



वस्त्र समिति  
भारत सरकार, वस्त्र मंत्रालय  
**Textiles Committee**  
Government of India, Ministry of Textiles

APPLICATION No.

508

P. Balu Road, Prabhadevi,  
Mumbai - 400 025

Tel: +91-22-6652 7507/510

Fax: +91-22-6652 7509

E-mail: secytc@gmail.com

Website: www.textilescommittee.gov.in

No: 10/47/3/2012 MR

1<sup>st</sup> January, 2015

The Registrar,  
Geographical Indications Registry,  
Intellectual Property Office Building,  
GST Road, Guindy  
Chennai - 600 032

Subject: Application for registration of Logo of selected craft indications of India.

Sir,

The Textiles Committee in collaboration with O/o the Development Commissioner (Handicrafts) has prepared the application for registration of logo of the following products under the Geographical Indication (GI) Act, 1999.

- 1 Bell Metal of Tikamgarh and Datia, M.P
- 2 Bagh Print of Madhya Pradesh
- 3 Leather Toys of Indore, Madhya Pradesh
- 4 Sankheda Furniture, Gujarat
- 5 Agates of Cambay, Gujarat
- 6 Kutch Embroidery of Gujarat

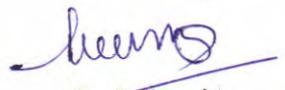
It may be noted that the above products have already been registered under the said Act and the O/o of the DC(Handicraft) is the registered proprietor. Hence, the application of Logo is being filed by the O/o the DC(Handicraft).

Therefore we are submitting here with the (1) Application in triplicate (2) Affidavit of the applicant (3) Application fees (4) other supporting documents for the registration of the Logo of the above mentioned craft indications.

Thanking you,



Yours faithfully,

  
(Dr P Nayak)  
Secretary

Encl: As above & Cheque No. '529857' for Rs 30,000/-

  
New GI Application

भारतीय स्टेट बैंक  
State Bank Of India

(00290) - WORLI (NORTH), MUMBAI  
NIRLON HOUSE, DR. ANNIE BESANT ROAD WORLI, MUMBAI  
MAHARASHTRA 400030  
IFS Code: SBIN0000290

केवल 3 महीने के लिए वैध / VALID FOR 3 MONTHS ONLY

19 DEC 2014

19 APR 2013

Reverse date on

Pay The Registrar Geographical Indications

को या उनके आदेश पर OR ORDER

रुपये RUPEES Thirty thousand only

अदा करें ₹ 30000/-

खा. सं. 10865756128  
A/c No.

VALID FOR Rs. 5,000,000.00 & UNDER

*R. Premanand*

R. PREMANAND  
CHIEF ACCOUNTS OFFICER  
TEXTILES COMMITTEE

MULTI-CITY CHEQUE Payable at Par at All Branches of SBI

Please sign above

⑈ 529857⑈ 400002088⑈ 000007⑈ 29



सत्यमेव जयते

# Geographical indications Registry

Intellectual Property Building,  
G.S.T. Road, Guindy, Chennai - 600 032

Phone: 044-22502091 & 92 Fax : 044-22502090

E-mail: gir-ipo@nic.in



INTELLECTUAL  
PROPERTY INDIA

## Receipt

CBR NO :2518

Date : 08-01-2015

TO

Generated by :BABU

DEVELOPMENT COMMISSIONER (HANDICRAFTS),  
MINISTRY OF TEXTILES, GOVERNMENT OF INDIA, HAROON HOUSE, 3RD FLOOR, 294-P NARIMAN POINT,  
MUMBAI,  
MAHARASHTRA,  
400 001,  
INDIA

### C B R Details :

Application No	Form No	Class	No of Class	Name of GI	Goods Type	Amount Calculated
504	GI-1A	6	1	Bell Metal Ware of Datia and Tikamgarh (Logo)	Handi Crafts	5000
505	GI-1A	24	1	Bagh Prints of Madhya Pradesh (Logo)	Handi Crafts	5000
506	GI-1A	28	1	Leather Toys of Indore (Logo)	Handi Crafts	5000
509	GI-1A	26	1	Kutch Embroidery (Logo)	Handi Crafts	5000
508	GI-1A	14	1	Agates of Cambay (Logo)	Handi Crafts	5000
507	GI-1A	20	1	Sankheda Furniture (Logo)	Handi Crafts	5000

### Payment Details :

Payment Mode	Cheque/DD /PostalNO	Bank Name	Cheque/DD/Postal Date	Amount Calculated	Amount Paid
Cheque	529857	State Bank of India	19-12-2014	30000	30000

Total Calculated Amount in words : Rupees Thirty Thousand only

Total Received Amount in words : Rupees Thirty Thousand only

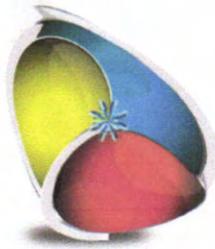
\*\*\* This is electronically generated receipt,hence no signature required \*\*\*

GI APPLICATION No.  
508 -

**The geographical indications of goods  
(Registration and Protection) act, 1999**

**FORM G1-1A**

**Application for Registration of LOGO of Agates of Cambay of  
Gujarat**



**agates of cambay**

GUJARAT • INDIA

GI NO. 101

GI APPLICATION No.  
508 -

**THE GEOGRAPHICAL INDICATIONS OF GOODS  
(REGISTRATION AND PROTECTION) ACT, 1999**

**FORM G1-1A**

Received Rs. 5000 in cash/  
Cheque/DD/MO on 8.1.2015  
vide entry no. 2518 in the  
register of valuables  
Cashier  
B.D.O.

1. Application is hereby made for the registration in Part A of the Register of the accompanying Logo of the geographical indication furnishing the following particulars:-

**1A. Name of the Applicant:**

O/o: The Development Commissioner (Handicraft) represented by Shri V.P. Thakur, Incharge Regional Director(WR) Development Commissioner (Handicraft), Ministry of Textiles, Govt. of India.

**1B. Address:**

**Development Commissioner (Handicraft)  
Ministry of Textiles, Govt. of India  
Haroon House, 3<sup>rd</sup> Floor,  
294 - P Nariman Point,  
Mumbai – 400 001, India**

**1C. Name of the geographical indication: Agates of Cambay**



**agates of cambay**

GUJARAT • INDIA

GI NO 101

1D. Type of Goods: Class- : 14

Semi Precious Stones

### III. Description of Goods:

The term agate seems to have derived its name from the river 'Achates' in Sicily, now known as the Achates or Dirillo, well known in early times for its agates. The word Achates is again a derivative of the Arabic 'Akika', meaning a river bed. It is thus Persian in origin. It is said that the *Akik* hill in Rajpipla is the same as that described in the *Van Parva* of the Mahabharata as '*Vaidurya Parvat*' or the Mountain of Agate, *Vaidurya* meaning onyx, which is an old Sanskrit name for the territory stretching from the Narmada to Gokarna, and also an equivalent for *Akik*. The earliest recorded reference to agate deposits and agate industry in this country is by Herodotus (484 B.C.). The real clue, however, to the firm establishment of the industry at *Khambhat* is had from the reference made to an Abyssinian mendicant by the name of Bawa of Baba Ghor, who started an *Akik* factory at Nimodra (Limodra) near Rajpipla, where raw material was available in plenty.

But for the export of finished products to the African Coast, he had to resort to a sea-port, which could be none other than *Khambhat*, where the Abyssinian merchant seems to have started lucrative business in agates under the supervision of his brother Bawa Abbas. The next and the most natural step was the opening of a branch or shifting the establishment from Nimbodra to *Khambhat* where the artisans got a ready welcome and encouragement. This inference finds support from the Portuguese traveler Barbosa in 1514 who wrote that at the ports of Arabia and Africa, there was a prosperous trade of *Akik* articles of *Khambhat* and Ghors were one of the chief articles of import. It is because of this that some varieties of agates are even today styled '*Bawa Ghor*' as they were popularized by Bawa Ghor. Export trade in *Akik* got a further fillip from the fact that *Khambhat* had then become a principal port of embarkation by Haj pilgrims to Mecca.

### iv. Geographical area of production:

Khambhat is located between 22°18'N 72°37'E and 22.3°N 72.62°E. It has an average elevation of 8 metres (26 feet). Khambhat has warm and humid climate. It is located on the plains. The land on which Khambhat sits right now is the silt deposited by Mahi river, so Khambhat has got very fertile and wet soil. Soil over here is Coastal Alluvial. The area south of Khambhat is muddy wetlands and then coast line comes. Normally April to June is summer. From July, it rains until

September. It has muggy climate for most part of the year except winters. Sometimes Khambhat receives heavy rain. And sometimes surrounding areas gets affected from the floods in Mahi river. October to February is winter. Maximum average temperature remains 25 to 30 and minimum average temperature goes until 10 to 12. Summer maximum average temperature remains 38 and minimum remains around 22. In summer, wind blows high. Khambhat coast's tides are the highest in the world. It goes high up to 35 feet.



v. **Historical Origin:** Cambay came into the picture towards the end of 15th century and the start of 16th century. *Akik* industry assumed importance during the rule of sultans of Gujarat when it reached the zenith of prosperity. The main market of agate being outside India, it was not only essential for the finished products to be brought to a convenient marketing centre on sea but also for the development of the industry to be located near some port to facilitate the export. It was equally necessary for the raw material required to be close to the place of manufacture. Cambay was a flourishing and chief centre of trade and commerce. This prosperity of the town naturally gave impetus to the growth of many industries including *Akik* and other precious and semi precious stones. The fate of *Akik* industry seemed to have been linked with the rise and fall of different places that grew into importance as sea-ports or centres of maritime trade at different periods of history. In Gujarat various places came into prominence as centers of trade and commerce at one time or another according to their importance as seaports. At one time it was Bharuch, at another time it was Vallabhi and still another time it was Surat or Cambay/Khambhat.

