



Baidyanath
Trusted since 1917

Shree Ayurved Bhawan Pvt. Ltd.
Great Nag Road, Nagpur (M.S.) 440 024
Ph.: 6644900/01/02/03/04/6644934,
Fax: 0712-2743453, Email: info@baidyanath.info
Regd. Office: 1, Gupta Lane, Kolkata - 700 006
CIN No.: U24233WB1947PTC015374

Ref No.:SARF/2017-18

Date : 02.12.2017

To,
Principal,
Institute of Pharmaceutical
Educational and Research
Borgaon Meghe, Wardha.

Dear Sir,

Enclosed herewith cheque of Bank of Maharashtra of Rs.35280/- (Thirty Five Thousand Two Hundred Eighty Only) bearing cheque No.77107 Dated 02.12.2017 as a advance towards the acute toxicity study of Four products. Vitex-10 Capsule (Marron-Marron) , Baidyanath Shatavari Granules, Clearpile Tablet (Red coating) Baidyanath Ashwagandha Capsule(Vegi Capsule).

Thanking You.

Yours Faithfully,

For, Shree Baidyanath Ayurved Bhawan Pvt. Ltd.

Authorized Signatory



Accept RS 35280/-
Issue receipt
04.12.17



(Dr. R. O. Ganjivale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgaon (Meghe), Wardha

KOLKATA · PATNA · JHANSI · NAGPUR · ALLAHABAD

Blending the ancient knowledge with modern science, we offer more than 700 products - the world's largest Ayurvedic range

2017-18/05

Acute toxicity of VITEX-10 Capsules
Study No.: PL – 05 (2017-18)

IPER, Wardha

ACUTE ORAL TOXICITY TEST IN THE RATS -Fixed Dose Procedure-

Test substance :- VITEX 10 Capsules
Supplied by :- Shree Baidyanath Ayurved Bhavan Pvt. Ltd., Nagpur


TEST REPORT

Project coordinator : Dr. R. O. Ganjiwale

Principal investigator : Mr. A. M. Patole

Institute of Pharmace
WARDE




(Dr. R. O. Ganjiwale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgun (Moghe), Wardha

sh,

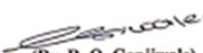
Date of commencement: 4th December 2017

Date of completion : 22nd December 2017

CONTENTS

I. AIM AND OBJECTIVES	3
II. TEST SUBSTANCE	3
III. TEST ANIMALS	4
IV. TEST PROCEDURE	4
V. OBSERVATIONS	5
VI. RESULTS	6
VII. CONCLUSION	6
VIII. REFERENCES	7
APPENDICES	




(Dr. R. O. Ganjiwale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgnon (Moghe), Wardha

ACUTE ORAL TOXICITY TEST IN THE RATS – FIXED DOSE PROCEDURE METHOD- OECD GUIDELINE 420¹

I. AIM & OBJECTIVE OF THE TEST

The aim of the test is to obtain, using a minimum number of animals, sufficient information on the acute toxicity after single administration, by oral route in the rat, of a test substance, for its classification.

The test substance is administered to a group of experimental animals, by oral route at one defined dose (5 mg/kg, 50 mg/kg, 300 mg/kg or 2000 mg/kg) according to the available information on the test substance.

The animals are observed each day for 14 days at least, after administration, to detect the signs of toxicity. Animals which die are necropsied ; the animals which are intercurrently sacrificed as well as the ones which survive until the end of the test are necropsied.

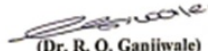
This test using pre-defined doses provides results allowing the test substance to be ranked according to the Globally Harmonised System (GHS) for classification of chemicals which cause acute toxicity (OECD 1998).²

II. TEST SUBSTANCE

The supplier provided for the test container containing solution identified as : VTEX-10 Capsule (Batch No. T – 03).

The test substance was stored at ambient temperature and out of the light.




(Dr. R. O. Ganjivale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research

III. TEST ANIMALS

Species: Albino rats weighing in range of 160-180 g

Strain: Wister

Age : 8-12 weeks

Number & Sex: 5 nulliparous and non-pregnant females.

Diet: Standard feed prepared in-house.

Water: Plain tap water *ad libitum*.

Housing: The animals were housed in 37cm x 23cm x 16cm polypropylene cages with maximum 3 animals per cage. The cages were placed in limited-access premises of animal house with controlled temperature and humidity. The artificial lighting ensured a sequence of 12 hours light and 12 hours dark.

IV. TEST PROCEDURE

Preparation of the test substance: The test substance was dissolved in water.

Administration of the test substance : The animals fasted overnight prior to the test substance administration. All animals were weighed again on day 1 before administration.

The volume per 100 g of body weight, defined to 2 ml/100g, the volume to administer was calculated for each rat.

The test substance was administered in a single dose, orally by gavage using a syringe fitted with suitable sized canula. After administration, animals were fasted for 3-4 hours.

Selection of starting dose: As the test substance was an Ayurvedic formulation the starting dose was selected as 2000 mg/kg rat.

Main study: According to the methodology describe in the Annex 3 of the OECD guideline 420 (joined in Appendix IV of the present report) the test was performed with 5 animals receiving the test substance at the dose level



V. OBSERVATIONS

Animals were observed individually after dosing during the first 30 minutes, periodically during the first 24 hours and daily thereafter for a total of 14 days.

