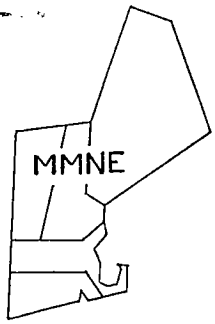

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Dues are $6.00/year and due on January 1st, payable to the treasurer.

News items for the *Newsletter* are welcome and should be submitted to the Editor. The *Newsletter* may quoted if credit is given. The Club address is c/o Editor

Upcoming Meetings

Oct. 12. Fogg's home, Goffstown, NH. 9 AM

Nov. 16, Sudbury. MA public library. 9:30 AM

MICROMOUNTERS OF NEW ENGLAND NEWSLETTER

September 1996 #192

The MMNE was organized on November 8, 1966, for the purpose of promoting the study of minerals that require a microscope.

MMNE METING ANNOUNCEMENTS

The next meeting will be held on Saturday, September 21 at the Hudson, MA public library. The library opens at 9:00 AM. Member Mike Kieron will talk about the Conklin Quarry in Rhode Island.

1996 remaining dates for Mont Saint-Hilaire: September 14 and October 12, both are Saturdays

MMNE schedule for the next year:

October 10, 1996 (Saturday) at the home of Forrest and Vera Fogg, Goffstown, NH. 9:00 AM
November 16, 1996 (Saturday), Sudbury, MA public library. Doors open at 9:30 AM.
December, 1996. No meeting.
January 12, 1997 (***Sunday***), Boston University. Doors open at 9:00 AM.
February 8, 1997 (Saturday), Auburn, MA public library. Doors open at 9:00 AM.
March 15, 1997 (Saturday), Burlington, MA public library. Doors open at 10:00 AM.
April 12, 1997, (Saturday), Northboro, MA public library. Doors open at 9:30 AM.
May 10, 1997, (Saturday) Ashland, MA 4-H Club Center. Doors open at 9:00 AM.

MEMBERSHIP NEWS

It is with sorrow that we announce the death of charter and life-time member Fred Colby, former resident of Laconia, NH. He was living with his daughter, Mrs. Schreiber, in Jacksonville, FL at the time of his death.

Welcome back to an old member:
Jim Warner, 23 June Street, Auburn, MA 01501 - (508) 752-8328

Welcome to new members:
John Pawloski, 42 Squash Hollow Road, New Milford, CT 06776 - (860) 354-0296
Doug Rambo, 17 N. Avon Drive, Claymont, DE 19703 - (302) 798-4163
George Rambo, 17 N. Avon Drive, Claymont, DE 19703 - (302) 798-4163
Robert Rothenberg, 9 Watkins Avenue, Oneonta, NY 13820 - (607) 432-6814
Richard Stenberg, 185 Redlands Street, Springfield, MA 01104 - (413) 733-9309

FROM THE EDITOR

By all accounts the May meeting was a great success.We had over 60 micromounters attending from as far away as Virginia, Delaware, and upstate New York. Our speaker, Dan Behnke, gave two excellent talks accompanied by superb slides. Thanks are due to all who contributed their time and specimen material to the meeting. It is time to start thinking about the next annual meeting, both in terms of a speaker and the format.

We owe thanks to Herb and Julia Fielding for all the work they did preparing for our July meeting at their camp on Lake Winnesquam only to have Bertha the hurricane wash us out.

Thanks to Pat Barker for a fine job on "Cooking with the Micromounters of New England." It includes not only recipes for the various good things we have enjoyed at our potluck meals, but also color photographs of members and minerals. Pat still has copies available for $5.00.

The last three pages of this issue are the first part of the follow-up to the earlier series on mineral cleaning. This list is in specific reference to Mont Saint-Hilaire species and lists what are felt to be reasonable cleaning solutions based on reactivity of the various species found there. The information has been culled from a variety of sources. In some cases presumed reactivity is made based on the reactivity of similar species (indicated by "Pr"). ***This list is only intended to be a help in cleaning. It is not intended to be used for diagnostic testing***. Always test a small chip first to be on the safe side. Remember that there may be more than one species on the specimen, so use the most reactive species as your guide to selecting cleaning solution. IN = insoluble; S = soluble; SS = slightly soluble; M = moderately soluble; R = rapid reaction. Please send in any comments, corrections, etc.