Finally it was at Khambhat that *Akik* industry reached the pinnacle or prosperity and survived till present times despite depression and competition to which it was later subjected.

In the beginning of 17th century many *Akik* craftsmen of Cambay were staying at Goa where they had their own locality and shops. Forty years later an Abyssinian merchant by the name of Baba Ghor started *Akik* factory at Limodra near Rajpipla where the raw material was available in plenty. For the export of finished products to the African coast he had to resort to a seaport, which was Cambay. Here the Abyssinian merchant seemed to have started a lucrative business in agates under the supervision of his brother Baba Abbas. They later shifted all their business to Cambay. Export in *Akik* got boost up when Cambay became a principal port of embarkment by Hajj pilgrims to Mecca. The pilgrims carried with them their agate beads, which were highly valued as articles of sanctity.

During the 18th century agate trade was referred to as one of the most important of the Cambay industries. Some of the articles made at Cambay stones for signets and rings were said to be worth double their weight in gold. Bowls, spoons, handles of swords, daggers, knives etc. were of great value. Agate industry reached the pinnacle of prosperity during the 16th century and continued its importance till 18th century. During the 19th century the agate trade fluctuated but did not really decline. But with the passage of time and change in consumer habits and competition from other countries the industry suffered a setback. Moreover, the Cambay port got silted, which made it impossible for the larger vessel to reach the harbor and as a result it lost all its former glory. During the 20th century due to decline of Cambay as an important center of trade, industry and export, diversion of trade channels with the opening of rail route from Bombay to Ahmedabad, and increase in competition from cheap synthetic stones agate industry declined.

Khambhat , formerly known as Cambay, is a city and a [municipality](#) in [Anand district](#) in the [Indian state](#) of [Gujarat](#). It was formerly an important trading centre, although its harbour has gradually silted up, and the maritime trade has moved elsewhere. Khambhat lies on an alluvial plain at the north end of the [Gulf of Khambhat](#), which is noted for the extreme rise and fall of its [tides](#), which can vary as much as thirty feet in the vicinity of Khambhat.

Some scholars suggest that the name Khambhat/Khambat -the Kambaya/Kanbāya of the Arabic writers - is connected with the Kambojas, and it is stated to be an apabhraṃśa form of the Sanskrit Kamboja. Some people believe that the town of Khambhat may be the *Camanes* of

Ptolemy. Lieutenant-Colonel James Tod believes that the name comes from the Sanskrit *Khambavati* or 'City of the Pillar'. One of the most accepted belief is, 'Khambhat' is made up of 2 words 'Khambh' and 'Aayat', Khambh means pole or pillar and Aayat means Import in Gujarati language. So, it is believed that, there has to be some pole, which must have been an identity for this city and as it was a glorious port, import/export trade was at the extreme. Khambhat was formerly a very flourishing city, the seat of an extensive trade, and celebrated for its manufactures of silk, chintz and gold stuffs. The Arab traveler, al-Mas'udi, visited the city in 915 AD, describing it as a very successful port; it was mentioned in 1293 by Marco Polo, who, calling it Cambaet, noted it as a busy port. He mentions that the city had its own king. Indigo and fine buckram were particular products of the region, but much cotton and leather was also exported through Khambhat. A contemporary Italian traveler, Marino Sanudo, said that Cambeth was one of India's main two ocean ports.

The Portuguese explorer Duarte Barbosa visited the city, which he calls Cambaia, in the early sixteenth century. His description of the city is very full, he states: "Entering by Cuindarim, which is the internal river, there is great and beautiful city that they call Cambaia, populated by Mouros (Muslims) and Hindus (Gentios). It has many beautiful houses, very high with windows, and covered with tiles in our manner. The streets are laid out well, with pretty squares and large buildings." He describes the city as very busy and affluent, with merchants coming frequently by sea from the world around.

Another Italian, visiting in about 1440, Niccolò de' Conti, mentions that the walls of the city were twelve miles in circumference. Khambhat was the capital of a princely state of British India within the Gujarat division of Bombay. It has an area of 350 square miles (906 km<sup>2</sup>). As a separate state it dates only from about 1730, the time of the dismemberment of the Mughal Empire. Its Nawabs were descended from Momin Khan II, the last of the Mughal governors of Gujarat, who in 1742 murdered his brother-in-law, Nizam Khan, governor of Khambhat, and established himself there. The detailed description of Khambhat is given by Marco Polo in his writings.

Owing principally to the gradually increasing difficulty of access by water by the silting up of the gulf, its commerce has long since fallen away, and the town became poor and dilapidated. The spring tides rise upwards of 30 ft (10 m), and in a channel usually so shallow form a serious

danger to shipping. By 1900, the trade was chiefly confined to the export of cotton. The town was celebrated for its manufacture of agate and carnelian ornaments, of reputation, principally in China.

The houses in many instances are built of stone (a circumstance which indicates the former wealth of the city, as the material had to be brought from a very considerable distance); and remains of a brick wall, 3 miles (5 km) in circumference, which formerly surrounded the town, enclose four large reservoirs of good water and three bazaars. To the southeast there are very extensive ruins of subterranean temples and other buildings half-buried in the sand by which the ancient town was overwhelmed. These temples belong to the Jains, and contain two massive statues of their deities, the one black, the other white. The principal one, as the inscription intimates, is Pariswanath, or Parswanath, carved in the reign of the emperor Akbar; the black one has the date of 1651 inscribed.

In 1780 Khambhat was taken by the army of general Goddard Richards, and was restored to the Marathas in 1783, and was afterwards ceded to the British by the Peshwa under the treaty of 1803. It was provided with a railway in 1901.

### **The Khambhat of yore**

*Khambhat*, also known as Cambay has a trading history, unparalleled in the Subcontinent. Ptolemy called it Camanes and described it as a flourishing port city and celebrated for its manufactures of silk, chintz and gold stuffs. In the Medieval world *Khambhat* was not only a key to the success of Gujarat's prosperity, but also to the great Mughal Empire. *Khambhat* was the outlet for the overseas trade of Mughal Empire with Persian Gulf and East Africa. In about 1500 the city was the most important international trading port and was divided into ten territorial administrative units, six of which lay outside of Cambay region in Kathiawar, Kutch, Malwa and Rajputna, and the country south of the Tapti River.

Cambay produced cotton cloth, silk and indigo of finest quality for which Gujarat gained fame both in Malacca and East Africa. This is evident in the writings of several western accounts. For instance, according to the 16th century account of Tome Pires "Cambay chiefly stretches out two arms, with her right arm she reaches out towards Aden and with the other towards Malacca, as the most important places to sail to, and the other places are held to be of less importance - Malacca cannot live without Cambay, nor Cambay without Malacca, if they are to be very rich and very prosperous." Regarding Cambay's connection with East Africa Duarte Barbosa writes that the busy harbour of Mombasa included ships 'from the great kingdom of Cambaya and from Melynde.

They are great barterers, and deal in cloth, gold, ivory, and divers others wares with the Moors and Heathen of the great kingdom of Cambaya; and to their haven come every year many ships with cargoes of merchandise, from which they get great store of gold, ivory and wax. In this traffic the Cambay merchants make great profits, and thus, on one side and the other, they earn much money.'

The most important among the Cambay merchants were the *vaniyas* and the Bohra Muslims, the former being the largest group. The *vaniyas* were organized collectively as *mahajans* - a body representing the people engaged in the commercial activity.

The *vaniyas* of Cambay were the 'subtilest and politiquet Marchauntes of all India' as described in a 16th century travel account of John Huygen van Linschoten. The account further says: 'They are most subtil and expert in casting accounts and writing, so that they do not only surpass and goe beyond all other Indians and other nations thereabout, but also the Portingales: and in this respect they have much advantage, for [that] they are very perfect in the trade of merchandise, and very ready to deceive men.'

Today's *Khambat* is a neglected region as it has fallen to the nature's apathy. Its harbour once thrived with ships from Malacca, Persian Gulf, Mombasa and even Europe is now a dry bed of silts. Besides nature, the competition from the European companies, the shift of maritime trade to Surat and Mumbai and the coming of the railway to Gujarat in 1863 all led to the city's eclipse. It's once prospered *Dawoodi Bohra Muslims* and *mahajans* moved elsewhere allowing most of its heritage buildings to decay further.

The only intact remains from the earlier time is however the splendid Juma Masjid, one of the earliest mosques of Gujarat built in the year of 1325 AD. Once located on the bank of the Gulf, in the local lore it is believed that ships from overseas used to anchor beside its wall. The sea has now receded about 2 km from the mosque. The Juma Masjid marked the beginning of medieval Gujarati architecture which was characterized by its integration of Hindu, Jain and Islamic forms. The absence of minars and the presence of toran inside the central arch are the evidence of fusions of these three aesthetics.

*Khambat* was a princely state during the British rule. Its Nawabs had the privilege of the English education and access to the Victorian lifestyle and thereby *Khambat* witnessed a profusion of Gothic influence in many of its buildings built during the 19th and early 20th century. To our surprise we saw a mosque and a Shiva temple, both built in the Gothic and neo-classical style showing a high degree of fusion of eastern and western aesthetics. The mosque located within the wall of the Bhora pol is an architectural marvel with beautiful Corinthian columns and Gothic

arches, closely resembling a Catholic Church.

