

**SAFETY DATA SHEET**
Stivarga™ Tablets

122000008586

Version 1.0

Revision Date 08/29/2012

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**Product information**

Product Name: Stivarga™ Tablets
MSDS Number: 122000008586

Use : Medicinal products

Company

BAYER HEALTHCARE LLC
Bayer HealthCare Pharmaceuticals Inc.
6 West Belt
Wayne, NJ 07470
USA
1888-84-BAYER

In case of emergency: 1888-84-BAYER
Chemtrec: (800) 424-9300

2. HAZARDS IDENTIFICATION**Emergency Overview**

Colour: Pink colored **Form:** solid, tablet **Odour:** odourless.

Hazard Communication (29CFR 1910.1200)

Talc **IARC** - Overall evaluation: Not classifiable as to carcinogenicity to humans.
IARC - Evidence of carcinogenicity in animals: Limited data.
IARC - Evidence of carcinogenicity in humans: Inadequate data.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Weight percent	Components	CAS-No.
10 - 30%	Cellulose microcrystalline	9004-34-6
5 - 10%	Regorafenib	755037-03-7

Stivarga™ Tablets

Version 1.0

Revision Date 08/29/2012

0.1 - 1% Talc 14807-96-6

Label Ingredients: Regorafenib monohydrate; Microcrystalline Cellulose; Croscarmellose sodium; Magnesium Stearate; Povidone; Silica, amorphous, fumed, crystalline free; Film-coating;

4. FIRST AID MEASURES

General advice: Take off all contaminated clothing immediately.

If inhaled: Remove to fresh air. If symptoms persist, call a physician.

In case of skin contact: After contact with skin, wash immediately with plenty of soap and water. If skin reactions occur, contact a physician.

In case of eye contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

If swallowed: If swallowed, seek medical advice immediately and show this container or label.

Contact Number: Use the Bayer Emergency Number in Section 1

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Any

Specific hazards during fire fighting: Fire may cause evolution of: Carbon monoxide Carbon dioxide (CO₂)

Special protective equipment for fire-fighters: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Further information: Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment.

Methods for cleaning up: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Stivarga™ Tablets

Version 1.0

Revision Date 08/29/2012

Additional advice: Avoid dust formation.

Further Accidental Release Notes Avoid dust formation.

7. HANDLING AND STORAGE**Handling:**

Avoid dust formation. Only handle product with local exhaust ventilation. Avoid contact with skin, eyes and clothing.

Take measures to prevent the build up of electrostatic charge. Keep away from open flames, hot surfaces and sources of ignition.

Storage:

Storage temperature: 59 - 86 °F (15 - 30 °C)

Do not use after expiration date.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Polyvinylpyrrolidone (9003-39-8)****Cellulose microcrystalline (9004-34-6)**

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 10 mg/m³

US. NIOSH: Pocket Guide to Chemical Hazards

Recommended exposure limit (REL): 5 mg/m³ (Respirable.)

US. NIOSH: Pocket Guide to Chemical Hazards

Recommended exposure limit (REL): 10 mg/m³ (Total)

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

PEL: 5 mg/m³ (Respirable fraction.)

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

PEL: 15 mg/m³ (Total dust.)

Polyvinyl alcohol (9002-89-5)**Respiratory protection:**

Recommended Filter type: HEPA

Hand protection:

Chemically resistant gloves.

Eye protection:

Safety glasses

Other protective measures:

Wear suitable protective equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	solid, tablet
Colour:	Pink colored
Odour:	odourless
Melting point:	no data available
Density:	no data available
Bulk density:	no data available
Vapour pressure:	not applicable
Water solubility:	no data available
pH:	no data available
Partition coefficient (n-octanol/water):	no data available
Solubility(ies):	no data available
Flash point:	not applicable
Ignition temperature:	no data available

10. STABILITY AND REACTIVITY

Conditions to avoid: no data available

Materials to avoid: Oxidizing agents

Hazardous reactions: None known.

Thermal decomposition:

no data available

Hazardous decomposition products:

Carbon monoxide, Carbon dioxide (CO₂)

Auto-flammability:

No statements available.

Burning number:

no data available

Flammability (solid, gas):

no data available

Oxidizing properties:

Stivarga™ Tablets

Version 1.0

Revision Date 08/29/2012

No statements available.

Explosive properties: No statements available.
No statements available.

Impact Sensitivity:
no data available

11. TOXICOLOGICAL INFORMATION**Other information on toxicity:**

No data is available on the product itself.

