A

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**Disclaimer**

The Final Document will be available at the time of consignment.

# Can vary as per company.

**End of Safety Data Sheet**