Roy Grim of the International Federation of Micromount Societies (IFMS) has contacted the MMNE regarding membership of either the MMNE or individuals in the IFMS. Membership is $15.00 per year per person or per group. There is a quarterly newsletter, the International Micromounters Journal (IJM). If anyone is interested in joining the IFMS individually, Roy can be reached at 9155A Hitching Post Road, Laurel, MD 20723-1531.

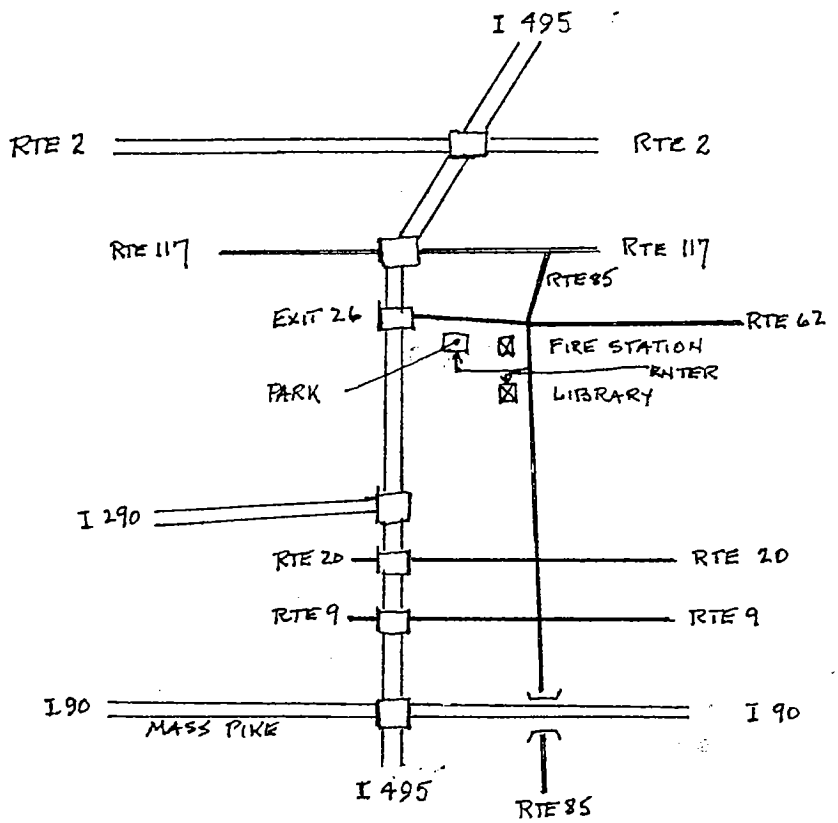
The Vermont issue of ***Rocks and Minerals*** will be available at the September meeeting from Janet Cares for those who signed up.

UPCOMING MEETINGS AND SHOWS

North Shore Rock and Mineral Club Micromounters meet the 2nd Wednesday of each month at the home of John and Margaret Stewart, 244 Mill St., Burlington, MA. For more information call John or Margaret at (617) 272-0854.
Mont Saint-Hilaire collecting trips: September 14 and October 12 (Saturdays only)
September 7 & 8, Northern Berkshire Mineral and Jewelry Show, St. Anthony's Parish Center, Rte 2, North Adams, MA.
September 7 & 8, Danbury Mineralogical Society 43rd Annual Gem & Mineral Show, Danbury High School, Danbury, CT.
September 20, 21 & 22, Paul Desautels Micromount Symposium. Put on by the Baltimore Mineral Society. For further information contact Cal Pierson , 4 Kampman Court, Sparks, MD 21151, (410) 472-9406.

