

CDH - Making and Using

A TECHNICAL DISCUSSION OF CDH

PM CLO2 at g2cForum.org to contribute to this discussion

1. Introduction

- A. A new way to make MMS1 (Master Mineral Solution) or CD (Chlorine Dioxide, CLO2), is called CDH which is an acronym for Chlorine Dioxide Holding (Solution).
- B. This new MMS1/CD has very little smell or bad taste at low doses and is easier to take.

2. How to make CDH - 1 Bottle Method

CDH One Bottle basic recipe: 22+1+1=24

A. Three ingredients are needed to make CDH: (all at room temperature)

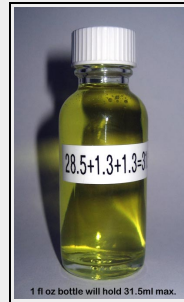
1. DW (Distilled Water, RO¹ or purified water)
2. SC (22.4% Sodium Chlorite solution from 28% salts)
3. 4% HCL (4% hydrochloric acid) or 35% citric acid

B. A simple recipe to make One Bottle CDH is:

1. 22 parts water + 1 part SC + 1 part acid (22+1+1=24) (HCL will taste much better than CA)
2. The basic recipe can be scaled up to fit any bottle.
3. If a Schveppes glass 300ml bottle with plastic lid is used as shown here, the amounts of ingredients could be:

220ml water + 10ml SC + 10ml acid added in that order.

4. Another example is 28.5ml DW + 1.3ml SC + 1.3ml acid to fit in a 30ml or 1 fluid ounce (US) bottle also shown above.
5. After adding the three room temperature ingredients, quickly put the cap on so the CLO2 gas will not escape. The cap must be leak-proof. Shake bottle to mix well.
6. Put the bottle of solution in a dark, room temperature place for 12 or more hours. If room temperature is below about 70°F (21°C) then increase the time up to 24hr.
7. Tip: Reducing the air space above the solution in the bottle will make stronger CDH. Just remember to keep the recipe ingredient ratio the same 22+1+1.
8. If refrigeration is available after the 12+ hour room temperature activation period, put the unopened bottle in a fridge to cool it down. When CDH is below about 51°F (10°C) there will be less CLO2 gas escaping when the bottle is opened. After taking out a dose of CDH, quickly recap the bottle and put it back in the fridge. Also, keep CDH away from sunlight. Even diffused sunlight will cause CLO2 gas to escape.



3. **How to make CDH - 2 Bottle Method**

CDH Two Bottle basic recipe: $2+1+1=4 + 20=24$

A. Three ingredients are needed to make CDH: (all at room temperature)

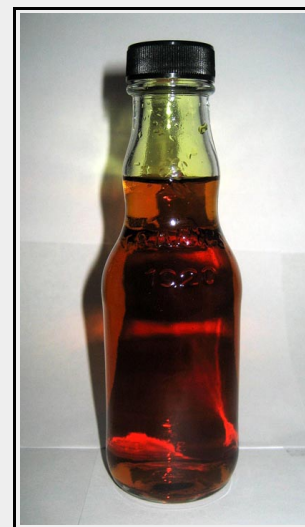
1. DW (Distilled Water, RO (Reverse Osmosis) or purified water)
2. SC (22.4% Sodium Chlorite solution from 28% salts)
3. 4% HCL (4% hydrochloric acid) or 35% citric acid

B. A simple recipe to make Two Bottle CDH is:

1. Two parts DW + 1 part SC + 1 part acid added in that order. ($2+1+1=4$)
2. This solution will later be diluted with more DW using another simple formula:
3. Add five times as much DW as the total parts of the first solution.
4. The first solution totals 4 parts, so 5 times those 4 parts is 20 parts added DW.
5. Ex: 20ml DW + 10ml SC + 10ml acid + 200ml DW added later = 240ml CDH.