The clinical observations were made individually, each animal being examined outside the home cage.

The different parameters observed were – changes in skin & fur, eyes & mucous membranes, respiratory function, tremors, convulsions, salivation, diarrhea, lethargy, sleep & coma.³

Body weight : The animals were regularly weighed on day 1 before administration, then on day 8 and day 15 i.e. 7 and 14 days after administration of the test substance.

Pathology: All the animals surviving at the end of the 14 days of observation were scarified by intraperitoneal injection of 6% sodium pentobarbital solution at the rate of 0.12 ml/100g and bled at the femoral artery. They were necropsied and the main organs were examined macroscopically.

Interpretation of the results: The assessment criteria of the toxicity of the test substance taken into account were:

- Body weight change
- Clinical and behavioral signs
- Necropsy findings
- The mortality expressed in % of compound related deaths.

These results enabled to classify the test substance to one of a series of toxicity classes defined by fixed oral LD50 cut-off values, in compliance with Globally Harmonized System (GHS).²

- Category 1 = 0 < LD50 < 5 mg/kg
- Category 2 = 5 mg/kg < LD50 < 50 mg/kg
- Category 3 = 50 mg/kg < LD50 < 300 mg/kg
- Category 4 = 300 mg/kg < LD50 ≤ 2000 mg/kg
- Category 5 = LD50 > 2000 mg/kg
- Category 5 or non classified



(Dr. R. O. Ganjwale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research

VI. RESULTS

Body weight: All animals exhibited normal and comparable body weight gain throughout the period of study. The individual weights of the animals assessed during the test are supplied in Appendix I.

Clinical Observations: All animals were free of intoxication signs throughout the period of study. The results of the clinical observations are summarized in the table enclosed in Appendix II.

Pathology: All main organs subjected to necropsy were found normal in all animals. The result of the necropsy findings are summarized in the table enclosed in Appendix III.

VII. CONCLUSION

According to the Globally Harmonized System (HS) for the classification of substances which cause acute toxicity, the substance VITEX-10 Capsules (Batch No. T - 03) supplied by Shree Biadyanath Ayurved Bhavan Pvt. Ltd., Nagpur was classified in the **hazard category 5 or unclassified** with a LD50 higher than 2000 mg/kg in the Rat.

Project coordinator : Dr. R. O. Ganjiwale
I/c Principal

I.P.E.R. Wardha
Borgana (Mehgaon), Wardha
Institute of Pharmaceutical Education & Research
I/c. PRINCIPAL

Principal investigator : Mr. A. M. Patole
Assistant Professor
I.P.E.R. Wardha



(Dr. R. O. Ganjiwale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgana (Mehgaon), Wardha

ACUTE ORAL TOXICITY TEST IN THE RATS -Fixed Dose Procedure-

Test substance :- BAIDYANATH SHATAVARI Granules
Supplied by :- Shree Baidyanath Ayurved Bhavan Pvt. Ltd., Nagpur

TEST REPORT

Project coordinator : Dr. R. O. Ganjiwale

Principal investigator : Mr. A. M. Patole

**Institute of Pharmaceut
WARDHA**



(Signature)
(Dr. R. O. Ganjiwale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgnon (Meghe), Wardha

Date of commencement: 28th December 2017

CONTENTS

I. AIM AND OBJECTIVES	3
II. TEST SUBSTANCE	3
III. TEST ANIMALS	4
IV. TEST PROCEDURE	4
V. OBSERVATIONS	5
VI. RESULTS	6
VII. CONCLUSION	6
VIII. REFERENCES	7
APPENDICES	



(Dr. R. O. Ganjivale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgnon (Stephe), Wardha

ACUTE ORAL TOXICITY TEST IN THE RATS - FIXED DOSE PROCEDURE METHOD- OECD GUIDELINE 420¹

I. AIM & OBJECTIVE OF THE TEST

The aim of the test is to obtain, using a minimum number of animals, sufficient information on the acute toxicity after single administration, by oral route in the rat, of a test substance, for its classification.

The test substance is administered to a group of experimental animals, by oral route at one defined dose (5 mg/kg, 50 mg/kg, 300 mg/kg or 2000 mg/kg) according to the available information on the test substance.

The animals are observed each day for 14 days at least, after administration, to detect the signs of toxicity. Animals which die are necropsied ; the animals which are intercurrently sacrificed as well as the ones which survive until the end of the test are necropsied.

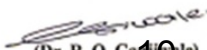
This test using pre-defined doses provides results allowing the test substance to be ranked according to the Globally Harmonised System (GHS) for classification of chemicals which cause acute toxicity (OECD 1998).²

II. TEST SUBSTANCE

The supplier provided for the test container containing solution identified as : BAIDYANATH SHATAVARI Granules (Batch No. 176940066).

The test substance was stored at ambient temperature and out of the light.




(Dr. R. O. Ganjale)
Principal

III. TEST ANIMALS

Species: Albino rats weighing in range of 130-150 g

Strain: Wister

Age : 8-12 weeks

Number & Sex: 5 nulliparous and non-pregnant females.

Diet: Standard feed prepared in-house.

Water: Plain tap water *ad libitum*.

Housing: The animals were housed in 37cm x 23cm x 16cm polypropylene cages with maximum 3 animals per cage. The cages were placed in limited-access premises of animal house with controlled temperature and humidity. The artificial lighting ensured a sequence of 12 hours light and 12 hours dark.

