

S.V. 107 C.V. 100 D.V. 330,322,207,317

DATE PRINTED: 4/07/82

CG 36 CODE RT-695-D PKG ---

PROCESSES APPROVED BY  
( ) RT-695-D ( ) JJG 3/18/81  
EWK 12/7/81

JUL 23 1982

G2J60

( DATE ) ( LOT NUMBER )

COMTYP JOB NAME = 36RT695DMO  
TYPED BY: KLW

EST. WT. 2608\* LBS.

STANDARD HRS. TIME 11 P.M.

PREPARATION NOTES:

## NON-BLEEDING

| EQUIP<br>MENT | NAME: "BON" RED DARK                        | USE<br>LBS | N-CODE | ACCT<br>LBS |
|---------------|---------------------------------------------|------------|--------|-------------|
| PREP          | IF NECESSARY, CLEAN, DRESS SPARKLER & PRE-  |            |        |             |
| 1             | COAT WITH 15# DICALITE FILTER AID           |            | 777-A  |             |
| 2             | OBTAIN FOR S 6 2-CHLORO-4-AMINO TOLUENE-5   |            | 740-C  |             |
| 3             | SULFONIC ACID                               |            |        |             |
| 3             | OBTAIN FOR S 42 3-HYDROXY-2-NAPHTHOIC ACID  |            | 82-C   |             |
| 317           | RUN 23" (732G) WATER INTO V-317             |            |        |             |
| 2             | WEIGH & POUR IN SODIUM HYDROXIDE            |            |        |             |
|               | M. 1.2, 49.55%                              | 43.4       | 7-D    | 215         |
|               | TURN ON AGITATOR & STEAM & DUMP IN FROM S 2 |            |        |             |
|               | 2-CHLORO-4-AMINO-TOLUENE-5-SULFONIC ACID    |            | 740-C  |             |
|               | LOT 100% 98.62                              | 325        |        | 1104        |
|               | 282 321                                     | 325        |        |             |
|               | 276 320                                     | 325        |        |             |
|               | 286 320                                     | 325        |        |             |
|               | WEIGH 282 286 286 143 9934                  | 144        |        |             |
| 8             | DUMP IN ACTIVATED CARBON                    | 50         | 113-B  | 50          |
| 9             | DUMP IN DICALITE, FILTER AID                | 10         | 777-A  | 10          |
| 10            | HEAT TO 214-216 DEG. F WATCH FOAM           |            |        |             |
| 11            | RECORD: BY (+), IF NECESSARY ADJUST         |            |        |             |
| 12            | TO + BY SODIUM HYDROXIDE ASSUME 50%         |            | 7-D    |             |
| 13            | STIR 30 MIN. AT 212-214 DEG. F, THEN SHUT   |            |        |             |
|               | OFF STEAM WATCH FOAM                        |            |        |             |
|               | NOTE RECORD: SPARKLER PRESSURE PSI          |            |        |             |
|               | IF NOT ZERO, NOTIFY SUPERVISOR              |            |        |             |
| 15            | CIRCULATE 15 MIN OR LONGER THRU SPARKLER    |            |        |             |
|               | UNTIL SOLUTION IS CLEAR                     |            |        |             |
|               | MAINTAIN AT 190-195 DEG. F FOR S 15         |            |        |             |
|               | RECORD: HT 195 DEG. F & RECORDER 195 DEG. F |            |        |             |
|               | RECORD: START 145 TOTAL MIN 15 CLARITY OK   |            |        |             |

JUL 30 1982

100 14 RUN #1 (99G) WATER INTO V-100  
3 15 WHEN S-13 COMPLETE, PUMP V 317 THRU  
SPARKLER. MAINTAIN V-317 AT 190-195 DEG. F  
RECORD: START 2 PM TOTAL MIN 15  
SAMPLE FROM HOSE. SHOW TO SUPV'R FOR OK