*Pol* is typical urban feature of the walled cities of Gujarat. Derived from the Sanskrit word '*Protoli*' *Pol* is an urban neighbourhood - a cluster of houses protected by a wall and can be entered through a gate. The façade of the houses, which once showed beautiful wooden carvings, are now mostly replaced with cement and plaster. The walled city of *Khambat* is divided into two main clusters, the *pol* of the Muslim Bohras and the Hindu and the Jain *pol*.

*Khambat* is perhaps the only place in India where the Harappan craft of agate bead making is found in the living tradition. Surprisingly *Khambat* has no stone deposit. But the craft has survived mainly through acquiring stones from the Rajpipla hills, about 200 km away from the town. In the folklore of *Khambat* the beginning of the craft is attributed to Baba Ghor, an Ethiopian / Abyssinian mendicant who had led a large contingent of Muslims to settle in the town in 1500 AD. However, in the archaeological record the origin of the craft can be traced to the nearby Lothal, a Harappan outpost flourished about 4000 years ago.

Portuguese trader Duarte de Barbosa states relative to carnelian, "they extract it in large pieces, and there are cunning craftsmen here who shape it, bore it, and make it up in divers fashions, that is to say: long, eight sided, round, and olive leaf shapes, also rings, knobs for hilts of short swords and daggers, and other ways."

#### vi. **Production Process:**

The various techniques and processes, which have been so far evolved in the making of agate articles have undergone quite a few changes, inspite of advance unscientific methods, as it is believed there is very little scope for mechanization except in a few operations, viz., smoothing the surface and polishing with the help of electric motor. These operations have been mechanized only as far back as 55years. Raw stones have to pass through six different stages of work before they are processed into finished products. The various processes are described below under the following heads:

- i) Mining
- ii) Sun-heating and firing
- iii) Cutting and shaping
- iv) Roughing and smoothing
- v) Polishing
- vi) Drilling

### **Mining:**

The main source of supply of raw materials required for working in this industry at *Khambat* is the agate mines comprise in the former Rajpipla state in Jhagadia taluka of Bharuch district. This area is situated on the left bank of the Narmada, about fourteen miles above Bharuch. The mines are located on the slope of the hill known as Ratanpor Hill, also known as Bawa Ghorī or Bawa Abbas Hill.

Before the agate bearing stratum is reached, the bore holes pass through a bed of gravel. After a thin seam of iron bearing rock comes the clay mixed with carnelian. The mine shafts are about 4ft. in diameter and about 13-15ft. deep. Nowadays, miners work in small groups scattered over a large area. At the mine mouth, the stones are chipped and classified into three grades, the best one known as '*tukdi*', medium type known as '*gar*' and the lowest quality known as '*khadya*'. Stones are carried by truck or rail from Jhagadia or Rajpipla to *Khambat*. Besides, the stones that are mined and supply *Khambat*, also come from Madhya Pradesh, Utter Pradesh, Bihar, Andhra Pradesh, Orissa and Tamilnadu. The *akikias* (also written as *akikiyas*) or the agate-dealers who are also the *karkhanedars* purchase the mined stones from the mining contractor or from the cooperative society of which they are members and store them in godowns in gunny and plastic bags.

### **Sun-heating and firing:**

In the months of March and April the stones are spread and exposed to the sun on the terrace or corrugated iron sheets on the house roofs for a period of one and a half to two months, as the stones dug out from the underground are damp and retain some portion of water in them. Without the actual heat treatment of the sun the stones get cracked into pieces while working on them and the material gets wasted. If the stones are directly baked with the help of fire which is the next process, the watery vapours that come out can crack the stones. There are two methods of firing followed locally:

### ***Bhalsal:***

A trench two feet deep, and three feet wide is dug in a dry ground or field. Some now have trenches built of bricks and cement. A layer of ash one to one and a half inches thick is spread at the bottom. The sun-heated stones are placed on this layer of ash, and covered with alternate layers

of ash on which goat and cow-dung cakes, pieces of charcoal and sawdust are spread. Three or four layers are arranged one upon the other so that the stones get evenly heated from all sides. This process is applied for three days continuously, where after the baked stones are taken out and those which are not properly baked are baked again till they take their natural colour.

**Handla:**

Pebbles are placed within cracked and holed earthen pots, with the holes in the bottom facing upwards. These pots are arranged in a row in a trench. Goat and cow-dung cakes are piled around them and the fire is kept burning from sunset to sunrise. Bricks are kept in between the vacant spaces of rows of pots so that the cow-dung cakes and other material may not drop out. The properly baked stones are separated from the ones that have not yet attained a natural colour. The latter are baked again. Repeated baking is the key of bringing out the real colour of agate. This is resorted to even after polishing, if necessary. The temperature at which this change takes place is 300-450 degrees Centigrade. The spread of iron oxide determines the intensity of the colour. Artificial colouring is a recent introduction although it has been prevalent in countries like Germany since 1820.

**Cutting and shaping the stones**

The stones which are baked properly, are cut in the required shape on an iron spike known as 'sink' with 'shingadi', a horn-headed hammer, made of goat or buffalo horn, and mounted on a thin handle or bamboo. Sawing is however necessary in case of large size stones which are cut into convenient pieces with a toothless saw. The workers engaged in cutting or shaping is known as 'bhangiya' or 'khondiya'. In the workshop the agate stones are shaped on the iron spikes which are embedded into platforms of a mud and cow-dung mixture, locally known as 'otli'. The striking with the hammer is known as 'tappa', and the outer skin of the baked stones which is removed is called 'chal', for getting the stones into desired shapes. As fingers get injured by sharp edges of flint, the workers wrap them with cotton bandages, known as 'anguthiya'. Some also wear numberless spectacles to protect their eyes from the flying flint. Experts can shape stones into the smallest of beads. This has given rise to a proverb, "Jey khande tasbi, te thai kasbi".

Roughing and smoothing the surface: The stones after they are chiselled into desired shapes, flat, round, triangular, quadrangular, hexagonal etc. are handed over to the 'ghasiya' for

smoothing the surface by grinding on the emery wheel. This work is done mechanically as well as manually.

In the mechanical method the 'emery' or the carborandum wheel is powered by an electric motor of 1/2 H.P. If the articles to be smoothed are rough and thick, the wheel is given greater momentum and lesser, if the articles are thin.

Two or three workers can operate at a time. The worker keeps one small earthen vessel filled with water by his side and the articles are dipped in water before they are put on the emery wheel to avoid inhalation of the powder (stone dust), which could be detrimental to his health, often being the cause of T.B. If water is not used the wheel moves more rapidly giving better 'wadh' or cut and greater output.

As the *ghasiyas* are given wages on piece rate basis, they do not dip the stones in water and thereby get greater output of seven or eight pieces per minute, but in the process become more susceptible to fatal diseases. Before the introduction of electric motors the work of grinding and polishing of agate articles was done entirely by hand operated emery. The four different types of lapidary wheels required for grinding and hand polishing are described as i) *Ghat-ni-saran*, used for removing the unevenness of surface and giving correct shape to the stone. ii) '*Naram*' or soft saran is used to make the surface smoother and the remaining two wheels to give them appropriate glaze and polish.

### **Polishing:**

The articles which are roughened and smoothed on emery wheel are polished to give them shine and lustre. The persons engaged in this activity are polishers known as '*opiya*' derived from the word '*op*' which in local parlance means shine or lustre. These days the common methods of polishing are:

- i) *Saran* or hand operated lapidary wheel method
- ii) *Pattimar* method
- iii) Mechanical method

The *Pattimar* method is specially resorted to in case of small round beads which are fixed in a bamboo clamp and rubbed against a special type of stone called *Porbandari* stone to give

them a smooth surface and rough polish. They are then rubbed on a polishing board called '*patti*' having its surface cut into grooves. This method is not popular now.

The mechanical method comprises of a leather bag containing beads, emery dust, leather pieces and fine carnelian powder, placed in a barrel of crude oil and tar. The barrel is supported with an axle on either end. The barrels are three to four in number. Three of them are made of tin and one of copper. The finished articles are rotated in these drums in turn and finally transferred to the copper drum in each of which the proportion of polishing material varies. The barrels are rotated mechanically and within two or three days the beads get polished. There is no physical labour in this method. What is required is general supervision and examination of the glaze obtained. This method has replaced all the former processes as machine polishing is quicker and physical labour is totally eliminated.

### **Drilling:**

After the beads are polished they are passed on for drilling holes. The persons engaged in this operation are known as '*vindhar*' or '*sari*', being derived from the local word '*vindhavu*' or '*saravu*', meaning to pierce a hole from one end to another. Drilling is done in two ways - those which work in their cottages in the fields during leisure hours, and those who have regular establishments at home in the village, wherein the household members and hired workers participate.

The technique of drilling consists of boring holes through beads by a diamond tipped steel drill. In order that the beads to be holed are gripped properly they are fixed between two forks in a wooden clamp and kept in position by an iron ring, so that the beads do not get loose and remain properly fitted. This is known as '*bhinthi*.' The round beads are kept in the hollow crevices on the wooden frame which in colloquial terminology is known as '*khamanu*.' After marking drilling points on the top and bottom of the beads, the craftsman takes it up for drilling. The drill is encircled by a bow-shaped string fastened on a thin stick known as '*dhandhodi*' held in the right hand. A small earthen pot known as '*dagholu*' or '*atodi*' is kept on stand. Inside this pot is a tamarind solution of water mixed with agate powder. A thin narrow metal reed which is usually an umbrella reed is fixed in the side of the pot in slanting position so that the solution dripping from it helps drilling and prevents the diamond tip from slipping and heating up. While drilling the artisan

inserts a portion of the drill in and out intermittently so that the water mixed with carnelian powder comes out from the hole and allows the drill to go ahead. After drilling midway the bead is reversed if it is long. A bead which is not correctly holed loses its value and is known as '*ghodeveh*'. Drilling is an important activity because this operation is not favourable on any mechanical device as direct and continuous drilling by machine will generate heat and cause cracks whereas by hand drilling the artisan can rotate the drill and regulate the pressure according to his requirements

#### vii. **Specification**

Agates are semi precious stones which display a wide spectrum of colours and fancy images. One of the most interesting gems of collectors delight, agate is a type of microcrystalline quartz falling under the general category chalcedony. They are believed to have been formed under earth's cavities out of volcanic action and extreme climatic conditions.