CLASSIFIED ANNOUNCEMENTS

This space is available for active members of the MMNE at no cost. Contact your editor with any sale items (no minerals), trades, want items, etc. The announcement will run for two consecutive issues of the Newsletter.



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NORTH

The following is part of an article from ***Micro News and Views***, April 1995, Vol. 21:3. entitled "An occurrence of partially overgrown prismatic 'sandwich' calcite crystals from a tillite fissure at Clairwood Quarries, Durban." The calcite 'escription is of interest because very similar material was found at the Poudrette Quarry, Mont Saint-Hilaire in 1994.

(The calcite) "occurred as well formed prismatic crystals with later crystal aggregate overgrowths. Calcite-1 formed micro-tabular to prismatic colourless translucent crystals exhibiting prominent m(1010) and which....were terminated by the low rhombohedron e(0112). All the terminal facets were capped by overgrowths of calcite-2 crystal aggregates....Calcite-2 formed overgrowths upon, and completely obscured, the terminal facets of calcite-1. These overgrowths varied from roughly 0.1 to 0.3 mm in thickness and were brownish-tinted yellow-white in colour. Under magnification, the calcite-2 appeared to be oriented upon calcite-1. The aggregate nature made the face identification very difficult but they appear to be prismatic crystals terminated by a minute e(0112): the same essential habit as the host crystals. Rarely, these calcite-2 clusters were noted on quartz crystals as micro aggregates to 0.2 mm. Occasionally, calcite-1 crystals were almost entirely overgrown by calcite-2 aggregates. Where calcite-1 exhibited a narrow prism zone, the cap-like calcite-2 overgrowths imparted a striking 'hamburger'-like appearance to the crystals."

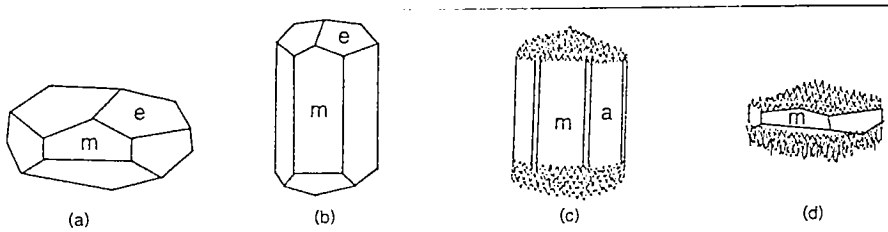

Fig. 1: Calcite crystals

(a) Idealised short first-order prism terminated by low rhombohedron

(b) Idealised elongated first-order prism terminated by low rhombohedron

(c) Sketch of elongated first-order prism with terminations obscured by calcite-2. Narrow second-order prism faces present.

The Saint-Hilaire material is slightly different in several ways. The calcite-1 crystals appear to be tabular prisms with a *c* face rather than a rhombohedral termination, and the calcite-2 crystals are steep rhombohedrons. Both generations of calcite are colorless. The preferential orientation is marked at Saint-Hilaire, with the calcite-2 oriented on the c-face along the edge between the prism and *c* face with the c-axis of the scalenohedron vertical to the plane of the c-face of calcite-1. In some cases the entire calcite-1 crystal is engulfed in calcite-2. When there is just a rim of scalenohedral crystals along the edge of the c-face, and two crystals are parallel relative to the c-face of calcite-1, there is a striking resemblance to *Jaws*. Interestingly, the two generations of calcite both fluoresce brightly under SW, but different colors. The calcite-2 scalenohedrons also occur as gowths on other materials such as arfedsonite in the vugs. This material was found in what appears to be an altered pegmatite.

From ***The Mineral Mite***, October 1994 (from ***Mineral Newsletter***, via ***SCFMS Newsletter***, and ***The Rock Rattler***):

Hints & Tips - A SOLUTION TO A MUSTY PROBLEM - Jenny Smith

How many times is the trip to an old bookstore a disappointment? Sometimes the volumes or periodicals wanted are too must to consider purchasing. The smell alone is a stron deterrent, and to one with allergies, an impossibility.