C. Making CDH - An example

1. Choose a bottle you want to use. It can be almost any bottle that will seal well.
2. Glass may be the best choice, but plastic can also be used.
3. A non-metallic lid must be used and it must make a tight seal to the bottle.
4. Most of the space in the bottle should be liquid with little air space at the top.
5. A 150ml small Franks Hot Sauce bottle with 10ml for air, leaves 140ml for CDH.
6. 70ml DW + 35ml SC + 35ml acid = 140ml. ($2+1+1$ scales up $35x$ to $70+35+35$)
7. Add 70ml DW to the 150ml bottle. Add 35ml SC to the 140ml DW. And last, add 35ml acid & cap. Be sure to add the acid last or you may have a violent solution reaction. Shake to mix well. Keep the bottle out of sunlight.
8. A reaction should begin almost immediately with the solution turning a dark orange color. About 10 minutes later it should be a dark red color. When the color no longer gets darker, put the bottle in a fridge. Note that the activation is done at room temperature. Ingredients must also be at room temp.
9. If you made 140ml of CDH ($70+35+35$) then put 700ml of distilled water in another bottle and into the fridge to cool down along with the 140ml of CDH. $140ml \times 5 = 700ml$. Use a 1 liter bottle, glass preferred with a tight fitting plastic cap.
10. About two hours after the two bottles have been in the fridge, take them out and combine both cold solutions into one bottle. That combined solution will total 840ml of diluted CDH. The 840ml of CDH can be stored in smaller glass bottles such as two 500ml glass bottles with tight fitting plastic caps or synthetic corks. Real cork will be destroyed by the ClO_2 gas. Best to keep CDH in the fridge & only take it out to remove CDH for dosing.



4. How to use CDH - 1 or 2 Bottle Methods

- A. The 840 ml of diluted CDH contains about 3000mg (3g) of ClO₂ (Chlorine Dioxide).
- B. Dosing is a personally determined amount, but a starting dose can be recommended.
- C. If a person is very sick and/or very toxic, starting with low amounts and increasing slowly is desirable. You could start with 1ml and increase until a Herxheimer occurs.
- D. One milliliter (1ml) of the stock CDH solution (840ml in the example above) contains about 3.6mg of ClO₂. Take 1ml or more of CDH in a glass of water for each hourly dose.
- E. If that amount of ClO₂ causes a Herxheimer reaction, then use less than 1ml of the CDH diluted solution for hourly doses. Increase the dose slowly from a non-Herxheimer reaction dose until the person Herxs again, then reduce to non-Herx dose. Continue increasing until the person can go no higher.
- F. Since ClO₂ only stays in the body about 1.5 hours, dosing consecutive hours will be most effective. The more hours per day the better. Increase the hourly dose until a Herxheimer reaction occurs, then reduce slightly. The more hours per day and the higher the dose, the quicker the ailment(s) may be remedied. Using an 8 fluid ounce glass baby bottle & dosing 1 fluid ounce per hour is an easy way to dose daily. Add 8ml CDH & fill bottle to the 8 fluid ounce mark with distilled water for 3.6mg doses per hour per fl oz. You would be dosing 1ml CDH hourly when 8ml is added to the baby bottle. Increase the milliliters of CDH added to the baby bottle as needed.
- G. SweetLeaf brand Stevia drops added at 1 drop per ml of CDH will improve the taste.
- H. The question of when to eat, when to take MMS2, supplements, herbs, etc., perhaps can be answered by referring to the following schedule. Modify to suit your needs.