#### **Agate/Akik – Occurrence and diagnostic features**

Agate is a variety of chalcedony, which is the general term applied to fibrous cryptocrystalline quartz varieties. It is a mineral generally of secondary origin, forming in cavities and veins by deposition from meteoric groundwater containing gelatinous silica from the weathering of silicate minerals. It can also form by deposition from late hydrothermal solutions at or near the earth's surface under conditions of low temperature and low pressure. Agate is commonly associated with siliceous volcanic, occurring as vein or vesicle filling. It occurs as a petrifying agent in fossil wood and bone. Agate is frequently found lining or filling rock cavities and fissures, sometimes forming geodes. Agate is characterized by its occurrence, hardness, fracture, specific gravity, refractive index and luster. Agates as well as Chalcedony are a variety of cryptocrystalline quartz gemstones composed of layers of quartz, sometimes of different colors. Agate usually occurs as rounded nodules or veins. The layers of quartz are often concentric. The composition of agate varies greatly, but silica is always predominant, usually with alumina and oxide of iron. The colors and "scenes" in agate are endless. While agate is usually an inexpensive stone, some varieties or special stones with very unusual scenes or markings can be quite expensive.

Crystal system: Hexagonal-R; 32 (trigonal-trapezohedral)

Agate Chemical composition: SiO<sub>2</sub>

Class: tectosilicate

Crystal system: Hexagonal-R; 32 (trigonal-trapezohedral) Crystal habit : usually as banded or layered botryoidal masses with micro-fibrous structure

Zoning : color banding and layers of inclusions are common

Specific gravity: 2.57-2.64

Index of refraction: 1.53-1.55

Birefringence: weak, 0.005 to 0.009

Hardness: 6.5 to 7

Colour: frequently colored by impurities and then may be any color, most agate used for ornamental purposes is colored by artificial means.

Luster: dull vitreous to greasy

Transparency: translucent, can be transparent or opaque Cleavage: Cryptocrystalline quartz shows no cleavage, although parting may occur along layers and splintery fracture can develop parallel to micro-fibrous orientation.

#### **Agate/Akik – Occurrence and Sources**

Akik or agate is the general term applied to different varieties or Carnelians, and includes various forms of Chalcedonic silica found either underground in mines, in beds of rivers or on hill slopes. Different varieties of agates are known by different names differing in color and luster. Agate word is derived from 'Achates', a river in Sicily on the banks of which it is said to have been found now known as agate or Dirillo, well known in early times for its agates. The word again a derivative of the Arabic word Akik, a name for agate which means riverbed.

#### viii. **Products and Specification:**

The agate and the carnelian generically belong to the Chalcedonic group of Quartzose minerals. Blandford defines agate as "a variegated form of silica banded with different colours or with opaque and translucent layers alternating". It is commonly found lining cavities in basalt and other volcanic rocks. Coveted for their ornamental value, agates are a composite mineral which contain 70 to 96% of silica with various proportions of alumina coloured by oxide of iron or manganese. It is a composite mineral consisting of chalcedony with subsidiary flint, carnelian, jasper, amethyst, onyx etc., disseminated either in single or in multiple combination. It is a composite mineral consisting of chalcedony with subsidiary flint, carnelian, jasper, amethyst, onyx etc., disseminated either in single or in multiple combination. These impurities often give rise to banded effects, the individual bands being due to different layers formed by the deposition of silica in cavities. Sometimes the impurities give rise to cloudy appearance. A variety of agate which fetches high prices is the well known moss agate in which the impurities are distributed in moss like or dendritic forms.

#### **Local names for varieties of agate**

Four agates, the common, the moss, the Kapadvanj, and the veined, rank next to the Rajpipla carnelians. The common agate is of two kinds; a white half-clear stone called *dola* or *cheshamdar*, and a cloudy or streaked stone called *jamo*. The colour varies, but is generally a greyish-white. Both kinds come from north-east Kathiawad near Mahedpur in Morvi, 3 miles from Tankara. Of the stones, which lie in massive blocks near the surface, the most perfect do not exceed five pounds in weight, while those of inferior quality, in many cases cracked, weigh as much as sixty pounds. These stones are brought to the Cambay dealers by merchants, who in earlier times, paid a royalty to the Morvi chief who hired labourers, generally called *Kolis*, to gather them. When worked up, the common agate is a greyish-white, and being hard, brittle, and massive, it takes a high polish.

Like the common agate, the moss agate, *suabhaji*, comes from Bud-Kotra, 3 miles from Tankara in Morvi. Found in the plain about 2 feet under the surface in massive layers often cracked, and from half a pound to forty pounds in weight, they are gathered in the same way as the common agate. When worked up, they take a fine polish, showing, on a base of crystal, sometimes clear, sometimes clouded, tracings as of dark-green or red-brown moss.

Besides from the town of Kapadvanj in Kaira, where, as its name shows, the *Kapadvanj* agate is chiefly found, this stone is brought from the bed of the river Majam, between the villages of Amliyara and Mandva, about 15 miles from Kapadvanj. It is found on the banks and in the beds of rivers, in round kidney and almond-shaped balls from half a pound to ten pounds in weight. Picked up by *Bhils*, they are sold to a Dawoodi Bohra merchant, who disposes off them to the Cambay stone-merchants. When worked up the Kapadvanj agate takes a high polish. It varies much in colour and pattern. In some cases they are variegated; in others they have forms of finely-marked plans grouped into landscape and other views. The trade names of the chief varieties are *khaiyu*, *agiyu*, and *ratadiyu*.

The most valued Cambay agate, the veined agate, *doradar*, comes from Ranpur in Ahmedabad. Found near the surface in pebbles of various shapes, not more than half a pound in weight, they are gathered in the same way as moss agates, and when worked up take a high polish, showing either a dark ground with white streaks, or dark veins on a light background.

Of other Cambay stones the chief are the jasper or bloodstone, the chocolate stone, a variegated pebble known as maimariam, crystal, the lapis-lazuli or azure stone, the obsidian or *jet*, and the blue-stone, *piroja*.

The various forms of cryptocrystalline silica which commonly go under the name of agate are described as:

- **Carnelian:** a clear deep red or brownish red form of chalcedonic silica.
- **Chalcedony:** a transparent or translucent stone with the lustre of wax.
- **Chrysoprase:** chalcedony of apple green colour, the colour being due to nickel oxide.
- **Plasma:** of emerald green colour, either translucent or semi-translucent.
- **Bloodstone:** similar to plasma but with jasper disseminated in spots which look like drops of blood.
- **Onyx:** an agate with straight even banding.
- **Sardonyx:** similar to onyx but possesses layers of varying colours-red (sard) and white (onyx), rarely black.
- **Jasper:** opaque chalcedonic silica.
- **Agate:** same as jasper but with distinct bands.
- **Flint:** grey, brown and usually dull coloured silica.
- **Chert:** similar to flint but more impure.
- **Horn Stone:** a more brittle form of flint.
- **Basanite or Touchstone:** dark jasper like form of chalcedony.

The stones as identified by Azfar Ali in the local vernacular are mentioned below. However his description is limited mainly to the colours and the hardness of the stones, as determined by some local, experiential and approximate method.

- *Akik*: either yellow, red, black, light grey, white. (8.5-9)
- *Jhama*: black, red, brown, blue, green, light green. Original *Jhama* is sky blue or white.
- *Turmulin*: black, green, yellow, pink. (3.5-5)
- *Berial* or *Beral*: green. (4-5)
- *Kakachi* and *Kakanili*: green. (3.5-4)
- *Moonstone*: cloudy white shades. (3.5-4.5)
- *Alexander*: either red or blue. (5-5.5)
- *Opal*: white, sky blue or green. (3.5-5)
- *Rainbow*: white (sky blue shining). (4.5-5)
- *Sang sitar*: shiny sepia. (3.5-4)
- *Aurangabadi*:
  - a. *Bloodstone*: green with red dots/yellow and white. (7.5-8)
  - b. *Jasper*: mild red. maroonish, medium red. (7.5-8)
  - c. *Zebra Agate*: green and white/black and white. (7.5-8)
  - d. *Moss Agate*: bottle green, dark green, light pink at times. (8-8.5)
  - e. *Jhama Aurangabadi*: grey. (8-8.5)
- *Khayaldar*: tones of grey and ochre. (8-8.5)
- *Malachite*: green and red. (4-5.5)
- *Rodolite*: red and very similar to jasper. (4-5.5)
- *Calcide*: light greenish and purple. (3-4)
- *Capocide*: white. (3-4)
- *Crystal Quartz*: translucent and transparent. (5.5-6)
- *Smoky Quartz*: smoke grey. (5.5-6)
- *Rose Quartz*: very light pink. (5.5-6)
- *Tiger*: ochre with black stripes. (7)
- *Lapis Lazuli*: cobalt blue with specks of gold and green. (5.5-7.5)
- *Jade*: translucent light pista green. (9)
- *Chathewalla* (Jamnagar): grey and red. (5-6)
- *White King* (Gujarat): white. (5-6)
- *Black Kathiawadi*: black. (6-7)
- *Aventurine*: red, blur and green. (4.5-6.5)
- *Emerald*: deep viridian green. (5-6)
- *Indian Manek*: brownish red. (8-9)
- *Garnet*: dark brownish red. (6-7)
- *Labroride*
- *Amethyst*:
  - a. *Brazilian*: very light lavender. (very hard)
  - b. *Indian*: deep purple. (very hard)

### *'Agates' Category*

Agates are inexpensive, easy to find, and they come in so many varieties that there is something for everyone. With that in mind agates are great stones to add to your collection. However, there are some people who will benefit from them even more than others.