IV. TEST PROCEDURE

Preparation of the test substance: The test substance was dissolved in water.

Administration of the test substance : The animals fasted overnight prior to the test substance administration. All animals were weighed again on day 1 before administration.

The volume per 100 g of body weight, defined to 2 ml/100g, the volume to administer was calculated for each rat.

The test substance was administered in a single dose, orally by gavage using a syringe fitted with suitable sized canula. After administration, animals were fasted for 3-4 hours.

Selection of starting dose: As the test substance was an Ayurvedic formulation the starting dose was selected as 2000 mg/kg.

Main study: According to the methodology describe in the Annex 3 of the OECD guideline 420 (joined in Appendix IV of the present report) the test was performed with 5 animals receiving the test substance at the dose level of 2000 mg/kg of body weight.



V. OBSERVATIONS

Animals were observed individually after dosing during the first 30 minutes, periodically during the first 24 hours and daily thereafter for a total of 14 days.

The clinical observations were made individually, each animal being examined outside the home cage.

The different parameters observed were – changes in skin & fur, eyes & mucous membranes, respiratory function, tremors, convulsions, salivation, diarrhea, lethargy, sleep & coma.³

Body weight : The animals were regularly weighed on day 1 before administration, then on day 8 and day 15 i.e. 7 and 14 days after administration of the test substance.

Pathology: All the animals surviving at the end of the 14 days of observation were scarified by intraperitoneal injection of 6% sodium pentobarbital solution at the rate of 0.12 ml/100g and bled at the femoral artery. They were necropsied and the main organs were examined macroscopically.

Interpretation of the results: The assessment criteria of the toxicity of the test substance taken into account were:

- Body weight change
- Clinical and behavioral signs
- Necropsy findings
- The mortality expressed in % of compound related deaths.

These results enabled to classify the test substance to one of a series of toxicity classes defined by fixed oral LD50 cut-off values, in compliance with Globally Harmonized System (GHS).²

- Category 1 = 0 < LD50 < 5 mg/kg
- Category 2 = 5 mg/kg < LD50 < 50 mg/kg
- Category 3 = 50 mg/kg < LD50 < 300 mg/kg
- Category 4 = 300 mg/kg < LD50 ≤ 2000 mg/kg
- Category 5 = LD50 > 2000 mg/kg
- Category 5 or non classified



(Signature)
(Dr. R. O. Ganjivale)
Principal
PRINCIPAL

VI. RESULTS

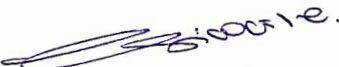
Body weight: All animals exhibited normal and comparable body weight gain throughout the period of study. The individual weights of the animals assessed during the test are supplied in Appendix I.

Clinical Observations: All animals were free of intoxication signs throughout the period of study. The results of the clinical observations are summarized in the table enclosed in Appendix II.

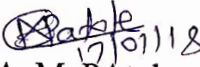
Pathology: All main organs subjected to necropsy were found normal in all animals. The result of the necropsy findings are summarized in the table enclosed in Appendix III.

VII. CONCLUSION

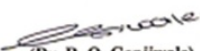
According to the Globally Harmonized System (GHS) for the classification of substances which cause acute toxicity, the substance BAIDYANATH SHATAVARI Granules (Batch No. T - 02) supplied by Shree Baidyanath Ayurved Bhavan Pvt. Ltd., Nagpur was classified in the **hazard category 5 or unclassified** with a LD50 higher than 2000 mg/kg in the Rat.

Project coordinator : 
I/c Principal
I.P.E.R. Wardha
I/c. PRINCIPAL

Institute of Pharmaceutical Education & Research
Borgaon (Meghe), Wardha

Principal investigator : 
Assistant Professor
I.P.E.R. Wardha




(Dr. R. O. Ganjiwale)
Principal
PRINCIPAL

ACUTE ORAL TOXICITY TEST IN THE RATS -Fixed Dose Procedure-

Test substance :- CLEARPILE Tablet
Supplied by :- Shree Baidyanath Ayurved Bhavan Pvt. Ltd., Nagpur

TEST REPORT

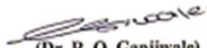
Project coordinator : Dr. R. O. Ganjiwale

Principal investigator : Mr. A. M. Patole

**Institute of Pharmaceutical Education & Research,
WARDHA**

Date of commencement: 4th December 201




(Dr. R. O. Ganjiwale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgon (Meghe), Wardha

er 2017

CONTENTS

I. AIM AND OBJECTIVES	3
II. TEST SUBSTANCE	3
III. TEST ANIMALS	4
IV. TEST PROCEDURE	4
V. OBSERVATIONS	5
VI. RESULTS	6
VII. CONCLUSION	6
VIII. REFERENCES	7

APPENDICES




(Dr. R. O. Ganjwale)
Principal

ACUTE ORAL TOXICITY TEST IN THE RATS – FIXED DOSE PROCEDURE METHOD- OECD GUIDELINE 420¹

I. AIM & OBJECTIVE OF THE TEST

The aim of the test is to obtain, using a minimum number of animals, sufficient information on the acute toxicity after single administration, by oral route in the rat, of a test substance, for its classification.

