

SAFETY DATA SHEET

According to OSHA HazCom 2012
Revision date 29-Sep-2023
Revision Number 1.1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**Product identifier**

Product Name Suzuki-Miyaura Cross Coupling Reaction Experiment Kit2

Other means of identification

Product Code(s) 289-90581

Recommended use of the chemical and restrictions on use

Recommended Use For research use only.

Uses advised against No information available

Details of the supplier of the safety data sheet**Distributor**

FUJIFILM Wako Pure Chemical Corporation . 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan Phone: +81

(0)6-6203-3741 Fax: +81 (0)6-6201-5964

FUJIFILM Wako Chemicals U.S.A., Inc. 1600 Bellwood Road, Richmond, VA 23237-1326, U.S.A. Phone: +1 (0)804-271-7677

Fax: +1 (0)804-271-7791

FUJIFILM Wako Chemicals GmbH Fuggerstrasse 12, D-41468 Neuss, Germany Phone: +49 (0)2131-311 158 Fax: +49

(0)2131-311 100

2. HAZARDS IDENTIFICATION**GHS classification****Classification of the substance or mixture**

Acute toxicity - Inhalation (Dusts/Mists)

Category 4

Skin corrosion/irritation

Category 2

Serious eye damage/eye irritation

Category 1

Specific target organ toxicity (single exposure)

Category 3

Category 3 Respiratory irritation, Narcotic effects

Pictograms

Signal word

Danger

Hazard statements

H315 - Causes skin irritation

H318 - Causes serious eye damage

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

H336 - May cause drowsiness or dizziness

Precautionary statements-(Prevention)

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

Precautionary statements-(Response)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

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

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell

Precautionary statements-(Storage)

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

Precautionary statements-(Disposal)

Dispose of contents/container to an approved waste disposal plant

Others

Other hazards Not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Kit

Chemical Name	Molecular weight	CAS RN	Weight-%
4-(N,N-Dimethylamino)phenylboronic acid, pinacol ester	247.14	N/A-28-9058-2	=<100
Sodium Carbonate	105.99	497-19-8	99.8
2-Acetyl-5-bromothiophene	205.07	5370-25-2	98.0
Palladium(II) acetate	224.51	3375-31-3	97.0
4-Methoxyphenylboric acid	151.96	5720-07-0	96

Impurities and/or Additives: Not applicable

4. FIRST AID MEASURES

First aid measures

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.

Inhalation Remove to fresh air.

Ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the chemical

No information available.

Explosion data

Sensitivity to Mechanical none.

Impact**Sensitivity to Static Discharge** none.**Protective equipment and precautions for firefighters**

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

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures****Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation, especially in confined areas.**Environmental precautions****Environmental precautions** See Section 12 for additional ecological information.**Methods and material for containment and cleaning up****Methods and material for containment and cleaning up** Prevent further leakage or spillage if safe to do so.**Methods for cleaning up** Pick up and transfer to properly labeled containers.**7. HANDLING AND STORAGE****Precautions for safe handling****Technical measures** Avoid contact with strong oxidizing agents.
Protective measures Handle in accordance with good industrial hygiene and safety practice.**Conditions for safe storage, including any incompatibilities****Storage conditions** Keep container protect from light, store in well-ventilated place at room temperature (preferably cool). Keep container tightly closed.**Packaging materials** Glass.**Incompatible materials** Strong oxidizing agents.**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Engineering controls**

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and hand- and eye-wash facility. And display their position clearly.

Exposure limits**Personal protective equipment****Respiratory protection** Dust mask (JIS T 8151)
Hand protection chemical protective gloves (JIS T 8116)
Eye protection protective eyeglasses or chemical safety goggles
Skin and body protection Long-sleeved work clothes**General hygiene considerations**

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Form**

Appearance	Kit
Odor	no data available
pH	no data available
Melting point/freezing point	no data available
Boiling point, initial boiling point and boiling range	no data available
Flash point	no data available
Evaporation rate:	no data available
Flammability (solid, gas):	no data available
Upper/lower flammability or explosive limits	
Upper:	no data available
Lower:	no data available
Vapour pressure	no data available
Vapour density	no data available
Specific Gravity / Relative density	no data available
Solubilities	
n-Octanol/water partition coefficient:(log Pow)	no data available
Auto-ignition temperature:	no data available
Decomposition temperature:	no data available
Viscosity (coefficient of viscosity)	no data available
Dynamic viscosity	no data available

10. STABILITY AND REACTIVITY

Stability

Chemical stability May be altered by light.
Reactivity no data available

Hazardous reactions

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO₂), Sulfur oxides (SO_x), Halides, Boron oxide, Metal oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Carbonate	2,800 mg/kg (Rat)	>2,000 mg/kg (Rabbit)	1.2 mg/L (Rat) 4 h
Palladium(II) acetate	> 2000 mg/kg (Rat)	N/A	N/A

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas- source information
Sodium Carbonate	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

Chemical Name	Acute toxicity -inhalation vapor- source information	Acute toxicity -inhalation dust- source information	Acute toxicity -inhalation mist- source information
Sodium Carbonate	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS Classification results.

Skin irritation/corrosion

Chemical Name	Skin corrosion/irritation source information
Sodium Carbonate	Based on the NITE GHS classification results.

Serious eye damage/ irritation

Chemical Name	Serious eye damage/irritation source information
Sodium Carbonate	Based on the NITE GHS classification results.

Respiratory or skin sensitization

Chemical Name	Respiratory or Skin sensitization source information
Sodium Carbonate	Based on the NITE GHS classification results.

Reproductive cell mutagenicity

Chemical Name	germ cell mutagenicity source information
Sodium Carbonate	Based on the NITE GHS classification results.

Carcinogenicity

Chemical Name	Carcinogenicity source information
Sodium Carbonate	Based on the NITE GHS classification results.

Reproductive toxicity

Chemical Name	Reproductive toxicity source information
Sodium Carbonate	Based on the NITE GHS classification results.

STOT-single exposure

Chemical Name	STOT -single exposure- source information
Sodium Carbonate	Based on the NITE GHS classification results.

STOT-repeated exposure

Chemical Name	STOT -repeated exposure- source information
Sodium Carbonate	Based on the NITE GHS classification results.

Aspiration hazard

Chemical Name	Aspiration Hazard source information
Sodium Carbonate	Based on the NITE GHS classification results.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium Carbonate 497-19-8	EC50 : Nitzschia 242 mg/L 120 h	LC50 : Lepomis macrochirus 300 mg/L 96 h		EC50 : Daphnia magna 250 mg/L 48 h

Persistence and degradability

No information available

Bioaccumulative potential

No information available

Mobility in soil

No information available

Other Data

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Precautionary including method of disposing contaminated packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION**DOT**

UN/ID No

Not regulated

Proper shipping name:

Not applicable

UN classification

Subsidiary hazard class	
Packing group	
Marine pollutant	Not applicable
IATA	Not regulated
UN/ID No	-
Proper shipping name:	
UN classification	
Subsidiary hazard class	
Packing group	
Environmentally Hazardous Substance	Not applicable
IMDG	Not regulated
UN/ID No	-
Proper shipping name:	
UN classification	
Subsidiary hazard class	
Packing group	
Marine pollutant (Sea)	Not applicable

15. REGULATORY INFORMATION

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any chemicals regulated by Proposition 65

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

Issue Date 25-Feb-2021

Revision date 29-Sep-2023

Revision Note

No information available

Disclaimer

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet