

704 & 813, Sakar-5, Nr. Mithakhali Railway Crossing, Off Ashram Road, Ahmedabad - 380 009. Tel/Fax: (079) 26583525

Ref. No. AC/EFF/14-15/140

Date: 20-10-2014

Intas Pharmaceuticals Ltd.,

Plot No. 457, 458, Sarkhej – Bavala Highway,

Vil.: Matoda - 382 210, Ta.: Sanand,

Dist.: Ahmedabad.

Sub. : ANALYSIS REPORT OF YOUR TREATED EFFLUENT SAMPLE.

Sample drawn by

: Akshar Consultants.

Sample collection date

: 15-10-2014.

Sr. No.	Parameter	Result	GPCB Limit
01	pH	7.73	6.5 - 8.5
02	Temperature ( Deg. C )	31.00	40.00
03	Colour ( Pt-Co unit )	10.00	100.00
04	Total Suspended Solids	68.00	100.00
05	Oil & Grease	1.00	10.00
06	Phenolic Compounds	Nil	1.00
07	Cyanides	N. D. *	0.20
08	Fluorides	0.30	2.00
09	Sulphides	0.25	2.00
10	Ammonical Nitrogen	11.50	50.00
11	Total Chromium	N. D. *	2.00
12	Hexavalent Chromium	N. D. *	0.10
13	Copper	N. D. *	3.00
14	Lead	N. D. *	0.10
15	Mercury	N. D. *	0.01
16	Nickel	N. D. *	3.00
17	Zinc	N. D. *	5.00
18	COD	88.00	100.00
19	BOD	20.00	30.00
20	Chlorides	522.00	600.00
21	Sulphates	196.00	1000.00
22	Total Dissolved Solids	2055.00	2100.00
23	Sodium Absorption Ratio	22.90	26.00
24	Arsenic	N. D. *	0.20
25	Cadmium	N. D. *	2.00
26	Insecticide / Pesticide	Absent	Absent
27	Bio – assay Test	91 % survival of fish after	90 % survival of
		96 hours in 100 % effluent	fish after 96 hours in 100 % effluent

Note: All parameters except pH, Temperature & Colour are expressed in mg/L.

N.D.\* : Not Detected in mg/L.

Analysed By,

Analyst)

For AKSHAR CONSULTANTS, D. J. Pase Kh.

( AUTHORISED SIGNATORY )

**EFFANA** 



704 & 813, Sakar-5, Nr. Mithakhali Railway Crossing, Off Ashram Road, Ahmedabad - 380 009. Tel/Fax: (079) 26583525

Report No.: AC/AIR/14-15/452

## STACK SAMPLING ANALYSIS REPORT

UNIT	: Intas Pharmaceuticals Ltd.	DATE: 15-10-2014
SITE	: Plot No. 457, 458, Sarkhej-Bavla Highway, Vil.: Matoda – 382 210. Ta. Sanand, Dist.: Ahmedabad.	TIME: 12:30 PM
SAMPLING LOCATION	: Stack attached to 10 TPH Steam boiler.	FUEL USED : Imported Coal.

#### DUST CONCENTRATION ( PM ) DATA

Stack /Flue gas temperature ( Deg. C )	124.00
Stack gas velocity (m./sec.)	10.33
Sampling duration ( min.)	30.00
Vacuum gauge reading (mm. of Hg.)	10.00
Volume of gas sampled at NTP conditions (cu. m.)	0.45
Wt. of PM collected ( mg.)	46.80

#### GAS CONCENTRATION DATA

Sampling duration ( min.)	30.00
Gas flow-rate ( litres per min.)	5.00
Volume of gas sampled at NTP conditions (cu. m.)	0.150

#### **RESULTS**

PARAMETER		CONCENTRATION		GPCB Limit
		mg/Nm3	ppm	
Particulate matter	(PM)	104. 00		150 mg/Nm <sup>3</sup>
Sulphur Di-oxide	(SO <sub>2</sub> )		58. 75	100 ppm
Nitrogen Di-oxide	(NO <sub>2</sub> )		6. 80	50 ppm

Note: NTP conditions have been taken as 25 Deg. C & 760 mm of Hg atmospheric pressure.