Time	MMS1/CDS/CDH	MMS2	Eat
0800	x		
0830			x
0900	x		
0930		x	
1000	x		
1030			x
1100	x		
1130		x	
1200	x		
1230			x
1300	x		
1330		x	
1400	x		
1430			x
1500	x		
1530		x	
1600	x		
1630			x
1700	x		
1730		x	
1800			
1900			x

Eat & take antioxidants after 1900

5. **How to make CDH - Capsule Method #1**

CDH Capsule recipe #1: 1+1=2

See page 8 for How to make CDH - Capsule Method #2

A. Two ingredients are needed to make CDH capsules:

1. SC (22.4% Sodium Chlorite solution from 28% salts)
2. 4% HCL (4% hydrochloric acid) or 35% citric acid

B. A simple formula to make CDH is:

1. Combine equal parts SC and acid

C. Making CDH Capsules - An example NOTE: DISCARD THIS RECIPE AFTER ONE DAY.

1. In a 30ml (1 fl oz US) glass or plastic bottle put 15ml of SC
2. Add 15ml of acid and immediately cap the bottle. (leak-proof non-metallic cap)
3. Be sure to add the acid to the SC, not the reverse order.
4. When the solution color no longer gets any darker, put the bottle in a fridge.
5. Also keep an eye dropper in the fridge so it stays cold.
6. An HDPE plastic bottle with a dropper top could be used so no eye dropper needed.

6. **How to use CDH - Capsule Method #1**

A. Using your favorite size capsule, dispense drops into the capsule and assemble.

B. The 30ml CDH capsule solution contains about 1200mg CLO₂. (Test #71)

C. 30ml of solution contains about 720 drops. (24 drops of solution = 1ml)

D. Therefore each drop of the 30ml of CDH contains about 1.7mg CLO₂.

E. Can also be used topically by applying with a Q-tip.

7. **Example calculation** for the amount of CLO₂ in 31ml of CDH made in the 1 fl oz bottle.

(See section 2.B.4 above)

A. *"The maximal theoretical yield is 160 mg/ml SC solution (22.4% w/w). or 6.7 mg per 1 drop SC (24 drops /ml). These values may vary slightly with SC concentration."* (TH)

- 28.5ml DW + 1.3ml SC + 1.3ml 4% HCL = 31.1ml solution
- 4500ppm CLO₂ measured in 31ml of CDH and 1.3ml of SC was used.
- Using the formula:
- Volume (liters) × Concentration (ppm) = Dose (mg)
- 0.031L × 4500ppm = 139.5mg CLO₂
- 139.5mg / 31ml = 4.5mg CLO₂ per 1ml of CDH, 0.19mg/drop CDH
- 139.5mg / 1.3ml SC = 107mg CLO₂/ml, 4.5mg/drop of SC used.
- Not bad compared to the maximum theoretical yield of 6.7mg per drop of SC.
- 5.0mg/drop SC has been achieved using the CDH Two Bottle method. (Test #59)
- Each drop of 746 drops CDH contains 0.19mg of CLO₂. (24 drops = 1ml solution)

Sodium Chlorite chemical formula = NaClO₂

No maximum daily dose has been determined. ¹ RO = Reverse Osmosis water

8. Orally Dosing MMS1, CDS & CDH

MHM = Mouth Holding Method

A. Reading how others ingest CLO₂ and the reasons why there are different methods used, I have changed my way of dosing CLO₂.

B. G2C Forum member [gefeu2](#) (Gerhard) suggests administering CLO₂ perlingually by absorption through the oral mucosa and tongue & cheek interior surfaces. He also recommends administering CLO₂ sublingually under the tongue and sublingual glands. Both methods occur when one holds a mouthful of either of the three varieties of MMS a minute or so before swallowing. Could be called the Mouth Holding Method.

C. After holding the CLO₂ solution in one's mouth for a minute or two, swallowing will then allow the solution to travel down to the stomach where further CLO₂ absorption may take place. I have noticed less throat irritation when using this method as some of the CLO₂ is used up in one's mouth before traveling downward through the throat.

D. However, if there is food in one's stomach, the CLO₂ probably won't be so effective as when the stomach is empty.

E. So, it seems to me that the most effective way to orally ingest CLO₂ is by using both methods: perlingually-sublingual in the mouth (MHM) & with an empty stomach.

F. Eating becomes a concern while ingesting CLO₂ if one wants the highest effect. Ingesting the first dose of the day is easy because one's stomach should be empty after arising from sleep. So, just lightly snacking on the half hour for the following doses if you are hungry and eating a large evening meal, may be one answer to that eating question.