N32582

DUP050463669

MAKING INSTRUCTIONS: BATCH UNIT

| EQUIP<br>MENT      |    | PAGE 02 OF 04 CG 36 CODE RT-695-D (0)                                                                                                                                                                                                                     | USE<br>LBS  | N-CODE | ACCT<br>LBS   |
|--------------------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|---------------|
| 317<br>4           | 16 | WHEN S 13 COMPLETE, CLOSE V-317 OUTLET &<br>STOP PUMP                                                                                                                                                                                                     |             |        |               |
|                    | 17 | RUN IN 7" (216G) WATER & HEAT TO 190-195<br>DEG F                                                                                                                                                                                                         |             |        |               |
| 317<br>CONT'D<br>4 | 18 | CIRCULATE THRU SPARKLER UNTIL SOLUTION IS<br>CLEAR<br>MAINTAIN AT 190-195 DEG. F FOR S 19 &<br>RECORD: HT. <u>175</u> DEG. F & RECORDER<br>RECORD: START <u>220</u> TOTAL MIN. <u>5</u> CLARITY <u>OK</u>                                                 |             |        |               |
| 100<br>5           | 19 | WHEN S 18 IS COMPLETE, PUMP V-317 THRU<br>SPARKLER INTO V-100                                                                                                                                                                                             |             |        |               |
|                    | 20 | RUN IN 5" (90G) WATER & HEAT TO 190-195<br>DEG. F                                                                                                                                                                                                         |             |        |               |
|                    | 21 | CIRCULATE 15 MIN THRU SPARKLER, PUMP V-317<br>THRU SPARKLER INTO V-100                                                                                                                                                                                    |             |        |               |
|                    | 22 | WHEN MT, BLOW OUT SPARKLER INTO V-100                                                                                                                                                                                                                     |             |        |               |
|                    | 23 | HEAT TO 165-170 DEG. F (TAKE 1 QT. SAMPLE)<br>(WITH AGITATION ON)<br>TEST FOR CLARITY OF SOLUTION. SHOW 1 QT.<br>SAMPLE TO SHIFT SUPERVISOR FOR APPROVAL<br>(EXAMPLE OF ACCEPTABLE CLARIFICATION OF<br>N-740-C IS AVAILABLE IN OFFICE TO COMPARE<br>WITH) |             |        |               |
|                    | 24 | IF S 23 IS OK, CONTINUE WITH S 25. IF S 23<br>IS NOT ACCEPTABLE, RECLARIFY THRU SPARKLER                                                                                                                                                                  |             |        |               |
|                    | 25 | IF S 23 IS OK, REHEAT V-100 TO 165-170<br>DEG. F FOR S 26                                                                                                                                                                                                 |             |        |               |
| 100<br>6           | 26 | ADJ TO 16" (1590G)                                                                                                                                                                                                                                        |             |        |               |
|                    | 27 | HEAT V-100 TO 165-170 DEG. F                                                                                                                                                                                                                              |             |        |               |
|                    | 28 | RUN IN V-324 HYDROCHLORIC ACID THRU DIRECT<br>LINE AND RINSE IN M. <u>1</u> , <u>2989</u> %                                                                                                                                                               | <u>1482</u> | 28-D   | 443           |
|                    | 29 | STIR 15 MIN AT 165-170 DEG. F                                                                                                                                                                                                                             |             |        |               |
|                    | 30 | ADJ TO 50" (4970G) AT 34-38 DEG. F<br>RECORD: TEMP <u>72</u> DEG. F AND IF NECESSARY <u>70</u> X330                                                                                                                                                       |             | 57-A   | <u>33,100</u> |
|                    |    | ADJ TO 34-38 DEG. F &<br>RECORD: TEMP <u>72</u> DEG. F                                                                                                                                                                                                    |             | 57-A   |               |
| 107<br>7           | 31 | RUN 45" (4320G) WATER INTO V-107                                                                                                                                                                                                                          |             |        |               |
|                    | 32 | TURN ON AGITATOR AND STEAM AND DUMP IN<br>MANGANESE SULPHATE                                                                                                                                                                                              | 1400        | 336-B  | 1400          |
|                    | 33 | DUMP IN BARIUM SULPHATE                                                                                                                                                                                                                                   | 250         | 65-A   | 250           |
|                    | 34 | HEAT TO 150-160 DEG. F AND STIR                                                                                                                                                                                                                           |             |        |               |
|                    | 35 | RECORD: PH <u>5.8</u> (5.0-5.5)                                                                                                                                                                                                                           |             |        |               |
|                    | 36 | IF PH ABOVE 5.5, ADJ TO PH 5.5 OR LOWER<br>SULFURIC ACID ASSUME 78%                                                                                                                                                                                       |             | 27-D   | <u>1</u>      |
|                    | 37 | RECORD: PH <u>5.3</u>                                                                                                                                                                                                                                     |             |        |               |
|                    | 38 | NOTE: IF PH BELOW 5.0, DO NOT ADJ UPWARD                                                                                                                                                                                                                  |             |        |               |
|                    | 39 | HOLD FOR S 58                                                                                                                                                                                                                                             |             |        |               |