ANALYSED BY,

(Authorised Signatory)

FOR AKSHAR CONSULTANTS,

D. J. Parekh.



704 & 813, Sakar-5, Nr. Mithakhali Railway Crossing, Off Ashram Road, Ahmedabad - 380 009. Tel/Fax: (079) 26583525

Report No.: AC/AIR/14-15/453

## STACK SAMPLING ANALYSIS REPORT

UNIT	: Intas Pharmaceuticals Ltd.	DATE: 15-10-2014
SITE	: Plot No. 457, 458, Sarkhej-Bavla Highway, Vil.: Matoda – 382 210. Ta. Sanand, Dist.: Ahmedabad.	TIME: 03:30 PM
SAMPLING LOCATION	: Stack attached to Liquid / Solid Waste Incinerator.	FUEL USED : HSD

## DUST CONCENTRATION ( PM ) DATA

Stack /Flue gas temperature ( Deg. C )	56.00	
Stack gas velocity (m./sec.)	8.80	
Sampling duration ( min.)	30.00	
Vacuum gauge reading (mm. of Hg.)	10.00	
Volume of gas sampled at NTP conditions ( cu. m. )	0.48	
Wt. of PM collected ( mg.)	47.79	

### GAS CONCENTRATION DATA

Sampling duration ( min.)	30.00	
Gas flow-rate ( litres per min.)	5.00	
Volume of gas sampled at NTP conditions (cu. m.)	0.150	

#### RESULTS

PARAMETER		CONCENTRATION		GPCB Limit
		mg/Nm3	ppm	
Particulate matter	(PM)	99. 56		150 mg/Nm <sup>3</sup>
Sulphur Di-oxide	$(SO_2)$		21. 85	100 ppm
Nitrogen Di-oxide	(NO <sub>2</sub> )		6. 75	50 ppm

Note: NTP conditions have been taken as 25 Deg. C & 760 mm of Hg atmospheric pressure.

ANALYSED BY,

Analyst)

FOR AKSHAR CONSULTANTS, D. T. Parekh.

(Authorised Signatory)



704 & 813, Sakar-5, Nr. Mithakhali Railway Crossing, Off Ashram Road, Ahmedabad - 380 009. Tel/Fax: (079) 26583525

Report No. : AC/AIR/14-15/454

## SCRUBBER SAMPLING ANALYSIS REPORT

UNIT	: Intas Pharmaceuticals Ltd.	DATE: 15-10-2014
SITE	: Plot No. 457, 458, Sarkhej-Bavla Highway, Vil. : Matoda – 382 210. Ta. Sanand, Dist. : Ahmedabad.	TIME: 04: 00 PM
SAMPLING LOCATION	: Vent attached to Ammonia Scrubber of API Plant.	

### GAS CONCENTRATION DATA

Sampling duration ( min.)	30.00
Gas flow-rate ( litres per min.)	5.00
Volume of gas sampled at NTP conditions (cu. m.)	0.150

## **RESULTS**

PARAMETER		CONCENTRATION	GPCB Limit
		mg/Nm3	mg/Nm3
Ammonia	(NH <sub>3</sub> )	31. 60	175.00
Particulate Matter	(PM)	Nil	150.00
Sulphur Di-oxide	(SO <sub>2</sub> )	Nil	40.00
Oxides of Nitrogen	(NOx)	Nil	25.00

ANALYSED BY,

(Analyst)

FOR AKSHAR CONSULTANTS,

D. T. Parela.

( Authorised Signatory )



704 & 813, Sakar-5, Nr. Mithakhali Railway Crossing, Off Ashram Road, Ahmedabad - 380 009. Tel/Fax: (079) 26583525

Report No.: AC/AIR/14-15/455

# SCRUBBER SAMPLING ANALYSIS REPORT

UNIT	:	Intas Pharmaceuticals Ltd.	DATE: 15-10-2014
SITE	;	Plot No. 457, 458, Sarkhej-Bavla Highway, Vil.: Matoda – 382 210. Ta. Sanand, Dist.: Ahmedabad.	TIME : 04 : 50 PM
SAMPLING LOCATION		: Vent attached to HCl scrubber of API Plant.	