G. I notice my digestion seems better after taking my morning 20mg CLO₂ CDH dose, so maybe the unused HCL is helping my stomach breakdown food?

9. Making CDH using kitchen measuring utensils

A. Using only a kitchen measuring cup (US) and a teaspoon, I made CDH using the One Bottle Method. The only other item needed was a Schweppes 10 fl oz (300ml) glass bottle and its tight sealing cap.

B. One cup of water was put in the bottle followed by two teaspoons each of SC and 4% HCL. After 12 hours at 72°F the 260ml CDH measured 3300ppm, 858mg CLO₂, 86mg/ml (3.6mg/drop) of SC used. This CDH contains 3.3mg/ml (0.14mg/drop) CLO₂. The few seconds the chemicals were in contact with the stainless steel teaspoon would not be enough time to oxidize the metal.



10. **SC vs MMS**

A. MMS, CDS and CDH are made from the same two chemicals:

1. SC (22.4% Sodium Chlorite solution from 28% salts), consisting of 80% sodium chlorite and distilled water, and
2. An acid, ideally 4% HCL for MMS and CDH and 10% HCL for CDS.

B. MMS, CDS and CDH are the acronyms for these three oxidizers:

1. MMS = Master Mineral Solution
2. CDS = Chlorine Dioxide Solution
3. CDH = Chlorine Dioxide Holding (Solution)

C. However, from the beginning the acronym MMS has also been used to describe SC, (22.4% Sodium Chlorite solution from 28% salts). This causes great confusion to this day.

D. To differentiate between the two MMSs, sometimes you will read or hear the terms unactivated MMS and activated MMS. Also found are MMSU and MMSA. Unfortunately, you will read & hear just MMS & that can refer to either of the two definitions for MMS.

E. Therefore, I propose that the acronym MMS be used only to describe the finished product, Master Mineral Solution, and SC to denote one of two ingredients in MMS, 22.4% Sodium Chlorite solution from 28% salts; the second ingredient being an acid activator.

F. Some have used the acronym CD (Chlorine Dioxide) to describe MMS, but that is incomplete as we know there is more than chlorine dioxide (CLO₂) in MMS. CD would be an accurate description for CDS, however, as CDS only contains chlorine dioxide gas in a distilled water solution.

g. **UPDATE:** G2C definitions: **MMS**=(22.4% Sodium Chlorite solution from 28% salts) **MMS1**=activated MMS.

11. **Killing the Malaria Parasite with MMS, CDS & CDH**

According to Tomas Horky, a chemist who is a Genesis 2 Church Forum member, 6.7mg of CLO₂ is the maximum possible amount of CLO₂ that can be extracted from 1 drop of 22.4% SC solution (unactivated MMS). So, that means when 18 drop MMS doses were used to cure malaria in the past, the maximum possible amount of CLO₂ that could be produced externally plus internally from those 18 drops of SC would have been 121mg of CLO₂.

If CDS was used, 40ml of 3000ppm CDS would be needed. (@3mg/ml = 121/3=40)

If CDH was used, 18ml of CDH would be needed. (1ml CDH = 1 drop MMS)

(1 or 2 bottle method)

One way to help a malaria patient ingest these large amounts of CDS or CDH would be to add the doses to a 500ml bottle of bottled water after removing enough water to allow the CDS/CDH to fit. Then have them drink the whole bottle over a short period of time.

CDH - Going Beyond CD & CDS

12. **The CDH Formulation Table and Different Acid Concentrations**

What if you have 10% Hydrochloric acid or 50% Citric Acid (very common) Or, you wish to use a different size of bottle? Not a problem. These acids can still be used. However, the formula changes accordingly.