Agates have a lot to offer children and teenagers. There are a number of reasons for this and they often start with protection. Agates often protect children and teenagers from harm, both physically and emotionally. They are also good for helping them avoid stumbling and clumsiness. However, beyond that agates help to build up confidence, heal inner anger, foster love, keeps peace and calm, and finally they also help make the person wearing or carrying them more agreeable and less likely to argue. All of these things make for great reasons for children and teenagers to wear or carry agates.

Emotional trauma comes from divorce, but agates help bring peace and calm. They also help heal the heart and give one courage to get on their feet and start anew. Agates are good for all sorts of emotional trauma and can aid you in the path to love through healing, calming, and through gaining confidence and self love.

For those interested in working with crystals, exploring energy and "other worlds", learning about deeper meditation, divination, and other metaphysical exploration agates are a great stone to have. These inexpensive stones are good for grounding and aid in all sorts of exploration. While everyone can benefit from agates, these three groups of people are more likely to benefit from them. If you have children or teenagers, are dealing with divorce, or are exploring metaphysical things then having a few agates will help a great deal.

When agates have a spot or multiple spots or banding that is rounded or oval that look like eyes they are called Eye Agates. To make things a little more complicated, stones with single eyes are often called Cat's Eye Agates and those with a single eye found in Mexico are usually called Cyclops Agate. Other people call these agates Orbicular Agates or Orbital Agates. No matter what



you call the stones they are small usually about 1/2" to about 1 1/2". The banding is usually pink, orange, red, brown, black, white, or a shade of gray. These stones are fairly easy to find and usually pretty inexpensive to purchase. They are also very useful stones.

Eye Agates, especially Cat's Eye Agate and Cyclops Agates are used to ward off the evil eye. Therefore it can be used in jewelry and is also carried around for protection. You can keep it in your pocket or your purse. You can also keep it in a medicine or a small bag and wear it around your neck, wrist, or carry it with you. Where ever you keep it, it will aid you in your travels. Additionally it is used to treat growths and helps to stimulate regenerative powers. For those seeking exploration help it can also help one attune to other planets in the solar system.

It also protects you physically. At the same time it is great for those who are sensitive, lonely, or emotionally hurt because it aids in protecting and healing them. This is a stone that brings about self satisfaction and helps one believe in themselves. It counters negative thinking. At the same time it is great for stabilizing and balancing energy levels. This is also a stone that promotes fertility, sensuality, and even sexuality. It will allow the person who carries it to release their artistic expression as well. Finally this stone is used in creating astral projections and keeps watch over the casting of spells and particularly the caster of spells.

Eye agates of all sorts are excellent for a wide variety of things and they make a huge difference in your life, especially if you are in need of comfort or protection whether it is mentally, emotionally, or physically. It is also great for those who are looking to explore more in astral projections and in casting spells.

### **Red Agate OR Blood Agate**

Red agate is also called blood agate. A local variety found in Utah is also known as Pigeon blood agate. No matter what you call it, this crystal is a deep red. While some mistake it for carnelian, carnelian often has an orange tint to it. This stone is often dyed an or heated to have a darker and bolder color. Red agates have all the advantages of other agates, but it has additional uses.



Use of these stone dates back to ancient Rome. Here people would wear them to guard against insect, snake, and spider bites. It has also been used to heal the blood. This stone is also one that brings peace and calm. This makes it good crystal for use around the home, in the office, and to carry or wear while you are dealing with stressful times. Red agates are fairly easy to find and also fairly inexpensive. They are great to have on hand if you deal with a lot of stress or you have a household that struggles to remain calm and peaceful.

### **Pink Agate**



Pink agates are lovely with banding that is often in mauve, peach, pink, whites, creams, and grays. The banding can be subtle or bolder. Most of these agates are located in Botswana and are therefore Botswana agates as well. However, there are times when they found else where as well. Another common thing that you can find is bright pink agates, especially bright pink agate slices.

These are often dyed this color for attracting the eye and are not a natural occurrence. While dyed agates are good for using as other agates, they have no more benefits then other agates. On the other hand, pink agates that aren't dyed are good for promoting love, especially between a parent and child. For this benefit you should wear or carry the pink agate near the heart. It can also be beneficial as a sleeping stone.

**Montana:**

There are so many different kinds of agate that you can get a little lost in the names. A single piece of agate might have more than one name or fall into more than one category. One might call it one thing and the other might look at it



and say, "No way, it is this!". Additionally, many agates are named for location, but can also fall under a type of agate. For example, Montana agate is a common name for agates found in Montana that are clear to light orange in color and contain brown or black hints of plant like structures. These agates are also a type of dendritic agate. All in all, you should do your best, but you should also know that when you are buying stones from other people it may be their best guess as well. Take your time to look at the characteristics and figure out which category or categories it could fall into and go from there. All agates have the same general metaphysical properties with a few displaying a few extra characteristics. For many agates, you will only be able to get your best guess.

Using Agates For Healing: Agates are one of the most common of all crystals. They come in a ton of different colors and varieties and are used for a multitude of different things. Agates are also good for healing in a number of different ways.

**Mental:** Agates are great stones for mental clarity. They enhance mental function, improve concentration, aid in perception, increase the analytical abilities, and even stimulate the memory.

With all of this they are excellent stones for anyone in a job that requires the mind and also for students. Additionally these stones are great for overcoming stress and for dealing with depression. They can aid the user in overcoming mental illness.



**General:** In general agates are great for pain relief, help with paralysis, work to stabilize physical energy, and cleanses the body on all levels. It also stabilizes the aura which heals the physical body when the problem is connected with the aura or chakras.

**Organs:** The agate is connected with healthy digestion and heals gastritis. It is also excellent for the eyes, stomach, uterus, lymphatic system, and pancreas. Throughout history it has been used to strengthen the blood vessels and heal the skin of many conditions. It can also be used to treat a wide range of stomach upsets.

This healing stone is great to have on hand for these things. It is also good for a huge number of emotional and metaphysical uses as well as use in exploring the spiritual world. You can find more about it in other articles.



Brazil agate comes in a variety of brown colours. It is patterned and banded, but more lightly than many agates. It is often mixed with whites, creams, and grays. Brazil agate often grows in geodes. Many of these are hollow with Quartz crystals in the centers. Brazil agate is often dyed bright blues, purples, pinks, and reds and used in ornaments and decorations. However, Brazil agate also has many uses. Brazil agate can be

used in all the ways that agates in general can be used for. However, it is also good for the following uses.

**Emotional:** While you may consider this a physical healing, it is one of those things that count as both, but Brazil agate is known for relieving depression. It eases stress as well.

**Metaphysical:** This stone also protects and makes you feel more courageous. Additionally it brings about an inner strength. In relationships it helps to encourage clear communication. It also aids in inner stability and helps people resist outside influences. While all agates are good to give to children and teenagers for these uses, Brazil agate is one of the best options helping them to make right choices, avoid peer pressure, communicate with those they care about, and having more courage for life.

**Exploration:** The Brazil Agate is often used as a meditation stone. It is said to help you move into a spiritual state. It is supposed to aid in spiritual growth and maturity. South American shaman are

said to use this crystal as a pathway to “other worlds”.

There are some excellent uses for Brazil Agate. If you are seeking spiritual help then you may want to own this stone even more. It is readily available though it is a lot easier to find dyed Brazil agate than natural stones. This isn't the cheapest agate out there, but it is also not the most expensive with prices running pretty close to down the middle. Overall, it is definitely worth getting.

**Banded Agate:** Banded agate is a term used for any agate that has parallel bands. These often run across the stone, but the term is also used if they are in a circular pattern. They can come in any other color and be from any place. Most banded agates can also be called by another term if the



buyer or seller knows where the stone comes from or if there are other characteristics about the stone. Banded agate is also known for a few different traits. Many of these are common to all agates but said to be even stronger in banded agate.

**Healing:** Banded agate is often used to aid in fertility and to heal fertility issues. It is also used for aiding in sexual health issues.

**Emotional:** Banded agate is a great emotional comfort and is a stone that will aid in relaxation and releasing stress. It can also help ease stressful situations. It is also good for restoring energy.

**Metaphysical:** The Banded agate is often said to be a great stone for protection. It is often worn or carried for protection. It is also a stone of passion and sensuality aiding in both sexuality and in artistic expression.

In its simplest form or understanding agates are made from silica. This material mixed with small quantities of other minerals produces the wide variety of agates as well as quartz and chalcedony. In fact, the microcrystalline structure that makes up each agate makes it a type of quartz and a type of chalcedony. If you think of it as a family tree then the quartz is what the agates are made up of and each agate is a chalcedony, but individual characteristics make it agate.

Other categories exist within the agate “family” and you will find that some of these categories can be broken off to form their own groups such as the moss agates, carnelian, and onyx. Each is an agate, while each is also a chalcedony, and quartz.