But there is a way to rid books and magazines of this disagreeable odor -- one that is easy and inexpensive.

I recently acquired some very early ***Mineralogical Records*** which were sold very cheap because they were so musty htey were impossible to hold and read. After treatment they have been read from cover to cover and now reside with the other volumes in my collection.

Place in one end of a box that is larges than the material to be deodorized, several handsful of untreated charcoal briquettes. Wedge open the books or magazines here and there with something so that the air may circulate. Twigs work well! Place a rolled up newspaper between your valued items and the briquettes, being sure that there is room for plenty pf air movement. Close the box and wrap tightly in a plastic bag, and leave it alone for as long as three to four weeks, if necessary. It works! Try it!

Porcupine Quills Available by Mail. If any micromounter who saw the reprint of the article on the use of porcupine quills for mounting would like to try some, they are available from Fire Mountain Gems, 28195 Redwood Highway, Cave Junction, Oregon 27523-9304. By phone 1-800-423-2319. A pack of approximately 200 quills is $5.59 + P&H. (Thanks to ***The Mineral Mite*** for the information.)

The following article is part of a series on micromounting techniques being published in ***The Mineral Mite***. Hopefully MMNE members will find these of value. All of you have been taught or developed personal techniques for preparation of micromount boxes and mounting of specimens. Write them up so that we can publish them here. This newsletter is widely read by many micromounters from other clubs, and original contributions are frequently reprinted in other newsletters. Your contributions will aid micromounters other than just the MMNE.

Volume 29, Number 1 January, 1996

WHISKERS AS A PEDESTAL FOR A MICROMOUNT:

The general practice of micromounters is to place a specimen on a pedestal in a plastic box.The box may be lined with a black construction paper insert or it may be painted with a flat black paint. Some use a black plastic box but still insert a black paper liner because pedestals do not adhere well to the plastic. The pedestal is required in most cases in order to elevate the specimen close to the top of the box for better viewing without having to make major adjustment to the microscope settings to keep it in focus for viewing. The black lining of the box is to reduce the likelihood of anything detracting ones attention from the specimen and as mentioned above, to allow the pedestal to be secured in the box for safe storage and transportation.

While blackened balsa wood, match sticks, cactus needles and small corks are common pedestal material, some specimens are so tiny that other vehicles for mounting are necessary. This is because it is not considered proper for any of the pedestal to show when viewing the specimen and these small "specs" would certainly occupy only a very small portion of most pedestals. Even hair brush bristles are too large for some micro crystals although the same technique can be used in adapting them and whiskers to use as a pedestal as will be described in the following.

Before going into those details it is important to know the source of "whiskers". Not just any whisker will do. We want only black whiskers for the same reason we have blackened corks and black lined boxes, namely to avoid any distraction from the specimen. Where does one find black whiskers? From black cats? but only a few cats or cat owners are willing to donate whiskers for any reason. Animals with black whiskers are likewise reluctant to part with these body parts which appear essential to their safety and well being. I discovered this when I approached my son for a whisker from his daughters cat. The cat was quite docile and allowed me to snip one whisker but my granddaughter was very reluctant to allow any further reduction in the supply of whiskers from HER cat.

WHISKERS AS A PEDESTAL FOR A MICROMOUNT (Continued from Page 1)

I got the message and refrained from further attempts to acquire cat whisker pedestals. Further research assured me that there were other sources of whiskers. Accordingly I kept a watchful eye out for any animal that had black whiskers and was not in a position to resist donating these appendages to my cause. In my subdivision in Fairfax Virginia, there is an abundance of squirrels and frequently they become the victims of motor vehicles and become ROAD KILL! When I discovered this source of pedestal material I immediately kept a watchful eye out for likely candidates and presently I have an adequate supply of black whiskers. IN ADDITION TO SQUIRRELS I have found that rabbits, woodchucks and some yet unidentified animals have black whiskers suitable for use as micromount pedestals. However, my favorite and most available source of whisker is the gray squirrel.