The table below is a great tool for determining the formula for a given bottle size. To use the table, start by circling the size of the bottle you wish to fill in the left most column. Next look at the acid you have and its labeled concentration. Match that with one of the 4 options across the top. Below the matching acid/concentration you will find the 3 formulation numbers for water, sodium chlorite (labeled "SC"), and whatever acid you are using. Just go down the appropriate 3 columns to where the bottle size line intersects and you will have the numbers you need. Substitute these numbers in the following preparation instructions if your situation calls for it.

CDH Formulation Table - Units are Milliliters (ml)

(Applies to the One Bottle Method of making CDH ONLY!)

SC=Sodium Chlorite / HCl=Hydrochloric Acid / CA=Citric Acid

(Thanks to Kerri Rivera for allowing this page from her book to be reproduced here)

Healing The Symptoms Known As Autism by Kerri Rivera (Page 161) (Second edition) <http://mmsautism.org/bookstore>

Water Bottle	Hydrochloric Acid 4%			Hydrochloric Acid 10%			Citric Acid 35%			Citric Acid 50%		
	Water	SC	HCl	Water	SC	HCl	Water	SC	CA	Water	SC	CA
10	9.2	0.4	0.4	9.4	0.4	0.2	9.2	0.4	0.4	9.3	0.4	0.3
20	18.3	0.8	0.8	18.8	0.8	0.3	18.3	0.8	0.8	18.6	0.8	0.6
30	27.5	1.3	1.3	28.3	1.3	0.5	27.5	1.3	1.3	27.9	1.3	0.9
40	36.7	1.7	1.7	37.7	1.7	0.7	36.7	1.7	1.7	37.2	1.7	1.2
50	45.8	2.1	2.1	47.1	2.1	0.8	45.8	2.1	2.1	46.5	2.1	1.5
60	55.0	2.5	2.5	56.5	2.5	1.0	55.0	2.5	2.5	55.8	2.5	1.7
70	64.2	2.9	2.9	65.9	2.9	1.2	64.2	2.9	2.9	65.0	2.9	2.0
80	73.3	3.3	3.3	75.3	3.3	1.3	73.3	3.3	3.3	74.3	3.3	2.3
90	82.5	3.8	3.8	84.8	3.8	1.5	82.5	3.8	3.8	83.6	3.8	2.6
100	91.7	4.2	4.2	94.2	4.2	1.7	91.7	4.2	4.2	92.9	4.2	2.9
150	137.5	6.3	6.3	141.3	6.3	2.5	137.5	6.3	6.3	139.4	6.3	4.4
200	183.3	8.3	8.3	188.3	8.3	3.3	183.3	8.3	8.3	185.8	8.3	5.8
250	229.2	10.4	10.4	235.4	10.4	4.2	229.2	10.4	10.4	232.3	10.4	7.3
300	275.0	12.5	12.5	282.5	12.5	5.0	275.0	12.5	12.5	278.8	12.5	8.7
350	320.8	14.6	14.6	329.6	14.6	5.8	320.8	14.6	14.6	325.2	14.6	10.2
400	366.7	16.7	16.7	376.7	16.7	6.7	366.7	16.7	16.7	371.7	16.7	11.7
450	412.5	18.8	18.8	423.8	18.8	7.5	412.5	18.8	18.8	418.1	18.8	13.1
500	458.3	20.8	20.8	470.8	20.8	8.3	458.3	20.8	20.8	464.6	20.8	14.6
550	504.2	22.9	22.9	517.9	22.9	9.2	504.2	22.9	22.9	511.0	22.9	16.0
600	550.0	25.0	25.0	565.0	25.0	10.0	550.0	25.0	25.0	557.5	25.0	17.5
650	595.8	27.1	27.1	612.1	27.1	10.8	595.8	27.1	27.1	604.0	27.1	19.0
700	641.7	29.2	29.2	659.2	29.2	11.7	641.7	29.2	29.2	650.4	29.2	20.4
720	660.0	30.0	30.0	678.0	30.0	12.0	660.0	30.0	30.0	669.0	30.0	21.0
750	687.5	31.3	31.3	706.3	31.3	12.5	687.5	31.3	31.3	696.9	31.3	21.9
800	733.3	33.3	33.3	753.3	33.3	13.3	733.3	33.3	33.3	743.3	33.3	23.3
850	779.2	35.4	35.4	800.4	35.4	14.2	779.2	35.4	35.4	789.8	35.4	24.8
900	825.0	37.5	37.5	847.5	37.5	15.0	825.0	37.5	37.5	836.3	37.5	26.2
950	870.8	39.6	39.6	894.6	39.6	15.8	870.8	39.6	39.6	882.7	39.6	27.7
1000	916.7	41.7	41.7	941.7	41.7	16.7	916.7	41.7	41.7	929.2	41.7	29.2