The test substance is administered to a group of experimental animals, by oral route at one defined dose (5 mg/kg, 50 mg/kg, 300 mg/kg or 2000 mg/kg) according to the available information on the test substance.

The animals are observed each day for 14 days at least, after administration, to detect the signs of toxicity. Animals which die are necropsied ; the animals which are intercurrently sacrificed as well as the ones which survive until the end of the test are necropsied.

This test using pre-defined doses provides results allowing the test substance to be ranked according to the Globally Harmonised System (GHS) for classification of chemicals which cause acute toxicity (OECD 1998).²

II. TEST SUBSTANCE

The supplier provided for the test container containing solution identified as : CLEARPILE Tablet (Batch No. T – 02).

The test substance was stored at ambient temperature and out of the light.



(Signature)
(Dr. R. O. Ganjwale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Wardha

III. TEST ANIMALS

Species: Albino rats weighing in range of 150-160 g

Strain: Wister

Age : 8-12 weeks

Number & Sex: 5 nulliparous and non-pregnant females.

Diet: Standard feed prepared in-house.

Water: Plain tap water *ad libitum*.

Housing: The animals were housed in 37cm x 23cm x 16cm polypropylene cages with maximum 3 animals per cage. The cages were placed in limited-access premises of animal house with controlled temperature and humidity. The artificial lighting ensured a sequence of 12 hours light and 12 hours dark.

IV. TEST PROCEDURE

Preparation of the test substance: The test substance was dissolved in water.

Administration of the test substance : The animals fasted overnight prior to the test substance administration. All animals were weighed again on day 1 before administration.


The volume per 100 g of body weight, defined to 2 ml/100g, the volume to administer was calculated for each rat.

The test substance was administered in a single dose, orally by gavage using a syringe fitted with suitable sized canula. After administration, animals were fasted for 3-4 hours.

Selection of starting dose: As the test substance was an Ayurvedic formulation the starting dose was selected as 2000 mg/kg rat.

Main study: According to the methodology describe in the Annex 3 of the OECD guideline 420 (joined in Appendix IV of the present report) the test was performed with 5 animals receiving the test substance at the dose level of 2000 mg/kg of body weight.




(Dr. R. O. Ganjwale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgon (Moghe), Wardha

V. OBSERVATIONS

Animals were observed individually after dosing during the first 30 minutes, periodically during the first 24 hours and daily thereafter for a total of 14 days.

The clinical observations were made individually, each animal being examined outside the home cage.

The different parameters observed were – changes in skin & fur, eyes & mucous membranes, respiratory function, tremors, convulsions, salivation, diarrhea, lethargy, sleep & coma.³

Body weight : The animals were regularly weighed on day 1 before administration, then on day 8 and day 15 i.e. 7 and 14 days after administration of the test substance.

Pathology: All the animals surviving at the end of the 14 days of observation were scarified by intraperitoneal injection of 6% sodium pentobarbital solution at the rate of 0.12 ml/100g and bled at the femoral artery. They were necropsied and the main organs were examined macroscopically.

Interpretation of the results: The assessment criteria of the toxicity of the test substance taken into account were:

- Body weight change
- Clinical and behavioral signs
- Necropsy findings
- The mortality expressed in % of compound related deaths.

These results enabled to classify the test substance to one of a series of toxicity classes defined by fixed oral LD50 cut-off values, in compliance with Globally Harmonized System (GHS).²

- Category 1 = 0 < LD50 < 5 mg/kg
- Category 2 = 5 mg/kg < LD50 < 50 mg/kg
- Category 3 = 50 mg/kg < LD50 < 300 mg/kg
- Category 4 = 300 mg/kg < LD50 ≤ 2000 mg/kg
- Category 5 = LD50 > 2000 mg/kg
- Category 5 or non classified



VI. RESULTS

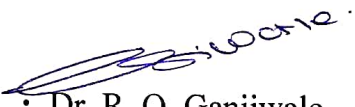
Body weight: All animals exhibited normal and comparable body weight gain throughout the period of study. The individual weights of the animals assessed during the test are supplied in Appendix I.

Clinical Observations: All animals were free of intoxication signs throughout the period of study. The results of the clinical observations are summarized in the table enclosed in Appendix II.

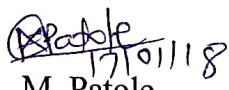
Pathology: All main organs subjected to necropsy were found normal in all animals. The result of the necropsy findings are summarized in the table enclosed in Appendix III.

VII. CONCLUSION


According to the Globally Harmonized System (GHS) for the classification of substances which cause acute toxicity, the substance CLEARPILE Tablet (Batch No. T - 02) supplied by Shree Baidyanath Ayurved Bhavan Pvt. Ltd., Nagpur was classified in the **hazard category 5 or unclassified** with a LD50 higher than 2000 mg/kg in the Rat.

