

Creation Date 16-Nov-2011

Revision Date 16-Nov-2011

Revision Number 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product Identifier

Product Description: 2,4,5-Trifluorophenylboronic acid  
Cat No. 393800000; 393800050; 393800250

### 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 begel.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

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

#### REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 4
Skin Corrosion/irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ systemic toxicity (single exposure)	Category 3

### Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R phrases mentioned in this Section, see Section 16

Symbol(s) Xn - Harmful  
R-phrases R22 - Harmful if swallowed  
Risk Combination Phrases R36/37/38 - Irritating to eyes, respiratory system and skin

2,4,5-Trifluorophenylboronic acid

Revision Date 16-Nov-2011

## 2. HAZARDS IDENTIFICATION

### Label Elements



### Signal Word

### Warning

### Hazard Statements

H315 - Causes skin irritation  
H302 - Harmful if swallowed  
H335 - May cause respiratory irritation  
H319 - Causes serious eye irritation

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

P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray  
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

### Other Hazards

No information available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC-No.	Weight %	CAS-No	Classification	GHS Classification	REACH No.
2,4,5-Trifluorophenylboronic acid 247564-72-3		>95	247564-72-3	Xn; R22 Xi; R36/37/38	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H302)	-

For the full text of the R phrases mentioned in this Section, see Section 16

2,4,5-Trifluorophenylboronic acid

Revision Date 16-Nov-2011

## 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 plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Obtain medical attention.

#### Ingestion

Do not induce vomiting. Clean mouth with water. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

#### Inhalation

Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Obtain medical attention.

#### Notes to Physician

Treat symptomatically

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

#### Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### 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. Thermal decomposition can lead to release of irritating gases and vapors.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.

### Environmental precautions

Should not be released into the environment.

### Methods and material for containment and cleaning up

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

2,4,5-Trifluorophenylboronic acid

Revision Date 16-Nov-2011

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

### Conditions for safe storage, including any incompatibilities

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

### Specific End Uses

## 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 that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

### **Personal protective equipment**

**Eye Protection**

Safety glasses with side-shields

**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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State**

Solid

**Appearance**

White

**odor**

No information available.

**pH**

No information available.

**Boiling Point/Range**

No information available.

**Melting Point/Range**

118 - 119°C / 244.4 - 246.2°F

2,4,5-Trifluorophenylboronic acid

Revision Date 16-Nov-2011

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Flash Point	No information available.
Autoignition Temperature	No information available.
Molecular Formula	C <sub>6</sub> H <sub>4</sub> B F <sub>3</sub> O <sub>2</sub>
Molecular Weight	175.90

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

Stable under normal conditions.

**Possibility of Hazardous Reactions**

Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions .	None under normal processing..

**Conditions to Avoid**

Incompatible products, Excess heat, Avoid dust formation.

**Incompatible Materials**

Strong oxidizing agents, Strong acids, Strong bases.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Oxides of boron. Hydrogen fluoride.

**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
-----------------	-----------------------------------------------------------

2,4,5-Trifluorophenylboronic acid

Revision Date 16-Nov-2011

<b>Sensitization</b>	No information available.
<b>Mutagenic Effects</b>	No information available
<b>Reproductive Effects</b>	No information available.
<b>Developmental Effects</b>	No information available.
<b>Target Organs</b>	Skin Respiratory system Eyes
<b>Endocrine Disruptor Information</b>	None known

## 12. ECOLOGICAL INFORMATION

### Toxicity

<b>Ecotoxicity effects</b>	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants
----------------------------	----------------------------------------------------------------------------------------------------------------------------

### 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

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

<b>Waste from Residues / Unused Products</b>	Dispose of in accordance with local regulations
<b>Contaminated Packaging</b>	Empty containers should be taken to local recyclers for disposal

## 14. TRANSPORT INFORMATION

<b>IMDG/IMO</b>	Not regulated
-----------------	---------------

<b>ADR</b>	Not regulated
------------	---------------

2,4,5-Trifluorophenylboronic acid

Revision Date 16-Nov-2011

**14. TRANSPORT INFORMATION**IATA

Not regulated

**15. REGULATORY INFORMATION****Safety, health and environmental regulations/legislation specific for the substance or mixture****International Inventories****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****16. OTHER INFORMATION****Full text of R-phrases referred to under sections 2 and 3**

R22 - Harmful if swallowed

R36/37/38 - Irritating to eyes, respiratory system and skin

**Full text of H-Statements referred to under sections 2 and 3**

H302 - Harmful if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

**Revision Date**

16-Nov-2011

**Revision Summary**

Not applicable

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

**2,4,5-Trifluorophenylboronic acid****Revision Date 16-Nov-2011****16. OTHER INFORMATION****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**