13. How to make CDH - Capsule Method #2

CDH Capsule recipe #2: 4+1+1=6

This method is a modified CDH Two Bottle Method for use in capsules. See test #73.

CDH was made in a 1 fl oz (32ml) glass bottle with a Polyseal/Polycone cap so there was no gas leakage.

20ml DW + 5ml SC + 5ml 4% HCL = 30ml total + ~2ml DW to completely fill the bottle.

Activation time was 15 minutes, then 1 hour in the fridge before opening the bottle.

As you can see, I did not add 5 times 32ml additional water after the activation period as CDH Two Bottle Method calls for. I left out the additional 160ml of water. So, we have a much stronger CDH solution in just 32ml. Compared to mixing SC and 4HCL only, there was no heating felt on the bottle and just a hint of gas releasing when the cold bottle was first opened. The color started out a light orange and progressed to medium orange. At 9 days, slightly less orange color noted compared to a new batch made on day 9.

This CDH produced 0.57mg CLO₂/drop (13.7mg/ml) of the 32ml CDH. If you can fit 15 "drops" in a capsule, that would give you 8.6mg of CLO₂ per capsule. A second measurement made on day 8 showed about the same as the original. Tested 6% higher. This recipe seems stable for at least a week which should be enough time to use up the contents of the bottle.

My activation time tests some time ago for a MMS 3 drop 4HCL 60 second open container activated dose, showed about 2.6mg CLO₂. Who knows how much more CLO₂ might be generated after a MMS 3 drop 60 second activated dose is ingested. If twice, then a 3 drop dose might produce 5.2mg CLO₂. Btw, veggie-caps survive almost twice as long as gel-caps.

If that is true, then about 0.38ml (9 drops) of this CDH might be equal to a 3 drop MMS 4HCL 60 second activated dose. 0.38ml can easily be measured using a 1ml syringe.

Using a 1 teaspoon measuring spoon you can make capsule CDH this way:

Add 4 tsp DW to a 1 fl oz (30ml) glass bottle
Add 1 tsp SC
Add 1 tsp 4HCL
Fill to top with more DW

That would be 20ml + 5ml + 5ml = 30ml + additional ~2ml of DW to fill this bottle full.

Fill the bottle as full as you can to keep the air space to a minimum. Past testing has shown a 25% increase in CLO₂ when the bottle is full compared to half full. I think we are forcing the CLO₂ into solution rather than let it outgas and escape when the bottle is opened. THIS RECIPE CAN BE USED WITHOUT CAPSULES, TOO.

Activate about 10-15 minutes. Put the bottle in a fridge for an hour or so. DMSO can be added: 1 drop DMSO per 6 drops of this CDH recipe.



14. Activating CDH in open & closed topped containers

CDH Capsule recipe #2: 4+1+1=6

Three tests were performed to determine if there is a difference in CLO₂ concentration when activating CDH Two Bottle Method in open topped and closed containers. Activation time 15 minutes at 72F room temperature with 3x 5 second agitations @ 0,5,10 minutes. All bottles were capped at the end of the 15 minute activation period and put in a fridge to cool down before measurements were taken.

22ml DW + 5ml SC + 5ml 4HCL

1. 1 fl oz capped small mouth bottle = 13,300 ppm
2. 1 fl oz uncapped small mouth bottle = 13,700 ppm
3. 1 fl oz open topped shot glass = 12,100 ppm



#1 & 2 were essentially the same, which was a surprise. #3 was only 12% less ppm with a mouth area of 16x larger than the bottles.