Obviously, one of the problems in the use of a whisker is that there is not a sufficient surface to allow it to stand in the box while the adhesive (glue) dries. Some means of holding it in place is required and while this may be accomplished by drilling or burning a hole in the bottom of the box or by placing a carefully engineered block of thin balsa wood in the bottom of the box and piercing it with a small needle in which to place the whisker for gluing, one of the most available methods is to use a short section of one of the blackened corks. I take one section of a cork that I have cut from a full cork in order to make the cork the correct height for another specimen, blacken the surface that has been cut and, using a needle, puncture the cork with the whole length of the needle. This produces a hole into which I introduce the whisker after dipping it in a small amount of Elmers Glue. After allowing a few minutes for the glue to harden, I use a pair of scissors to cut the whisker to the approximate length necessary to fit the height of the box. and then measure and adjust the height so that the specimen is no higher than the very top of the box. Sometimes it is possible to pull the whisker through the cork until it is the right height and then trim it from the base of the cork until it is the correct height,

Placing the specimen on the whisker pedestal is a problem sometimes. I find that it is necessary to examine the mineral-crystal to determine the best point or angle of view and then apply the whisker pedestal to the specimen with a small amount of water soluble glue. It is desirable to use glue that can be removed easily in case it is applied to the wrong surface of the specimen and needs to be adjusted. While quick drying glue is desirable, some leeway in the time for the specimen to set and become permanently secure on the pedestal is an advantage.

In addition to the use of whiskers acquired from road kill, I have found that the hair from the tail of a horse is adequate providing it is black. It is almost as stiff as a whisker although I have found that it tends to curl or lean to one side more than a whisker. Horse hair can be obtained from stables where horses are kept. Most horse owners are most willing to contribute masses of horse hair if they are approached in a polite manner.

There are definite techniques for mounting micro specimens of such small pedestals and a dedicated micromounter must take the time to become adept at this method of mounting small specimens. Try it, you will like it!

Species	Rx H2O	Rx HCl	Rx HNO3	Rx H2SO4	Rx Citric Acid	Rx Oxalic Aci	Rx Remarks
Abenakiite (UK 85)	?	?	?	?			
Acanthite	IN	S	M	S			
Actinolite	IN	IN	IN	IN			
Aegerine	IN	IN	IN	IN	IN	IN	
Alabandite	IN	R	M	M	S warm		
Albite	IN	IN	IN	IN	IN	IN	
Allanite-(Ce)	IN	S to gel	IN	IN			
Analcime	IN	R to gel	?	?	Pr S	Pr IN - SW	Luster hurt by soap, wm acetic acid remove calcite, ascor for MnO, oxal
Anatase	IN	IN	IN	IN			
Ancylite-(Ce) (UK 3 & 10)	IN	R - fizz	R	R			
Andesine	IN	IN	IN	IN			
Andradite	IN	VS conc	IN	IN	IN	IN	
Anglesite	IN	VS	M	VS			S ammoniium citrate
Ankerite	IN	R wm	M wm	M wm			
Annite	IN	IN	IN	Dec conc	IN	IN	
Anorthoclase	IN	M to gel	IN	IN			
Antimony	IN	S	DEC	M ht conc			
Aragonite	IN	R - fizz	R	R			S dilute acids
Arfvedsonite	IN	IN	IN	IN			
Arsenopyrite	IN	IN	S	IN	IN cold conc		Not affected by cold conc citric acid
Ashcroftine-(Y)	IN	IN	?	?			
Astrophyllite	IN	S to gel	IN	S conc			
Augite	IN	IN	IN	IN			
Barite	IN	IN	IN	VS wm con			Can usually be cleaned using 30% HCl
Barylite	IN	IN	IN	IN			
Barytolamprophyllite	IN	?	?	?	Pr IN	Pr IN	
Bastnaesite	IN	S wm	S wm	M wm			
Bavenite	IN	Dec	IN	IN			
Behoite	IN	M	M	M			
Berthierine	IN	S conc	IN	S conc	M cld conc	Pr IN	
Beryl	IN	IN	IN	IN			
Beryllonite	SS	SS	SS	SS			
Beudantite	M	IN	IN	IN			
Biotite	IN	IN	IN	Dec conc	IN	IN	
Birnessite	?	?	?	?			
Bismuth	IN	S ht conc	M	S ht conc			
Britholite-(Ce) (UK 22)	IN	M to gel	?	?			
Brochantite	IN	M	M	M			Attacked by ammonia
Brookite	IN	IN	IN	VS wm			
Burbankite	IN	R -fizz	Pr R	Pr R	Pr R	Pr R	
Calcioancylite-(Ce)	IN	R - FIZZ	R	R			
Calcite	IN	R - fizz	R - fizz	R - fizz			
Cancrinite	IN	M to gel	IN	IN			