Acute oral toxicity:

Cellulose microcrystalline
LD50 rat: > 5,000 mg/kg

Regorafenib

LD50 cut-off rat: > 250 mg/kg

Method: OECD TG 423

Single administration did not lead to fatalities. Technically produced maximum dose.

LD50 cut-off mouse: > 250 mg/kg

Method: OECD TG 423

Single administration did not lead to fatalities. Technically produced maximum dose.

Acute inhalation toxicity:

This information is not available.

Acute dermal toxicity:

This information is not available.

Acute toxicity (other routes of administration):

This information is not available.

Skin irritation:

This information is not available.

Eye irritation:

This information is not available.

Sensitisation:

This information is not available.

Phototoxicity:

No statements available.

Stivarga™ Tablets

Version 1.0

Revision Date 08/29/2012

Subacute, subchronic and prolonged toxicity:

Regorafenib

NOEL 0.1 mg/kg, Lowest observable effect level 0.5 mg/kg , rat Oral, Exposure time 6 months

Number of exposures: once daily

Method: OECD TG 452

Genotoxicity in vitro:

Result: No statements available.

Genotoxicity in vivo:

Result: No statements available.

Carcinogenicity:

Result: No statements available.

Reproductive toxicity:

Result: No statements available.

Teratogenicity:

Result: No statements available.

Pharmaceutic effects:

Regorafenib

anti-cancer drug

12. ECOLOGICAL INFORMATION**General advice:**

Do not allow to enter surface waters or groundwater.

Toxicity to fish:

Cellulose microcrystalline

Acute Fish toxicity: LC50 > 100 mg/l

Test species: Oncorhynchus mykiss (rainbow trout) Duration of test: 96 h

Talc

LC50 > 10 g/l

Test species: Danio rerio (zebra fish) Duration of test: 24 h

Regorafenib

Early-life Stage: NOEC < 14

Test species: Pimephales promelas (fathead minnow) Duration of test: 672 h

Method: OECD 210

Toxicity to daphnia and other aquatic invertebrates.:

Cellulose microcrystalline

LC50 > 100 mg/l

Test species: Daphnia magna (Water flea) Duration of test: 48 h

Stivarga™ Tablets

Version 1.0

Revision Date 08/29/2012

Toxicity to algae:

Cellulose microcrystalline

EC50 > 100 mg/l

Duration of test: 96 h

NOEC 12.5 mg/l

Duration of test: 96 h

Regorafenib

Growth inhibition EC50 0.0085 mg/l

tested on: Desmodesmus subspicatus (green algae) Duration of test: 72 h

Toxicity to bacteria:

Regorafenib

Respiration inhibition NOEC >= 40 mg/l

tested on: activated sludge micro-organism

Method: OECD TG 209

Toxicity to fish(Chronic toxicity)

No statements available.

Toxicity to daphnia and other aquatic invertebrates.(Chronic toxicity)

No statements available.

Toxicity on soil-dwelling organisms

No statements available.

Toxicity on other terrestrial non-mammal

No statements available.

Biodegradability:

no data available

Physico-chemical removability:

no data available.

Bioaccumulation:

no data available

Biochemical Oxygen Demand (BOD):

no data available

Chemical Oxygen Demand (COD): No statements available.

Adsorbed organic bound halogens (AOX):

no data available

Theoretical biological oxygen requirement:

no data available

BSB in proportion to ThSB: No statements available.

Stability in water:

Stivarga™ Tablets

Version 1.0

Revision Date 08/29/2012

no data available

Stability in soil:

no data available

Additional degradation pathways: No statements available.

Photodegradation:

No statements available.

13. DISPOSAL CONSIDERATIONS

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

14. TRANSPORT INFORMATION**Land transport (DOT)**

Non-Regulated

Inland waterway transport

Non-Regulated

Railway transport

Non-Regulated

Sea transport (IMDG)

Non-Regulated

Air transport (ICAO / IATA cargo aircraft only)

Non-Regulated

Air transport (ICAO / IATA passenger and cargo aircraft)

Non-Regulated

15. REGULATORY INFORMATION

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

Components

None

Stivarga™ Tablets

Version 1.0

Revision Date 08/29/2012

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required**Components**

None

US. EPA CERCLA Hazardous Substances (40 CFR 302) Components

None

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists

Weight percent	Components	CAS-No.
10 - 30%	Cellulose microcrystalline	9004-34-6

California Prop. 65

To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

OSHA Hazcom Standard Rating Hazardous

16. OTHER INFORMATION**Further information**

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.