



SAFETY DATA SHEET

Revision Date 21-Feb-2012

Revision Number 4

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Description: 4-Bromo-2-fluorobiphenyl
Cat No. 373270000; 373270100; 373270500
Synonyms None Known.

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Laboratory chemicals
Uses advised against No Information available

Details of the supplier of the safety data sheet

Company

Acros Organics BVBA
Janssen Pharmaceuticaaan 3a
2440 Geel, Belgium

E-mail address begele.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01
For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99
Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300
CHEMTREC Phone Number, Europe: 001-703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 4
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Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

Symbol(s) Xn - Harmful
R-phrases(s) R22 - Harmful if swallowed

Label Elements

SECTION 2. HAZARDS IDENTIFICATION



Signal Word

Warning

Hazard Statements

H302 - Harmful if swallowed

Precautionary Statements - EU (§28, 1272/2008)

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell

Other Hazards

No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.
4-Bromo-2-fluoro-1,1'-biphenyl 41604-19-7	EEC No. 255-453-9	98	41604-19-7	Xn; R22	Acute Tox. 4 (H302)	-

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

SECTION 4. FIRST AID MEASURES

Description of first aid measures

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.

Ingestion

Clean mouth with water. Get medical attention.

Inhalation

Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention.

4-Bromo-2-fluorobiphenyl

Revision Date 21-Feb-2012

Notes to Physician

Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES**Extinguishing media****Suitable Extinguishing Media**Water spray. Carbon dioxide (CO₂). Dry chemical. chemical foam.**Extinguishing media which must not be used for safety reasons**

No information available.

Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal.

SECTION 7. HANDLING AND STORAGE**Precautions for Safe Handling**

Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

Specific End Uses**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

4-Bromo-2-fluorobiphenyl

Revision Date 21-Feb-2012

SECTION 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.

Biological limit values

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

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

Exposure controls**Engineering Measures**

Ensure adequate ventilation, especially in confined areas

Personal protective equipment**Eye Protection**

Goggles

Hand Protection

Protective gloves

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**Physical State**

Solid

Appearance

Off-white

pH

No information available.

Vapor Pressure

0.04 hPa @ 20 °C

Boiling Point/Range

No information available.

Melting Point/Range

38 - 42°C / 100.4 - 107.6°F

Flash Point

113°C / 235.4°F

Autoignition Temperature

No information available.

Water Solubility

Insoluble

Molecular Formula

C₁₂ H₈ Br F

Molecular Weight

251.1

SECTION 10. STABILITY AND REACTIVITY**Reactivity****Chemical Stability**

Stable under normal conditions

Possibility of Hazardous Reactions

4-Bromo-2-fluorobiphenyl

Revision Date 21-Feb-2012

**Hazardous Polymerization
Hazardous Reactions .**Hazardous polymerization does not occur.
No information available.**Conditions to Avoid**

Incompatible products.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition ProductsCarbon monoxide (CO). Carbon dioxide (CO₂). Hydrogen halides. Gaseous hydrogen fluoride (HF).**SECTION 11. TOXICOLOGICAL INFORMATION****Information on Toxicological Effects****Acute Toxicity****Product Information**

No acute toxicity information is available for this product

Component Information**Chronic Toxicity****Carcinogenicity**

There are no known carcinogenic chemicals in this product

Sensitization

No information available.

Mutagenic Effects

No information available

Reproductive Effects

No information available.

Developmental Effects

No information available.

Target Organs

No information available.

Other Adverse Effects

The toxicological properties have not been fully investigated.

Endocrine Disruptor Information

None known

SECTION 12. ECOLOGICAL INFORMATION**Toxicity****Ecotoxicity effects**

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

4-Bromo-2-fluorobiphenyl

Revision Date 21-Feb-2012

Persistence and degradability

No information available

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessment**Other adverse effects**

No information available

SECTION 13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Waste from Residues / Unused Products**

Dispose of in accordance with local regulations

Contaminated Packaging

Empty containers should be taken to local recyclers for disposal

SECTION 14. TRANSPORT INFORMATION**IMDG/IMO**

UN-No	3152
Hazard Class	9
Packing Group	II
Proper Shipping Name	POLYHALOGENATED BIPHENYLS, SOLID

ADR

UN-No	3152
Hazard Class	9
Packing Group	II
Proper Shipping Name	POLYHALOGENATED BIPHENYLS, SOLID

IATA

UN-No	3152
Hazard Class	9
Packing Group	II
Proper Shipping Name	POLYHALOGENATED BIPHENYLS, SOLID

4-Bromo-2-fluorobiphenyl
Revision Date 21-Feb-2012
SECTION 14. TRANSPORT INFORMATION
SECTION 15. REGULATORY INFORMATION
Safety, health and environmental regulations/legislation specific for the substance or mixture
International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
4-Bromo-2-fluoro-1,1'-biphenyl	255-453-9	-		-	-	-	-	-	-	-	X

Legend
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

AICS - Inventory of Chemical Substances

KECL - Existing and Evaluated Chemical Substances

Chemical Safety Assessment
SECTION 16. OTHER INFORMATION
Full text of R-phrases referred to under sections 2 and 3

R22 - Harmful if swallowed

Revision Date 21-Feb-2012

Revision Summary Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006
Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet



SAFETY DATA SHEET

4-Bromo-2-fluorobiphenyl

Revision Date 21-Feb-2012