15. Daily CDH Doses by Body Weight

The following CDH daily dosing recommendations were developed for Kerri Rivera to be used by autistic children following her autism recovery protocol. Anyone can use the chart.

Estimated Full Oral CDH Doses by Weight per Day

Use these numbers as a guide only. You may need to go up by as much as 25% or more over the indicated milliliters.

Read chart as: **POUNDS / KILOGRAMS → MILLILITERS OF CDH**

25/11→12	62/28→24	99/45→36	136/62→48	173/78→60	210/95→72
26/12→12	63/29→24	100/45→36	137/62→48	174/79→60	211/96→72
27/12→12	64/29→24	101/46→36	138/63→48	175/79→60	212/96→72
28/13→12	65/29→24	102/46→36	139/63→48	176/80→60	213/97→72
29/13→12	66/30→24	103/47→36	140/64→48	177/80→60	214/97→72
30/14→12	67/30→24	104/47→36	141/64→48	178/81→60	215/98→72
31/14→14	68/31→26	105/48→38	142/64→50	179/81→62	216/98→72
32/15→14	69/31→26	106/48→38	143/65→50	180/82→62	217/98→74
33/15→14	70/32→26	107/49→38	144/65→50	181/82→62	218/99→74
34/15→14	71/32→26	108/49→38	145/66→50	182/83→62	219/99→74
35/16→14	72/33→26	109/49→38	146/66→50	183/83→62	220/100→74
36/16→14	73/33→26	110/50→38	147/67→50	184/83→62	221/100→74
37/17→16	74/34→28	111/50→40	148/67→52	185/84→64	222/101→74
38/17→16	75/34→28	112/51→40	149/68→52	186/84→64	223/101→74
39/18→16	76/34→28	113/51→40	150/68→52	187/85→64	224/102→76
40/18→16	77/35→28	114/52→40	151/68→52	188/85→64	225/102→76
41/19→16	78/35→28	115/52→40	152/69→52	189/86→64	226/103→76
42/19→16	79/36→28	116/53→40	153/69→52	190/86→64	227/103→76
43/20→18	80/36→30	117/53→42	154/70→54	191/87→66	228/103→76
44/20→18	81/37→30	118/54→42	155/70→54	192/87→66	229/104→76
45/20→18	82/37→30	119/54→42	156/71→54	193/88→66	230/104→76
46/21→18	83/38→30	120/54→42	157/71→54	194/88→66	231/105→78
47/21→18	84/38→30	121/55→42	158/72→54	195/88→66	232/105→78
48/22→18	85/39→30	122/55→42	159/72→54	196/89→66	233/106→78
49/22→20	86/39→32	123/56→44	160/73→56	197/89→68	234/106→78
50/23→20	87/39→32	124/56→44	161/73→56	198/90→68	235/107→78
51/23→20	88/40→32	125/57→44	162/73→56	199/90→68	236/107→78
52/24→20	89/40→32	126/57→44	163/74→56	200/91→68	237/108→78
53/24→20	90/41→32	127/58→44	164/74→56	201/91→68	238/108→78
54/24→20	91/41→32	128/58→44	165/75→56	202/92→68	239/108→80
55/25→22	92/42→34	129/59→46	166/75→58	203/92→70	240/109→80
56/25→22	93/42→34	130/59→46	167/76→58	204/93→70	241/109→80
57/26→22	94/43→34	131/59→46	168/76→58	205/93→70	242/110→80
58/26→22	95/43→34	132/60→46	169/77→58	206/93→70	243/110→80
59/27→22	96/44→34	133/60→46	170/77→58	207/94→70	244/111→80
60/27→22	97/44→34	134/61→46	171/78→58	208/94→70	245/111→80
61/28→22	98/44→34	135/61→46	172/78→58	209/95→70	246/112→80