#### GAS CONCENTRATION DATA

Sampling Duration ( min.)	30.00
Vaccum Gauge Reading (mm. of Hg.)	0.00
Gas flow-rate ( litres per min.)	5.00
Volume of Gas Sampled at STP Conditions (cu. mt.)	0.15

#### RESULTS

PARAMETER		CONCENTRATION	<b>GPCB Limit</b>	
		mg/Nm3	mg/Nm3	
Hydrochloric Acid	(HCl)	12. 70	20.00	
Particulate Matter	(PM)	Nil	150.00	
Sulphur Di-oxide	$(SO_2)$	Nil	40.00	
Oxides of Nitrogen	(NOx)	Nil	25.00	

Note: STP conditions have been taken as 25°C & 760 mm of Hg atmospheric pressure.

ANALYSED BY,

(Analyst)

FOR AKSHAR CONSULTANTS,

D. J. Parekh

(Authorised Signatory)



704 & 813, Sakar-5, Nr. Mithakhali Railway Crossing, Off Ashram Road, Ahmedabad - 380 009. Tel/Fax: (079) 26583525

Report No.: AC/AIR/14-15/460

# AMBIENT AIR SAMPLING ANALYSIS REPORT

UNIT : Intas Pharmaceuticals Ltd. DATE: 15-10-2014

SITE : Plot No. 457, 458, Sarkhej-Bavla Highway,
Vil.: Matoda – 382 210. Ta. Sanand,
Dist.: Ahmedabad.

SAMPLING : In open space near boiler house.
LOCATION

### AMBIENT AIR QUALITY DATA

(A) 8 hourly observation:	
Duration of sampling	09:30 AM to 05:30 PM
2. Weight of PM <sub>2.5</sub> collected	0. 427 mg.
3. Volume of Air sampled	8. 105 Cubic meter
4. PM <sub>2.5</sub> concentration	GPCB Limit 52. 68 μg / m <sup>3</sup> 60 μg/m <sup>3</sup>

## (B) 8 hourly observation:

Time

09:30 AM to 05:30 PM

Volume of Air Sampled ( cu. mt. )	0.24	GPCB Limit μg/m³
Sulphur Di-oxide (SO <sub>2</sub> ) (ug/m <sup>3</sup> )	17.30	80.00
Nitrogen Di-oxide (NO <sub>2</sub> ) (ug/m <sup>3</sup> )	31. 75	80.00

ANALYSED BY,

1

FOR AKSHAR CONSULTANTS,

D. J. Parekh.

(Authorised Signatory)



704 & 813, Sakar-5, Nr. Mithakhali Railway Crossing, Off Ashram Road, Ahmedabad - 380 009. Tel/Fax: (079) 26583525

Report No.: AC/AIR/14-15/461

# AMBIENT AIR SAMPLING ANALYSIS REPORT

UNIT	: Intas Pharmaceuticals Ltd.	DATE: 15-10-2014
SITE	: Plot No. 457, 458, Sarkhej-Bavla Highway, Vil.: Matoda – 382 210. Ta. Sanand, Dist.: Ahmedabad.	TIME: 09:30 AM
SAMPLING LOCATION	: In open space near boiler house.	

## AMBIENT AIR QUALITY DATA

(A) 8 hourly observation:	
1. Duration of sampling	09:30 AM to 05:30 PM
2. Weight of PM <sub>10</sub> collected	0. 705 mg.
3. Volume of Air sampled	7. 955 Cubic meter
4. PM <sub>10</sub> concentration	GPCB Limit
	88. 62 μg / m3 100 μg/m3

ANALYSED BY,

(Analyst)

FOR AKSHAR CONSULTANTS,

D. J. Pareth.

( Authorised Signatory )

704 & 813, Sakar-5, Nr. Mithakhali Railway Crossing, Off Ashram Road, Ahmedabad - 380 009. Tel/Fax: (079) 26583525

Ref. No. AC/SOLID/14-15/016

Date: 20-10-2014

Intas Pharmaceuticals Ltd.,

Plot No. 457, 458, Sarkhej – Bavla Highway,

Vil.: Matoda - 382 210, Ta.: Sanand,

Dist.: Ahmedabad.

Sub.: Analysis report of your ETP sludge sample.

Source

Effluent Treatment Plant.

Date of Receipt

15-10-2014

Sample drawn by

: Akshar Consultants.

Physical state

: Semi – solid sludge.