Agates are formed in small holes within lava formations. They are very old, tend to be on the small size at 3 inches or less (though large agates as big as two feet across have been discovered), and come in a huge variety of colors and textures. These agates are found in one of two forms. Many are discovered washed ashore by the ocean, lakes, rivers, and or creeks.

In these areas the water has pulled the agates from their hiding space within other rocks and brought them out. In many other places agates are discovered as geodes with exteriors of gray or brown. They are ugly on the outside, but when cracked up the agates inside are discovered and are often very beautiful. These agates may also contain quartz crystals or other minerals in the center of the stone. It is common for druzy crystals to be found here as well.

Agates come in a wide range of colors and include pinks, reds, blues, greens, yellows, and even purples. Many include black, white, or gray banding or patterns, but that is not a necessary element of an agate. Agates are a hard stone with a Mohs scale of 7 and are durable to water, salt, and other elements. However, they can crack, scratch, and break from sharp blows or when not handled with care. These stones are also found all over the world making them a hunted variety of stone in many and even most neighborhoods. Add to the fact that new and interesting agates are discovered each and every year and you have a stone type that is addicting to collectors and laymen alike. The beautiful colorations and designs also make it a great stone to have in a wide variety of ways and forms around the house.

**Black Agate:** Black agate doesn't usually occur naturally. When it does the black portions don't cover all of the stone or nearly all of the stone. Black agate is most commonly artificially colored using a process that involves sulfuric acid and sugar to make the stone permanently darker.



The process often works on portions of the stone and causes banding with grays and whites. Some people believe that onyx is the same thing as black agate and they use the term interchangeably. There are many people who believe that stones that have been altered

have no more benefits than they did in their original form. However, others believe that some processes can enhance the stone in some ways.

There are only a few that believe that black agate has additional meanings or “powers” than any other types of agates. Some of this belief has to do with the connection of crystals and colors. Here are various uses for black agate.

**Healing :** Black agate is said to be a very powerful healer and can be used to increase the power of other healing stones. It is used to heal issues of bone marrow and allergies. It is also good for reproductive health in women and is said to encourage fertility. It can ease the discomforts of menopause and is said to help heal breast cancer. It is also said to treat bruises and help to heal sores of all kinds. It can help with the eyesight.

**Metaphysical:** It is said that black agate also removes jinxes and can reverse luck by eliminating the bad. It is also supposed to bring good luck and fortune your way. It is considered a mental stone bringing clarity and increasing concentration. Those who carry or wear black agate overcome their fears and are able to see why they are afraid and how to overcome it. They can also bring strength and protect against negative energies. It also promotes good will.

**Exploration:** Black agate is also supposed to be good with helping one interpret dreams, both theirs and others. While not everyone needs to own a black agate, it can be a helpful stone to have. If it is one that calls to you, you should definitely get it!

**Emotional Aid From Agates:** Agates are great stones for emotional health. They create a feeling of safety and security. They also soothe and calm. At the same time agates are known for aiding in self acceptance, giving you the ability for clear and accurate self analysis, and also for helping to build self confidence.



It also helps one to identify issues in his life. It is a stone that overcomes negativity and helps to heal the inner anger. Agates are also excellent stones for giving one courage to start over and they are great for a user dealing with any type of emotional trauma. This stone also creates an atmosphere of relaxation and provides protection from stress and draining energies.

Agates have also been used in love spells for a long time. This continues to be used to draw love. This works multi-fold. First, the wearer gains a healthy self love which is important. It also helps one avoid envious thoughts and spite. Neither of these things has a place in love and in order to have true love you have to avoid them.

While also listed under healing it should be noted that agates also help a user deal with depression and can aid in overcoming mental illnesses. It brings peace and can be a great stone to carry, have around your environment, or wear in the form of jewelry.

Agates are great stones and produce great results for many people. They are wonderful for a wide variety of uses and the emotional help they provide is often invaluable. For more information on other uses check out the other agate articles.

**Lake Superior Agate:** There are many different types with many different characteristics.



One of these are the Lake Superior Agates. Long ago molten lava flowed to the surface in the area that is now Lake Superior.

Within little pockets of air of the lava that hardened agates formed in the bed of Lake Superior. Add some water and you had a great place for these agates to grow. Then the ice age

came and the glaciers moved the stones around, loosened them from the lava, and spread them throughout the Lake Superior area and south through Minnesota. Some were even moved through Iowa. Over time the Lake formed and the ice melted leaving its treasures behind. Today Lake Superior agates are most common in Minnesota where it is the state gem. However, they can still be found along the shores of Lake Superior, in the north along the water ways that flow into the lake, down the Mississippi river (which flows from the lake), and even as far south as Iowa.

Lake Superior agates are crystals that are red, orange, and yellow in color. When tumbled and polished these colors are very bright and are often found in a couple of different patterns.

- Fortification agates – These have complex patterns. However, the rings that are formed always connect with one another like the walls of a fortified city (hence its name).
- Parallel banded agates – These have bands, often bright colored, that are parallel to one another and often very straight.
- Eye agates – The most sought after and the rarest of agates are the eye agates. These are spotted with “eyes”. There could be one large one or several small ones. It is also possible that the eyes include rings. The ringed versions are sometimes called “bulls eye” since they then look like a target.

Most Lake Superior Agates are small and weight in under two ounces and a couple of inches. However, there are a few that are large with some as big as a bowling ball and weighing as much as 20 pounds. Lake Superior agates tend to go for a little some of the more common types of agates.

Metaphysical Properties: Lake Superior agates will do all that other agates will. However, in addition to those things it is known for elevating personal worth. Whether you carry it around in your pocket, wear it as a piece of jewelry, or keep it by your bed it will increase your self worth. It also makes you more confident in yourself. Finally, it is known for helping one explore the mystical. It will give you clearer vision and help aid you in your mystical explorations.

**Moss Agate:**



Moss agate is one of the most well known of the agates. Traditionally seen as a green colored agate with moss like patterns, this stone can be a huge variety of colors and is found in many different places. Additionally this agate has many more benefits than just those common to all agates. Many believe that moss agate is the most powerful of all agates.

**Healing:** When it comes to healing, moss agate has a lot of uses. It cleanses the circulatory and elimination systems. Moss agate helps keep the lymph system healthy as well. It gives energy to the body and is known for bringing general health. It even helps to boost the immune system. This stone speed up recovery and helps to counter the effects of long term illness. Moss agate can also be used for lowering fevers, reducing swelling, and treating infections, colds, and flu's. It also prevents hypoglycemia and dehydration. You can make an elixir and apply it to the skin to treat skin infections and fungal infections including nail fungus infections, ringworm (fungal infection of the skin), athlete's foot, jock itch, and trucker's bottom. This is also the stone to get if you suffer from neck problems, especially a stiff neck.

This stone heals depression and helps with food issues and or anorexia. This is listed under both the healing and emotional sections because these issues are often tied with both the physical and emotional self. Because of its deep rooted connection with nature, moss agate is also great at relieving sensitivities to the weather including allergies, heat, cold, and rain.

Finally, this stone is considered the birthing stone or the midwife stone because it aids with child birth. It helps lesson the pains of labor, bring endurance, adds strength to the one delivering the baby, and helps to bring about a quick (or as quick as possible) birth.

**Emotional:** While moss agate is great for healing of the body, it is also a stone that does great things for the emotional well being. It balances the energies including the yin/yang (male/female) energies. It helps the person using it or near it to let go of anger and bitterness. It releases fear and improves self esteem. This is the stone that helps everyone one get along with others and to develop the skills to make sure that you will always be able to get along well with others. This is also an excellent stone for releasing stress and fear. It encourages hope, trust, and optimism. This stone also helps to heal depression of all sorts. Moss agate gives insight and reason as to why we feel the way we do and how to help overcome the negative things that we feel. This is also the

stone that you should carry if you have food issues or anorexia.

Metaphysical: Moss agate is a gardener's or farmer's talisman and is said to bring about abundance in crops and beautiful, healthy flowers. Moss agates can be added to the garden, hung over it, or buried in the ground for the best results.

It is also said to bring about riches, happiness, and a long life. This is the stone that brings friends and build friendships. It brings abundance to your life in many different ways. One way that this is true is that it increases persistence, endurance, and therefore success. This crystal also helps the user to see beauty where ever it is.

Exploration: Moss agate also refreshes the soul, brings new beginnings, and helps you get rid of spiritual blockages. You will also be able to get in touch with your intuitive nature by using moss agate.

Moss agate is easy to find and fairly inexpensive. The most common kind is that of the green variety, but others do exist. Some examples of other moss agates include brown moss agate (brown moss), Bull Canyon Agate (Reddish, brown, or tan moss), Needle Peak Moss Agate (bright yellow moss), Ochoco Lake Moss (Blue to blue-gray moss), Maury Mountain Moss (red moss), and Southwest Texas moss (rust colored moss). It should be noted that no matter what color the moss agate is, the patterns are made up of minerals and not actual plant life.

These agates are very useful and are good for everyone. They make great jewelry, but can also give benefits carried in the pocket or your purse, or placed around your home or office. They are also easy to find and won't cost you a lot of money to buy, unless you prefer one of the more exotic colored moss agates. It should be noted that using crystals should never replace professional care including medical and mental help.

## The Difference between Agates and Jaspers



Leopard Jasper



Banded Agate

Two very common stones are agates and jaspers. Both come in a huge variety of colors and variations. Both are found all over the world. Both tend to show along the shores of lakes, oceans, and rivers. Both can be stunning stones. On a deeper level, both are made of silica mixed with small amounts of other minerals to form wide variety of colors made up of very tiny microcrystalline quartz. However, there is a slight difference between the two stones. While not a very large difference, the biggest thing different between agates and jaspers are their transparency. Agates have some sort of transparency, sometimes they are semi-transparent or cloudy and other times they have solid stripes, “moss”, or other patterns on top of a somewhat transparent

background. On the other hand, jaspers are always solid and opaque.

