



SAFETY DATA SHEET

Revision Date 23-Mar-2012

Revision Number 2

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

Product Identifier

Product Description: Bis(norbornadiene)rhodium(I) tetrafluoroborate
Cat No. 382550000; 382551000; 382555000

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

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture
REGULATION (EC) No 1272/2008

Flammable solids.	Category 2
-------------------	------------

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) F - Highly flammable
R-phrases(s) R11 - Highly flammable

Label Elements

Bis(norbornadiene)rhodium(I) tetrafluoroborate

Revision Date 23-Mar-2012

SECTION 2. HAZARDS IDENTIFICATION



Signal Word

Warning

Hazard Statements

H228 - Flammable solid

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

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

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.
Bis(norbornadiene)rhodium(I) tetrafluoroborate 36620-11-8		94	36620-11-8	F; R11	Flam. Sol. 2 (H228)	-

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.

Bis(norbornadiene)rhodium(I) tetrafluoroborate

Revision Date 23-Mar-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

Flammable. Explosive properties. Combustible material.

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

Avoid dust formation. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not let this chemical enter the environment.

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

Avoid contact with skin and eyes. Avoid contact with clothing. Avoid breathing vapors or mists. Do not ingest. Use explosion-proof equipment. Use only non-sparking tools. Keep under nitrogen.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat and sources of ignition. Protect from moisture. Flammables area. Keep under nitrogen. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Specific End Uses

Bis(norbornadiene)rhodium(I) tetrafluoroborate

Revision Date 23-Mar-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 Use explosion-proof electrical/ventilating/lighting/equipment

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	Powder, Solid
Appearance	Red
pH	No information available.
Boiling Point/Range	No information available.
Melting Point/Range	209 - 211°C / 408.2 - 411.8°F
Flash Point	No information available.
Autoignition Temperature	No information available.
Water Solubility	decomposes
Molecular Formula	C14 H16 B F4 Rh
Molecular Weight	373.99

SECTION 10. STABILITY AND REACTIVITY
Reactivity
Chemical Stability

Hygroscopic. heat sensitive. Air sensitive.

Bis(norbornadiene)rhodium(I) tetrafluoroborate

Revision Date 23-Mar-2012

Possibility of Hazardous Reactions

Hazardous Polymerization No information available.
Hazardous Reactions . No information available.

Conditions to Avoid

Keep away from open flames, hot surfaces and sources of ignition, Excess heat, Incompatible products, Exposure to moist air or water.

Incompatible Materials

Acids, Bases, Strong oxidizing agents.

Hazardous Decomposition ProductsCarbon monoxide (CO). Carbon dioxide (CO₂). Oxides of boron. Gaseous hydrogen fluoride (HF). Fluorine.**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 Do not empty into drains

Bis(norbornadiene)rhodium(I) tetrafluoroborate

Revision Date 23-Mar-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	1325
Hazard Class	4.1
Packing Group	II
Proper Shipping Name	FLAMMABLE SOLID, ORGANIC, N.O.S.

ADR

UN-No	1325
Hazard Class	4.1
Packing Group	II
Proper Shipping Name	FLAMMABLE SOLID, ORGANIC, N.O.S.

IATA

UN-No	1325
Hazard Class	4.1
Packing Group	II
Proper Shipping Name	FLAMMABLE SOLID, ORGANIC, N.O.S.*

Bis(norbornadiene)rhodium(I) tetrafluoroborate

Revision Date 23-Mar-2012

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

R11 - Highly flammable

Revision Date

23-Mar-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