Project coordinator : 
I/c Principal
I.P.E.R. Wardha
I/c. **PRINCIPAL**

Institute of Pharmaceutical Education & Research
Borgaon (Meghe), Wardha

Principal investigator : 
Assistant Professor
I.P.E.R. Wardha




(Dr. R. O. Ganjiwale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgaon (Meghe), Wardha

2017-18/02

Acute toxicity of BAIDYANATH ASHWAGANDHA Capsules
Study No.: PL-02 (2017-18)

IPER, Wardha

ACUTE ORAL TOXICITY TEST IN THE RATS -Fixed Dose Procedure-

Test substance :- BAIDYANATH ASHWAGANDHA Capsules
Supplied by :- Shree Baidyanath Ayurved Bhavan Pvt. Ltd., Nagpur

TEST REPORT

Project coordinator : Dr. R. O. Ganjiwale

Principal investigator : Mr. A. M. Patole

Institute of Pharmaceutical Education & Research
WARDHA (M.S.) INDIA



(Signature)
(Dr. R. O. Ganjiwale)
Principal
PRINCIPAL

Date of commencement: 28th December 2017

Institute of Pharmaceutical Education & Research
Borgoun (Astege), Wardha

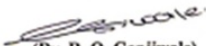
018

CONTENTS

I. AIM AND OBJECTIVES	3
II. TEST SUBSTANCE	3
III. TEST ANIMALS	4
IV. TEST PROCEDURE	4
V. OBSERVATIONS	5
VI. RESULTS	6
VII. CONCLUSION	6
VIII. REFERENCES	7

APPENDICES




(Dr. R. O. Ganjwale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research

ACUTE ORAL TOXICITY TEST IN THE RATS – FIXED DOSE PROCEDURE
METHOD- OECD GUIDELINE 420¹

I. AIM & OBJECTIVE OF THE TEST

The aim of the test is to obtain, using a minimum number of animals, sufficient information on the acute toxicity after single administration, by oral route in the rat, of a test substance, for its classification.

The test substance is administered to a group of experimental animals, by oral route at one defined dose (5 mg/kg, 50 mg/kg, 300 mg/kg or 2000 mg/kg) according to the available information on the test substance.

The animals are observed each day for 14 days at least, after administration, to detect the signs of toxicity. Animals which die are necropsied ; the animals which are intercurrently sacrificed as well as the ones which survive until the end of the test are necropsied.


This test using pre-defined doses provides results allowing the test substance to be ranked according to the Globally Harmonised System (GHS) for classification of chemicals which cause acute toxicity (OECD 1998).²

II. TEST SUBSTANCE

The supplier provided for the test container containing solution identified as :
BAIDYANATH ASHWAGANDHA Capsules (Batch No. T – 01).

The test substance was stored at ambient temperature and out of the light.




(Dr. R. O. Ganjivale)
Principal

III. TEST ANIMALS

Species: Albino rats weighing in range of 150-200 g

Strain: Wister

Age : 8-12 weeks

Number & Sex: 5 nulliparous and non-pregnant females.

Diet: Standard feed prepared in-house.

Water: Plain tap water *ad libitum*.

Housing: The animals were housed in 37cm x 23cm x 16cm polypropylene cages with maximum 3 animals per cage. The cages were placed in limited-access premises of animal house with controlled temperature and humidity. The artificial lighting ensured a sequence of 12 hours light and 12 hours dark.

IV. TEST PROCEDURE

Preparation of the test substance: The test substance was dissolved in water.

Administration of the test substance : The animals fasted overnight prior to the test substance administration. All animals were weighed again on day 1 before administration. The volume per 100 g of body weight, defined to 2 ml/100g, the volume to administer was calculated for each rat.

The test substance was administered in a single dose, orally by gavage using a syringe fitted with suitable sized canula. After administration, animals were fasted for 3-4 hours.

Selection of starting dose: As the test substance was an Ayurvedic formulation the starting dose was selected as 2000 mg/kg.

Main study: According to the methodology describe in the Annex 3 of the OECD guideline 420 (joined in Appendix IV of the present report) the test was performed with 5 animals receiving the test substance at the dose level of 2000 mg/kg of body weight

V. OBSERVATIONS

Animals were observed individually after dosing during the first 30 minutes, periodically during the first 24 hours and daily thereafter for a total of 14 days.

The clinical observations were made individually, each animal being examined outside the home cage.

The different parameters observed were – changes in skin & fur, eyes & mucous membranes, respiratory function, tremors, convulsions, salivation, diarrhea, lethargy, sleep & coma.³

Body weight : The animals were regularly weighed on day 1 before administration, then on day 8 and day 15 i.e. 7 and 14 days after administration of the test substance.

Pathology: All the animals surviving at the end of the 14 days of observation were scarified by intraperitoneal injection of 6% sodium pentobarbital solution at the rate of 0.12 ml/100g and bled at the femoral artery. They were necropsied and the main organs were examined macroscopically.

Interpretation of the results: The assessment criteria of the toxicity of the test substance taken into account were:

- Body weight change
- Clinical and behavioral signs
- Necropsy findings
- The mortality expressed in % of compound related deaths.

These results enabled to classify the test substance to one of a series of toxicity classes defined by fixed oral LD50 cut-off values, in compliance with Globally Harmonized System (GHS).²

- Category 1 = 0 < LD50 < 5 mg/kg
- Category 2 = 5 mg/kg < LD50 < 50 mg/kg
- Category 3 = 50 mg/kg < LD50 < 300 mg/kg
- Category 4 = 300 mg/kg < LD50 ≤ 2000 mg/kg
- Category 5 = LD50 > 2000 mg/kg
- Category 5 or non classified

VI. RESULTS

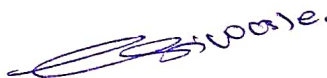
Body weight: All animals exhibited normal and comparable body weight gain throughout the period of study. The individual weights of the animals assessed during the test are supplied in Appendix I.