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Species	Rx H2O	Rx HCl	Rx HNO3	Rx H2SO4	Rx Citric Acid	Rx Oxalic aci	Rx Remarks
Carbocernaite (UK40)	IN	?	?	?			
Carbonate-fluorapatite	IN	M var	M	M var			
Caresite-3T (UK40 group)							
Carletonite (UK 15)							
Catapleeite	R to gel	IN	IN	IN			
Celestite	IN	VS ht pwd	VS ht pwd	VS ht pwd			
Cerite-(Ce)							
Cerussite	S ht	R	R	R			
Chabazite	IN	R to gel	R to gel	R to gel	IN wm	IN wm	Wm acetic acid for calcite, ascorb for MnO, oxalic acid for Fe
Chalcopyrite	VS	VS pwd	M	VS pwd			
Chamosite-IB	IN	S	IN	IN			
Charmarite-2H (UK58 Group)							
Charmarite-3T (UK58 Group)							
Chkalovite	IN	M	M	M			
Chlormagalumite							
Clinochlore	IN	IN	IN	S ht conc			
Cordierite	IN	S to dec	S to dec	S to dec			
Cordylite-(Ce) (UK 12)	IN	M - fizz	M to dec	M to dec			
Corundum	IN	IN	IN	IN			
Cryolite	VS*	S	IN	VS**			** Powdered gives HF gas!! - *OK in H2O
Daquinshanite-(Ce) (UK 44)	Pr IN	Pr R - fizz	Pr R	Pr R			
Datolite	IN	S conc to gel	IN	IN			S hot conc citric acid. HCl OK calcite removal
Dawsonite	IN	R- fizz	M	M			
Digenite	IN	S	M	S			Quick HCl clean OK
Diopside	IN	VS	IN	IN	IN	IN	
Djurleite	?	?	?	?			
Dolomite	M	M	M	M	VS cold conc		
Donnayite-(Y) (UK 33)	IN	R -fizz	Pr R	Pr R			
Dorfmanite	M	M	M	M			
Doyleite (UK 45)	IN	IN cld 1:1	IN cld 1:1	S conc	Pr IN	Pr IN	
Dravite	IN	IN	IN	IN			
Edentic-hornblende	IN	IN	IN	IN			
Edingtonite	IN	M to gel	Pr M	Pr M	Pr M	Pr IN - VS	Wm acetic acid for calcite, vit C for MnO, oxalic acid for Fe
Elpidite	IN	IN	IN	IN			
Enstatite	IN	IN	IN	IN			
Epididymite (UK 14)	IN	IN	IN	IN			
Epidote	IN	S dec ht conc	IN	IN			
Epistolite (UK 46)	IN	Pr IN	Pr IN	Pr M			
Erdite	?	?	?	?			
Erythrite	M	M	M	M			
Eudialyte	IN	M to gel	IN	IN			
Eudidymite	S	S	S	S			
Ewaldite (UK 37)	IN	R -fizz	Pr R	Pr R			