Confusion between the stones can happen a lot. In fact, if you buy jaspers or agates you may find that you end up with something different. Add to the fact that these stones are very similar, many of them have the same name. For example there are Zebra agates and zebra jaspers. This is just one example, though there are many others. If you are having a hard time identifying a stone it can help to check out some identification books or to search for pictures online. It should also be noted that in many pictures it is hard to determine whether or not the stone is transparent or opaque.

#### Hunting for Agates:

Agates are found almost everywhere on Earth. Some locations are more plentiful than others, but if you ask around you are likely to find a spot for agate hunting within a few hours of



your home. Good places to ask around are local rock hounding clubs, rock and gem groups, and even at rock or gem shows. Many people are likely to share at least some information with you as to where to begin your search. Many times there are also books and maps at the local library which will suggest rock hunting sites in your area and will let you know what can be found there.

Check out stones that are found as geodes, in the rough, and that have been smoothed by the water so you know the difference. Having a good idea of where you are going and what you will be looking for there will go a long way to help you find a lot of agates.

Once you have a location to go hunting there are a number of things to consider. When planning your trip you should let others know, especially if you are going to a remote area. You will also want to make sure that you dress for the area. Many out doors hiking trips require that you wear comfortable shoes or boots, that you wear socks and pants so that you are protecting yourself against other dangers of nature. You should also bring a first aid kit and plenty of water.

A hat or visor is also ideal because it will help protect your eyes from the sun.

Once you are ready you will want to head out. There are a number of things that you should do to find great rocks. Each of these tips will help you find great agates.

- Make sure you take things slow. Walk slow and scan the area thoroughly.
- Take your time to look at each stone, especially that catch your attention or look interesting.
- Be willing to go back over the area you have already looked at. You may find a great stone just waiting to be picked up.
- If you think you may have an agate, either carefully examine it there or take it home and see what else you have out there.
- Most agates have some sort of banding or internal patterns and are at least semi-translucent.

These tips will help you find more agates. It's a good idea to bring the stones home, even if you aren't sure that all of them are agates. There you can check them out under different lighting and clean them if necessary.

#### [Black and White Agate OR Zebra Agate](#)

Agate that is made up of black and white patterns is sometimes called black and white agate and



sometimes called zebra agate. Whatever it is you call this crystal it is a great one to have. It has been worn as a talisman for a long time and is often made into jewelry. This stone is used in the same manner as all agates, but also worn to ward off physical dangers and was carried into battle at different times in history. They are fairly easy to find and aren't very expensive. Finding them as beads and jewelry pieces can

be even easier. This agate is a beautiful one to own, but it is a matter of preference particularly for the look of the crystals.

### **Brown Or Tawny Agate:**

Brown or tawny agate is any agate made up primarily of browns. It tends to be banded, but the



bands are as defined as other agates and they blend together. You will find it with shades of brown, white, and gray. Many brown or tawny agates are found in Brazil, but some other locations produce a small number of these stones. Lighter brown agates are often dyed and used for ornamental purposes.

The brown or tawny agate has long been used for victory and success. This is another one of the agates that were once carried into battle for protection and for a successful campaign. It is also prized in Italy and Persia as a guard against evil spirits and is said to bring wealth.

You can find brown agate in jewelry and very commonly as beads. It is also fairly common to find it as slices from a geode and sometimes even with quartz crystals in the center. It is also fairly easy to find it as carved spheres of all sizes. Usually it can be purchased for an inexpensive amount though buying large geodes or spheres will cost you.

**Using Agates in Exploration:** Agates are great grounding stones and often used in exploration and healing as such. They also help to raise awareness and aid in linking to a



collective consciousness. These crystals raise awareness of ones own life and encourages contemplation. Because of this they make excellent meditation stones as well as great grounding stones. They also work to aid in spiritual growth and are stabilizing stones. They stabilize the aura

and can be used in healing of the aura. Finally it should be noted that some cultures have used agates for the purpose of scrying. This makes them a very powerful stone and you can connect with them and with a higher level of psychic awareness to answer difficult questions in your life. Overall, agate is a great stone if you are trying to explore metaphysical areas, healing, discernment, divination, or other “other world” methods.



Agate has been used for a really long time. It was a stone that was used for tools by primitive societies. It is believed that these uses of agate tools dates back 2.5 million years to people in the Omo Valley in Ethiopia. Whether or not that is true is hard to know, but none the less there is evidence that agate has been a real and

important part of people's lives for a long time.

Many ancient civilizations wore agate because they believed that it was powerful. This includes the Egyptians and the Greeks. The name actually comes from ancient Greece. There is a river in Southwestern Sicily (part of Greece in ancient times) that is known as Dirillo today, but was known as Achate in those times. This is where the name Agate came from.

In Medieval times there were several beliefs about agate and it was commonly worn and carried because of these beliefs. It was believed that by having agate on your person you would:

- Gain God's favor.
- That one would be more agreeable.
- That one would be more persuasive.
- That one would experience more victories.
- It was even believed that one would be stronger.
- Overall it was supposed to protect you from all dangers.

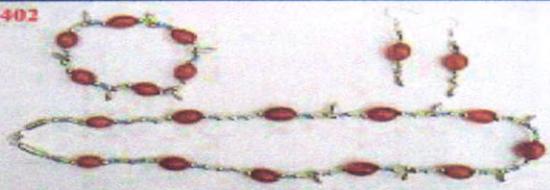
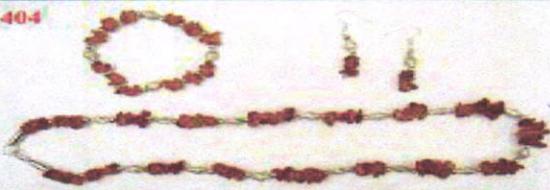
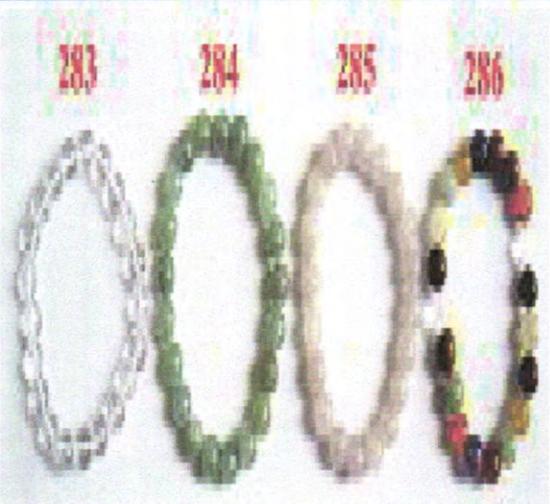
Agate was often used in bedrooms because it was believed that it would give you pleasant dreams. It was also used as a cure for insomnia. The final thing that was commonly done was agate being placed in the water. This would be done before cooking with it or drinking it. It was believed that agate would dispel illness.

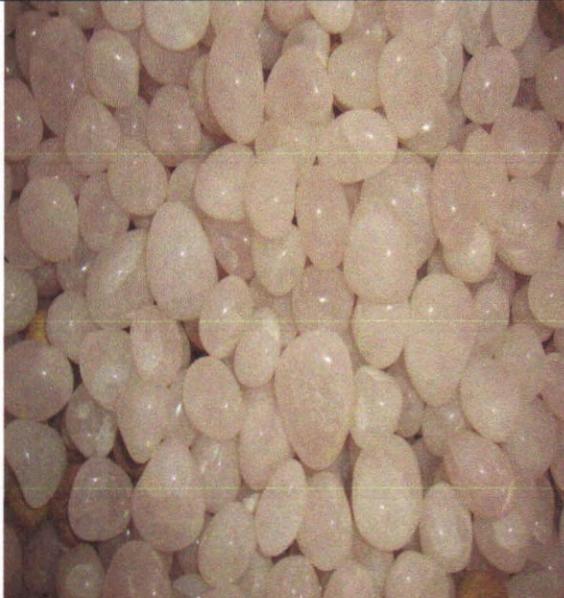
While these beliefs have changed over time, there are a few that remain the same. Some of these older beliefs have been dispelled by science, but others are believed to be a benefit of crystal metaphysical meanings. You can learn more about Agates Uses, Agates In Healing, The Science of Agates, and Colors And Variations of Agates.