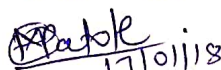
Clinical Observations: All animals were free of intoxication signs throughout the period of study. The results of the clinical observations are summarized in the table enclosed in Appendix II.

Pathology: All main organs subjected to necropsy were found normal in all animals. The result of the necropsy findings are summarized in the table enclosed in Appendix III.

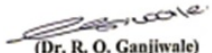
VII. CONCLUSION

According to the Globally Harmonized System (GHS) for the classification of substances which cause acute toxicity, the substance BAIDYANATH ASHWAGANDHA Capsules (Batch No. T - 01) supplied by Shree Baidyanath Ayurved Bhavan Pvt. Ltd., Nagpur was classified in the **hazard category 5 or unclassified** with a LD50 higher than 2000 mg/kg in the Rat.


Project coordinator : Dr. R. O. Ganjiwale
I/c Principal
I.P.E.R. Wardha
I/c. PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgaon (Meghe), Wardha


Principal investigator : Mr. A. M. Patole
Assistant Professor
I.P.E.R. Wardha




(Dr. R. O. Ganjiwale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgaon (Meghe), Wardha



Baidyanath
Trusted since 1917

Shree Baidyanath Ayurved Bhawan Pvt. Ltd.
Great Nag Road, Nagpur (M.S.) 440 024
Ph.: 6644900/01/02/03/04/6644934,
Fax: 0712-2743453, Email: info@baidyanath.info
Regd. Office: 1, Gupta Lane, Kolkata - 700 006
CIN No.: U24233WB1947PTC015374

Date : 16-01-2018

To,

**Principal
Institute of Pharmaceuticals Education & Research
Borgaon Meghe, Wardha**

Dear Sir,

Enclosed herewith cheque of Bank of Maharashtra, Laxmi Bhawan Square, Nagpur-440 010 of **Rs. 17,640=00/-** (Rs. Seventeen Thousand Six Hundred & Forty only) No.077467 Date: 15.01.2018 to towards Toxicity Study of medicine - Vasant Kusumakar Ras & Vatchintamani Ras (Brihat).

Thanking You

Your faithfully,

For SHREE BAIDYANATH AYURVED BHAWAN PVT. LTD.

Dr. Veena Deo
Head, Clinical Research.

Encl. As above



*Access Rs 17,640/-
Issue receipt*

[Signature]
..02.18.

(Dr. R. O. Ganjivale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgaon (Meghe), Wardha

KOLKATA • PATNA • JHANSI • NAGPUR • ALLAHABAD

Blending the ancient knowledge with modern science, we offer more than 700 products - the world's largest Ayurvedic range

ACUTE ORAL TOXICITY TEST IN THE RATS -Fixed Dose Procedure-

Test substance :- BASANT KUSUMAKAR RAS Tablet
Supplied by :- Shree Baidyanath Ayurved Bhavan Pvt. Ltd., Nagpur

TEST REPORT

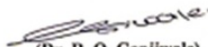
Project Coordinator : Dr. R. O. Ganjiwale

Principal Investigator : Mr. A. M. Patole

**Institute of Pharmaceutical Education & Research,
WARDHA (M.S.) INDIA**

Date of commencement: 5th February 20




(Dr. R. O. Ganjiwale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgun (Moghe), Wardha

ary 2018

CONTENTS

I. AIM AND OBJECTIVES	3
II. TEST SUBSTANCE	3
III. TEST ANIMALS	4
IV. TEST PROCEDURE	4
V. OBSERVATIONS	5
VI. RESULTS	6
VII. CONCLUSION	6
VIII. REFERENCES	7
APPENDICES	



ACUTE ORAL TOXICITY TEST IN THE RATS – FIXED DOSE PROCEDURE METHOD- OECD GUIDELINE 420¹

I. AIM & OBJECTIVE OF THE TEST

The aim of the test is to obtain, using a minimum number of animals, sufficient information on the acute toxicity after single administration, by oral route in the rat, of a test substance, for its classification.

The test substance is administered to a group of experimental animals, by oral route at one defined dose (5 mg/kg, 50 mg/kg, 300 mg/kg or 2000 mg/kg) according to the available information on the test substance.

The animals are observed each day for 14 days at least, after administration, to detect the signs of toxicity. Animals which die are necropsied ; the animals which are intercurrently sacrificed as well as the ones which survive until the end of the test are necropsied.

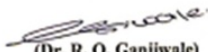
This test using pre-defined doses provides results allowing the test substance to be ranked according to the Globally Harmonised System (GHS) for classification of chemicals which cause acute toxicity (OECD 1998).²

II.

The supplier provided for the test container containing solution identified as : BASANT KUSUMAKAR RAS Tablet (Batch No. T – 172590001).

The test substance was stored at ambient temperature and out of the light.




(Dr. R. O. Ganjiwale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgnour (Meghe), Wardha

III. TEST ANIMALS

Species: Albino rats weighing in range of 175-200 g

Strain: Wistar

Age : 8-12 weeks

Number & Sex: 5 nulliparous and non-pregnant females.

Diet: Standard feed prepared in-house.

Water: Plain tap water *ad libitum*.