Species	Rx H2O	Rx HCl	Rx HNO3	Rx H2SO4	Rx Citric Acid	Rx Oxalic aci	Rx Remarks
Fluorapatite	IN	M var	M	M var			
Fluorapophyllite (UK 11)	IN	R to gel	M	M			
Fluorite	IN	VS	VS	M wm/pwd			
Franconite (UK 43)	IN	In	Pr IN	Pr IN	Pr IN	Pr IN	
Gaidonnayite (UK 23)	IN	M to gel	M to gel	M to gel			
Galena	IN	R*	R*	M	SS cold conc		* dull bright faces r - SS cld conc citric acid
Ganophyllite	IN	M to gel	M	M			
Garronite	IN	M to gel	M to gel	M to gel	Pr M	Pr M	Wm acetic acid for calcite, vit C for MnO, oxalic acid for Fe
Gaultite (UK 84)	?	?	?	?	?	?	
Genthelvite	IN	M to gel	M to gel	M to gel	Pr M	Pr M	
Geothite	IN	S cld conc	IN	IN	M	M	S ammonium citrate
Gersdorffite	IN	IN	M wm	IN	IN	IN	
Gibbsite	IN	IN cld 1:1	IN cld 1:1	S conc	Pr IN	Pr IN	
Gismondine	IN	R to gel	M to gel	M to gel	Pr M	Pr M	Wm acetic acid for calcite, vit C for MnO, oxalic acid for Fe
Gmelinite	IN	M to gel	M to gel	M to gel	Pr M	Pr M	Avoid ammonia and detergents
Gobbinsite	IN	M to gel	M to gel	M to gel	Pr M	Pr M	Wm acetic acid for calcite, vit C for MnO, oxalic acid for Fe
Gotzenite	IN	M to gel	M to gel	M to gel	Pr M	Pr M	
Graphite 2-H	IN	IN	IN	IN	IN	IN	
Greigite	IIN	VS	IN	IN	IN	IN	
Griceite (UK 54)	IN	IN @ 30%	Pr IN	Pr IN	Pr IN	Pr IN	
Grossular	IN	IN	IN	IN	IN	IN	
Gypsum	IN	M ht dil	IN	M dec	IN	IN	S in glycerine
Halite	R	R	R	R	R	R	Clean sat NaCl sol or ETOH, SS ETOH
Halotrichite	R	R	R	R	R	R	
Harmotome	IN	S - M dec	S	S	IN	IN	Will tolerate dil HCl wash to rem calcite
Heenbergite	IN	VS	IN	IN	IN	IN	
Helvite	M to gel	M to gel	M to gel	M to gel	?	?	
Hematite	IN	M	M	M	IN cold conc	M	
Hemimorphite	IN	R to gel	R to gel	R to gel	M	M	
Herschelite	IN	R	R	R	IN wm	IN wm	
Hessite	IN	Pr IN	M	Pr IN	Pr IN	Pr IN	
Hilairite (UK 20)	IN	S 1:1	S 1:1	IN 1:1	IN	IN	
Hisingerite	IN	M	M	M	Pr M	Pr M	
Hochelagite (UK 50)	IN	Pr IN	Pr IN	Pr IN	Pr IN	Pr IN	
Hornblende	IN	IN	IN	IN			
Hydroandradite	IN	Pr M	Pr M	Pr M	Pr IN	Pr IN	
Hydrocerussite	IN	R	R	R	Pr M	Pr M	
Hydrogrossular	IN	M to gel	M to gel	M to gel	IN	IN	
Hydroxylapophyllite	IN	R to gel	M	M	?	?	
Hydrozincite	IN	R - fizz	R - fizz	R - fizz	R	R	Avoid strong detergents. Use distilled H2O
Hypersthene	IN	VS wm conc	Pr IN	Pr IN	IN	IN	
Ilmenite	IN	VS wm conc	Pr IN	Pr IN	IN	IN	
Ilmenorutile	IN	IN	IN	IN	IN	IN	