Sr.	Characteristics	Unit	Results
No.			
01	pH (10 % Solution)		8.05
02	Chemical Oxygen Demand (COD)	gms/kg	11.60
03	Bio-chemical Oxygen Demand (BOD)	gms/kg	3.95
04	Chlorides	gms/kg	12.30
05	Sulphate	gms/kg	18.95
06	Total Inorganic Solids at 550 Deg. C	gms/kg	680.35
07	Total Dissolved Solids	gms/kg	72.80
08	Total Hardness (as CaCO <sub>3</sub> )	gms/kg	9.50
09	Calcium Hardness (as CaCO <sub>3</sub> )	gms/kg	7.00
10	Magnesium Hardness (as CaCO <sub>3</sub> )	gms/kg	2.50
11	Oil & Oil Emulsions	gms/kg	N. D. *
12	Total Alkalinity ( as CaCO <sub>3</sub> )	gms/kg	6.25

N. D. \*: Not Detected in gms/kg.

ANALYSED BY,

Analyst )

For AKSHAR CONSULTANTS,

(Authorised Signatory)

SLUDGE

704 & 813, Sakar-5, Nr. Mithakhali Railway Crossing, Off Ashram Road, Ahmedabad - 380 009. Tel/Fax: (079) 26583525

Ref. No. AC/SOLID/14-15/017

Date: 20-10-2014

Intas Pharmaceuticals Ltd.,

Plot No. 457, 458, Sarkhej - Bavla Highway,

Vil.: Matoda - 382 210, Ta.: Sanand,

Dist.: Ahmedabad.

Sub.: Analysis report of your sludge sample (Incinerator Ash).

Source

Incinerator.

Date of Receipt

15-10-2014

Sample drawn by

: Akshar Consultants.

Physical state

: Dry powder.

Sr.	Characteristics	Unit	Results
No.			
01	pH (10 % Solution)		8.30
02	Chemical Oxygen Demand (COD)	gms/kg	5.15
03	Bio-chemical Oxygen Demand (BOD)	gms/kg	1.10
04	Chlorides	gms/kg	15.15
05	Sulphate	gms/kg	7.35
06	Total Inorganic Solids at 550 Deg. C	gms/kg	894.75
07	Total Dissolved Solids	gms/kg	95.55
08	Total Hardness (as CaCO <sub>3</sub> )	gms/kg	14.00
09	Calcium Hardness (as CaCO <sub>3</sub> )	gms/kg	8.50
10	Magnesium Hardness (as CaCO <sub>3</sub> )	gms/kg	5.50
11	Oil & Oil Emulsions	gms/kg	N. D. *
12	Total Alkalinity (as CaCO <sub>3</sub> )	gms/kg	7.17

N. D. \*: Not Detected in gms/kg.

ANALYSED BY,

Analyst

For AKSHAR CONSULTANTS,

(Authorised Signatory)

SLUDGE



704 & 813, Sakar-5, Nr. Mithakhali Railway Crossing, Off Ashram Road, Ahmedabad - 380 009. Tel/Fax: (079) 26583525

Report No.: AC/AIR/14-15/464

Dist.: Ahmedabad.

## WORK AREA AIR SAMPLING ANALYSIS REPORT

UNIT : INTAS PHARMACEUTICALS LTD.

SITE : Plot No. 457, 458, Sarkhej-Bavla Highway,
Vil. : Matoda – 382 210. Ta. Sanand,

Sr. No.	Sampling location	Date of Sampling	Weight of PM <sub>2.5</sub> collected (in ug)	Volume of Air sampled (in m³)	Dust concentration – PM <sub>2.5</sub> (in ug/m <sup>3</sup> )	GPCB Limit (in ug/m³)
1	Ware House Dispensing Area	15/10/'14	55.14	8.05	6.85	60.00
2	First floor of Manufacturing plant	15/10/'14	52.87	7.95	6.65	60.00
3	Second floor of Manufacturing plant	15/10/'14	49.41	8.10	6.10	60.00

Sr. No.	Sampling location	Date of Sampling	Methylene Di- chloride (MDC) concentration (VOC) (in ug/m³)	Toluene concentration (VOC) (in ug/m³)
1	Ware House Dispensing Area	15/10/'14	BDL	
2	First floor of Manufacturing plant	15/10/'14	BDL	BDL
3	Second floor of Manufacturing plant	15/10/'14	BDL	

BDL: Below Detectable Limit.

ANALYSED BY,

Analyst

FOR AKSHAR CONSULTANTS.

D. J. Parekh.

(Authorised Signatory)