Housing: The animals were housed in 37cm x 23cm x 16cm polypropylene cages with maximum 3 animals per cage. The cages were placed in limited-access premises of animal house with controlled temperature and humidity. The artificial lighting ensured a sequence of 12 hours light and 12 hours dark.

IV. TEST PROCEDURE

Preparation of the test substance: The test substance was dissolved in water.

Administration of the test substance : The animals fasted overnight prior to the test substance administration. All animals were weighed again on day 1 before administration.

The volume per 100 g of body weight, defined to 2 ml/100g, the volume to administer was calculated for each rat.

The test substance was administered in a single dose, orally by gavage using a syringe fitted with suitable sized canula. After administration, animals were fasted for 3-4 hours.

Selection of starting dose: As the test substance was an Ayurvedic formulation the starting dose was selected as 2000 mg/kg rat.

Main study: According to the methodology describe in the Annex 3 of the OECD guideline 420 (joined in Appendix IV of the present report) the test was performed with 5 animals receiving the test substance at the dose lev



V. OBSERVATIONS

Animals were observed individually after dosing during the first 30 minutes, periodically during the first 24 hours and daily thereafter for a total of 14 days.

The clinical observations were made individually, each animal being examined outside the home cage.

The different parameters observed were – changes in skin & fur, eyes & mucous membranes, respiratory function, tremors, convulsions, salivation, diarrhea, lethargy, sleep & coma.³

Body weight : The animals were regularly weighed on day 1 before administration, then on day 8 and day 15 i.e. 7 and 14 days after administration of the test substance.

Pathology: All the animals surviving at the end of the 14 days of observation were scarified by intraperitoneal injection of 6% sodium pentobarbital solution at the rate of 0.12 ml/100g and bled at the femoral artery. They were necropsied and the main organs were examined macroscopically.

Interpretation of the results: The assessment criteria of the toxicity of the test substance taken into account were:

- Body weight change
- Clinical and behavioral signs
- Necropsy findings
- The mortality expressed in % of compound related deaths.

These results enabled to classify the test substance to one of a series of toxicity classes defined by fixed oral LD50 cut-off values, in compliance with Globally Harmonized System (GHS).²

- Category 1 = 0 < LD50 < 5 mg/kg
- Category 2 = 5 mg/kg < LD50 < 50 mg/kg
- Category 3 = 50 mg/kg < LD50 < 300 mg/kg
- Category 4 = 300 mg/kg < LD50 ≤ 2000 mg/kg
- Category 5 = LD50 > 2000 mg/kg
- Category 5 or non classified

VI. RESULTS


Body weight: All animals exhibited normal and comparable body weight gain throughout the period of study. The individual weights of the animals assessed during the test are supplied in Appendix I.

Clinical Observations: All animals were free of intoxication signs throughout the period of study. The results of the clinical observations are summarized in the table enclosed in Appendix II.


Pathology: All main organs subjected to necropsy were found normal in all animals. The result of the necropsy findings are summarized in the table enclosed in Appendix III.

VII. CONCLUSION

According to the Globally Harmonized System (GHS) for the classification of substances which cause acute toxicity, the substance BASANT KUSUMAKAR RAS Tablet (Batch No. T - 172590001) supplied by Shree Baidyanath Ayurved Bhavan Pvt. Ltd., Nagpur was classified in the hazard category 5 or unclassified with a LD50 higher than 2000 mg/kg in the Rat.


Project coordinator : Dr. R. O. Ganjiwale
I/c Principal
I.P.E.R. Wardha
I/c. PRINCIPAL

Institute of Pharmaceutical Education & Research
Borgaon (Meghe), Wardha


Principal investigator : Mr. A. M. Patole
Assistant Professor
I.P.E.R. Wardha




(Dr. R. O. Ganjiwale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research

ACUTE ORAL TOXICITY TEST IN THE RATS
-Fixed Dose Procedure-

Test substance :- VATCHINTAMANI RAS (Brihat) Tablet
Supplied by :- Shree Baidyanath Ayurved Bhavan Pvt. Ltd., Nagpur

TEST REPORT


Project Coordinator : Dr. R. O. Ganjiwale

Principal Investigator : Mr. A. M. Patole

Institute of Pharmaceutical Education & Research,
WARDHA

Date of commencement: 5th February 2018




(Dr. R. O. Ganjiwale)


Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgoa (Mogha), WARDHA

CONTENTS

I. AIM AND OBJECTIVES	3
II. TEST SUBSTANCE	3
III. TEST ANIMALS	4
IV. TEST PROCEDURE	4
V. OBSERVATIONS	5
VI. RESULTS	6
VII. CONCLUSION	6
VIII. REFERENCES	7

APPENDICES




(Dr. R. O. Ganjivale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgun (Moghe), Wardha

ACUTE ORAL TOXICITY TEST IN THE RATS – FIXED DOSE PROCEDURE METHOD- OECD GUIDELINE 420¹

I. AIM & OBJECTIVE OF THE TEST

The aim of the test is to obtain, using a minimum number of animals, sufficient information on the acute toxicity after single administration, by oral route in the rat, of a test substance, for its classification.

The test substance is administered to a group of experimental animals, by oral route at one defined dose (5 mg/kg, 50 mg/kg, 300 mg/kg or 2000 mg/kg) according to the available information on the test substance.