**ix. Description of goods:**

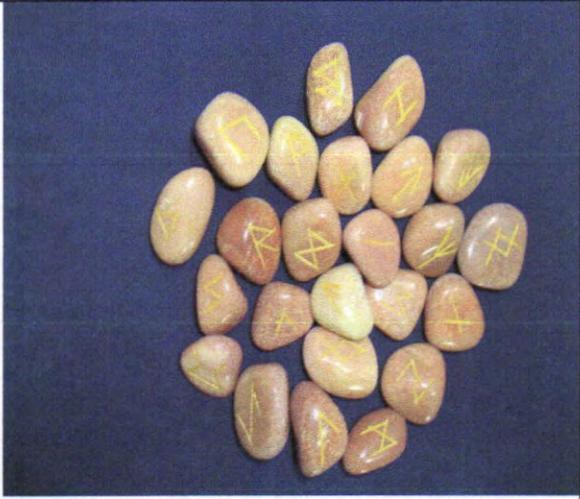
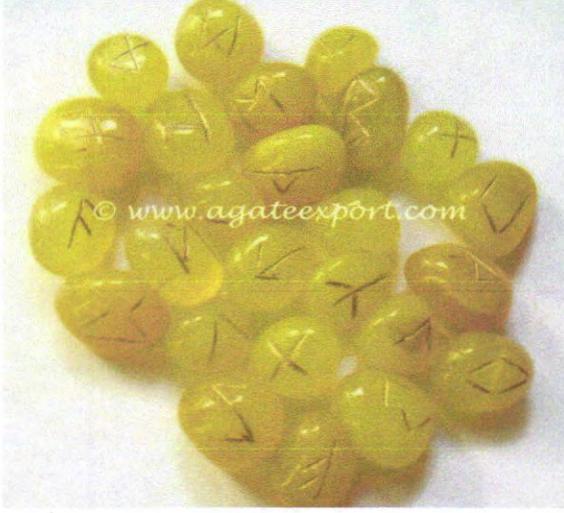
Agate beads are the chief products, which command a good market in the countries of Middle East and African coast. Other agate products are flower vases, ash trays, bangle, mortar and pestle necklaces, paper weights, buttons, rosaries, lamp shades, earrings, rings, bracelets, key chains, bowls, cufflinks, pendants etc.

S N	Product name	Product
1	AGATE NECKLACES	 <p>AN030</p>
		 <p>AN027</p>
		 <p>AN029</p>
		 <p>AN028</p>
		 <p>AN025 AN026</p>
2	AGATE SETS	 <p>401</p>

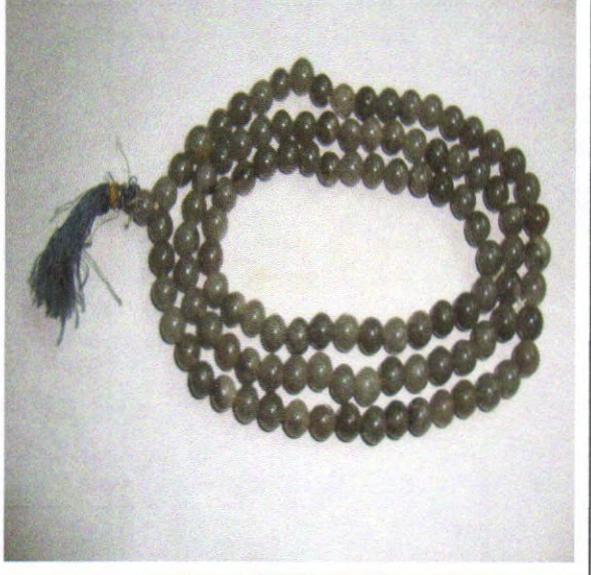
		<p>402</p> 	
		<p>403</p> 	
		<p>404</p> 	
<p>3</p>	<p>BRACELETS</p>	<p>283      284      285      286</p>  <p>288</p> 	

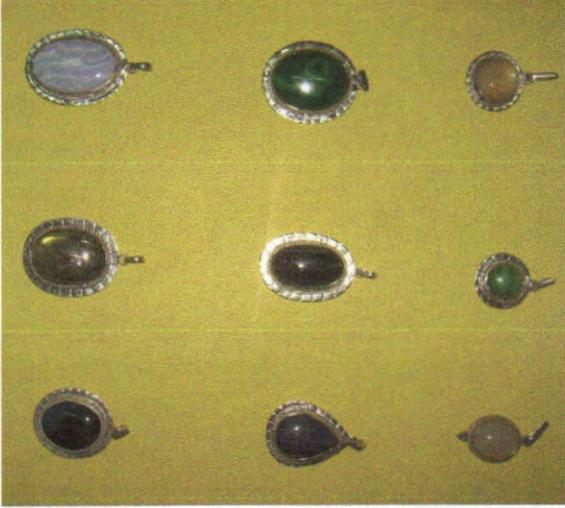
4	Agate rose quartz tumbled		
5	Moss agate tumbled		

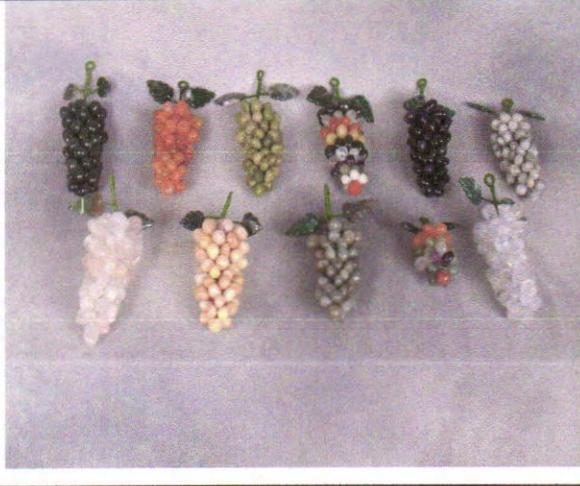
6	Black Agate	
7	Grey Agate	
8	Navrang jasper agate	

9	Sun Stone agate	
10	White Agate	
11	Rune Stone. — Khambhat	

12	Rune Stone Set. — Khambhat	
13	Semi Precious agate necklace	
14	White king Agate mala	

15	Yellow agate jape mala	
16	Grey agate Jape mala	
17	Golden agate Jape mala	

18	Golden Agate rodi drill		
19	<p>Silver Mounted Pendant  Blue Leis Agate, Melechite,  Yellow Hited,  Lebrorite, Blue Hited,  Lepiz &amp; Moonstone</p>		
20	Moss Agate		

21	Agate stone bunch of grapes	
22	Pendulums	
23	Gemstone Pendant / Agate Pendants.	
24	Gemstone	

25	Gemstone Beads	
26	Arrowheads : Wholesale Arrowheads	
27	Tumble Stone Necklaces	
28	Gemstone Key chains	

31	Agate stone tree		
32	Agate stone tree		

**x. Uniqueness:**

The articles to be produced from agate are determined by and shaped according to the size, color, and natural formation of raw stones. The color and design found in one article wouldn't exactly be the same as that in any other article and in that lays its uniqueness. According to ancient beliefs agates possess medicinal properties and are thought to cure Insomnia. People possessing this stone were believed to have gathered strength and courage.

**xi. Inspection Body:**

The inspection body consisting of the following have been constituted for maintaining the quality of the product

- Officer In-charge, O/o the Development Commissioner (Handicraft), Ahmedabad.
- Director (Market Rsearch), Textiles Committee, Ministry of Textiles, Mumbai
- Representative of Producers Associations, Khambat Prominent Master Artisans of the product.

xi. **Others:**

One of the major steps by means of which a developing economy seeks to sustain its growth is a rapid expansion of the internal market to absorb increases in production. A second step is to diversify the range of products that will yet restrain, within manipulability limits, the spiraling of rising expectations. One of the fields which demands immediate attention is traditional handicrafts. The products mostly handmade and rooted in the traditions of a nation's culture and economy are often sources of the deepest satisfaction in everyday life. Apart from the question of its value as social or ethical investment, the resuscitation of these aids becomes all the more imperative within a developing economy, on account of the fact that the tools employed are often timeworn and rudimentary, the pools of skill narrow, highly specialized and hereditary, being limited to certain communities or castes.

The *Akik* (Agate) industry in *Khambhat* or Cambay, in South Western Coastal Gujarat is an example of such a handicraft based small scale industry, rooted in tradition. *Akik* or agate is the general term applied to different varieties of carnelians, and includes different forms of chalcedonic silica found either underground in mines, in beds of rivers or on hill slopes. Agates are known by different names depending on colour and lustre or their chemical compositions. In India, the *Akik* industry has been in existence since antiquity. In Gujarat, it finds mention from the beginning of the Christian era by a number of foreign travelers who came to India at different periods. The key to the prosperity of Gujarat was the port city of *Khambhat* on the northern edge of a Gulf, now a crumbling town, heavily silted up with decaying population.

The fortunes of the *Akik* industry in India seem to have been linked with the rise and fall of different places that grew into importance as sea-ports or centres of maritime trade. It was at *Khambhat* that the *Akik* industry reached the pinnacle of prosperity and survived till present times despite economic depression and competition. The *Khambhat* port has lost all its former glory but the industries that still thrive are the handicrafts of cutting and polishing of precious and semi-precious stones like rubies and sapphires and the unmatched art of working on *Akik*. Further, the product bears generational legacy as the artisans learn the art of printing from their forefathers.

Along with the Statement of Case in **Class - 14** in respect of the name(s) of whose addresses are given below who claim to represent the interest of the producers of the said goods to which the geographical indication relates and which is in continuous use in respect of the said goods.

2. The Application shall include such other particulars called for in rule 32(1) in the Statement of case. The statement of case attached.

3. All communications relating to this application may be sent to the following address in India.

**Development Commissioner (Handicraft)**

**Ministry of Textiles, Govt. of India**

**Haroon House, 3<sup>rd</sup> Floor,**

**294 - P Nariman Point,**

**Mumbai – 400 001, India**

4. In the case of an application from a convention country the following additional particulars shall also be furnished.

- a. Designation of the country of origin of the Geographical Indication.
- b. Evidence as to the existing protection of the Geographical Indication in its country of origin such as the title and the date of the relevant legislative or administrative provisions, the judicial decisions or the date and number of the registration, and copies of such documents.

**Not Applicable**

  
**V.P. Thakur**  
**Dy. Director (H)**  
**O/o the Dev. Commr. (Handicrafts)**  
**Min. of Textiles, Govt. of India**  
**Haroon House, 3rd Floor,**  
**294, P. Nariman Street, Fort, Mumbai-400001.**

SIGNATURE  
NAME OF THE SIGNATORY

Dated this 15<sup>th</sup> day of November 2024