The animals are observed each day for 14 days at least, after administration, to detect the signs of toxicity. Animals which die are necropsied; the animals which are intercurrently sacrificed as well as the ones which survive until the end of the test are necropsied.

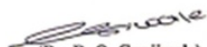
This test using pre-defined doses provides results allowing the test substance to be ranked according to the Globally Harmonised System (GHS) for classification of chemicals which cause acute toxicity (OECD 1998).²

II. TEST SUBSTANCE

The supplier provided for the test container containing solution identified as :
VATCHINTAMANI (Brihat) Tablet (Batch No. T – 173010007).

The test substance was stored at ambient temperature and out of the light.




(Dr. R. O. Ganjiwale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgnon (Meghe), Wardha

III. TEST ANIMALS

Species: Albino rats weighing in range of 150-160 g

Strain: Wister

Age : 8-12 weeks

Number & Sex: 5 nulliparous and non-pregnant females.

Diet: Standard feed prepared in-house.

Water: Plain tap water *ad libitum*.

Housing: The animals were housed in 37cm x 23cm x 16cm polypropylene cages with maximum 3 animals per cage. The cages were placed in limited-access premises of animal house with controlled temperature and humidity. The artificial lighting ensured a sequence of 12 hours light and 12 hours dark.

IV. TEST PROCEDURE

Preparation of the test substance: The test substance was dissolved in water.

Administration of the test substance : The animals fasted overnight prior to the test substance administration. All animals were weighed again on day 1 before administration.

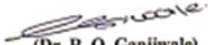
The volume per 100 g of body weight, defined to 2 ml/100g, the volume to administer was calculated for each rat.

The test substance was administered in a single dose, orally by gavage using a syringe fitted with suitable sized canula. After administration, animals were fasted for 3-4 hours.

Selection of starting dose: As the test substance was an Ayurvedic formulation the starting dose was selected as 2000 mg/kg rat.

Main study: According to the methodology describe in the Annex 3 of the OECD guideline 420 (joined in Appendix IV of the present report) the test was performed with 5 animals receiving the test substance at the dose level of 2000 mg/kg of body weight.




(Dr. R. O. Ganjivale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgnour (Moghe), Wardha

V. OBSERVATIONS

Animals were observed individually after dosing during the first 30 minutes, periodically during the first 24 hours and daily thereafter for a total of 14 days.

The clinical observations were made individually, each animal being examined outside the home cage.

The different parameters observed were – changes in skin & fur, eyes & mucous membranes, respiratory function, tremors, convulsions, salivation, diarrhea, lethargy, sleep & coma.³

Body weight : The animals were regularly weighed on day 1 before administration, then on day 8 and day 15 i.e. 7 and 14 days after administration of the test substance.

Pathology: All the animals surviving at the end of the 14 days of observation were scarified by intraperitoneal injection of 6% sodium pentobarbital solution at the rate of 0.12 ml/100g and bled at the femoral artery. They were necropsied and the main organs were examined macroscopically.

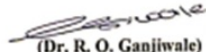
Interpretation of the results: The assessment criteria of the toxicity of the test substance taken into account were:

- Body weight change
- Clinical and behavioral signs
- Necropsy findings
- The mortality expressed in % of compound related deaths.

These results enabled to classify the test substance to one of a series of toxicity classes defined by fixed oral LD50 cut-off values, in compliance with Globally Harmonized System (GHS).²

- Category 1 = 0 < LD50 < 5 mg/kg
- Category 2 = 5 mg/kg < LD50 < 50 mg/kg
- Category 3 = 50 mg/kg < LD50 < 300 mg/kg
- Category 4 = 300 mg/kg < LD50 ≤ 2000 mg/kg
- Category 5 = LD50 > 2000 mg/kg
- Category 5 or non classified




(Dr. R. O. Ganjwale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Bosman (Moghe), Wardha

VI. RESULTS

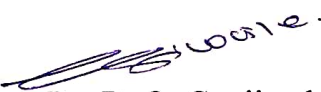
Body weight: All animals exhibited normal and comparable body weight gain throughout the period of study. The individual weights of the animals assessed during the test are supplied in Appendix I.


Clinical Observations: All animals were free of intoxication signs throughout the period of study. The results of the clinical observations are summarized in the table enclosed in Appendix II.

Pathology: All main organs subjected to necropsy were found normal in all animals. The result of the necropsy findings are summarized in the table enclosed in Appendix III.

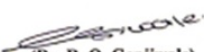
VII. CONCLUSION

According to the Globally Harmonized System (GHS) for the classification of substances which cause acute toxicity, the substance VATCHINTAMANI RAS (Brihat) Tablet (Batch No. T - 173010007) supplied by Shree Baidyanath Ayurved Bhavan Pvt. Ltd., Nagpur was classified in the **hazard category 5 or unclassified** with a LD50 higher than 2000 mg/kg in the Rat.

Project coordinator : 
: Dr. R. O. Ganjiwale
I/c Principal
I.P.E.R. Wardha
I/c. **PRINCIPAL**
Institute of Pharmaceutical Education & Research
Borgaon (Meghe), Wardha

Principal investigator : 
: Mr. A. M. Patole
Assistant Professor
I.P.E.R. Wardha




(Dr. R. O. Ganjiwale)
Principal
PRINCIPAL
Institute of Pharmaceutical Education & Research
Borgaon (Meghe), Wardha