MAKING INSTRUCTIONS: BATCH UNIT

| EQUIP<br>MENT    |    | PAGE 03 OF 04 CG 36 CODE RT-695-D (0)                                                                                                                                                                                                                                         | USE<br>LBS               | N-CODE | ACCT<br>LBS |
|------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------|-------------|
| 322<br>8         | 40 | RUN IN 47" (1610G) WATER INTO V-322                                                                                                                                                                                                                                           |                          |        |             |
|                  | 41 | WEIGH AND POUR IN SODIUM HYDROXIDE<br>M. <u>10</u> , <u>4955%</u>                                                                                                                                                                                                             | <u>949</u>               | 7-D    | 470         |
|                  | 42 | DUMP IN FROM S 3 3-HYDROXY-2-NAPHTHOIC ACID<br>LOT<br><u>7671</u><br><u>7665</u>                                                                                                                                                                                              | <u>750</u><br><u>784</u> | 82-C   | 934         |
|                  | 43 | WEIGH 1-HYDROXY-2-NAPHTHOIC ACID ON POSTAL<br>BALANCE AND ADD LOT <u>10797</u>                                                                                                                                                                                                | 20                       | 180-C  | 20          |
|                  | 44 | HEAT TO 70-90 DEG. F                                                                                                                                                                                                                                                          |                          |        |             |
|                  | 45 | SIFT IN BLANCOL N IN ONE TO TWO MINUTES                                                                                                                                                                                                                                       | 27                       | 567-B  | 27          |
|                  | 46 | DUMP IN TETRASODIUM PYROPHOSPHATE & STIR 5<br>MIN OR LONGER TO DISSOLVE                                                                                                                                                                                                       | 8                        | 479-D  | 8           |
| 313/<br>302<br>9 | 47 | WEIGH SODIUM NITRITE & POUR INTO V-<br>FOR S 50 M. <u>9</u> , <u>3336%</u>                                                                                                                                                                                                    | <u>1094</u>              | 725-A  | 365         |
| 322<br>10        | 48 | ADJ V-322 TO 65" (2240G) AT 77-80 DEG. F<br>& RECORD: TEMP <u>80</u> DEG. F                                                                                                                                                                                                   |                          |        |             |
|                  | 49 | SLURRY TRISULPHOIC SOAP D WITH 30 GALS<br>WATER IN DRUM. POUR IN AND STIR 5 MIN.                                                                                                                                                                                              | 160                      | 39-A   | 160         |
| 100<br>11        | 50 | RUN IN N-725-A FROM S 47 AFAP INTO V-100                                                                                                                                                                                                                                      |                          |        |             |
|                  | 51 | STIR 30 MIN AT 36-38 DEG. F MAINTAINING<br>CR, +KI                                                                                                                                                                                                                            |                          | 57-A   |             |
|                  | 52 | RECORD: TIME START <u>8:10</u> , CR <u>+</u> KI <u>+</u><br>TEMP <u>38</u> DEG. F                                                                                                                                                                                             |                          |        |             |
|                  |    | NOTE:<br>(1) IF CR-, KI- ADD 20# "AS IS" INCREMENTS<br>HYDROCHLORIC ACID ASSUME 32%<br>RECORD: CR <u>+</u> , KI <u>+</u><br>(2) IF CR+, KI- ADD 20# "AS IS" INCREMENTS<br>SODIUM NITRITE ASSUME 33%<br>RECORD: CR <u>+</u> , KI <u>+</u><br>TEMP <u>38</u> DEG. F             |                          | 28-A   |             |
|                  | 53 | COUPLE V-322 THRU UNDERSURFACE DISTRIBUTOR<br>INTO V-100 IN 90-110 MIN (USE 9/16" DRIFICE)<br>RECORD: START <u>9:00</u> TOTAL MIN <u>90</u>                                                                                                                                   |                          | 725-A  |             |
|                  | 54 | WHEN S 53 COMPLETE STIR 15 MIN                                                                                                                                                                                                                                                |                          |        |             |
|                  | 55 | RECORD: DIAZO <u>-</u> (-), BASE <u>+</u> (+)<br>PH <u>6.8</u> (7.0-8.0) TEMP <u>62</u> DEG. F (60-65 F)                                                                                                                                                                      |                          |        |             |
|                  |    | NOTE:<br>(1) IF PH IS 5.0-7.0, WEIGH AND DUMP IN<br>30# "AS IS" N-7-D DILUTED TO 30 GAL<br>AFAP SODIUM HYDROXIDE ASSUME 50%<br>(2) (FOR PH ADJUSTMENTS USE ONLY DILUTED<br>N-28-D AND N-7-D)                                                                                  | <u>50</u>                | 7-D    | <u>25</u>   |
|                  | 56 | ADJ TO PH 9.0-9.5 (SEE ATTACHED PH ADJ AID)<br>HYDROCHLORIC ACID ASSUME 32%<br>(1) IF PH IS 6.5-7.0, WEIGH 40# AS IS<br>N-7-D POUR INTO 50 GAL WATER (1/2<br>FULL) IN PT & RUN INTO CV 100 IN 15<br>MIN & RINSE IN <u>8.0</u> STIR 5 MIN &<br>RECORD: PH <u>8.0</u> (9.0-9.5) |                          | 28-D   |             |

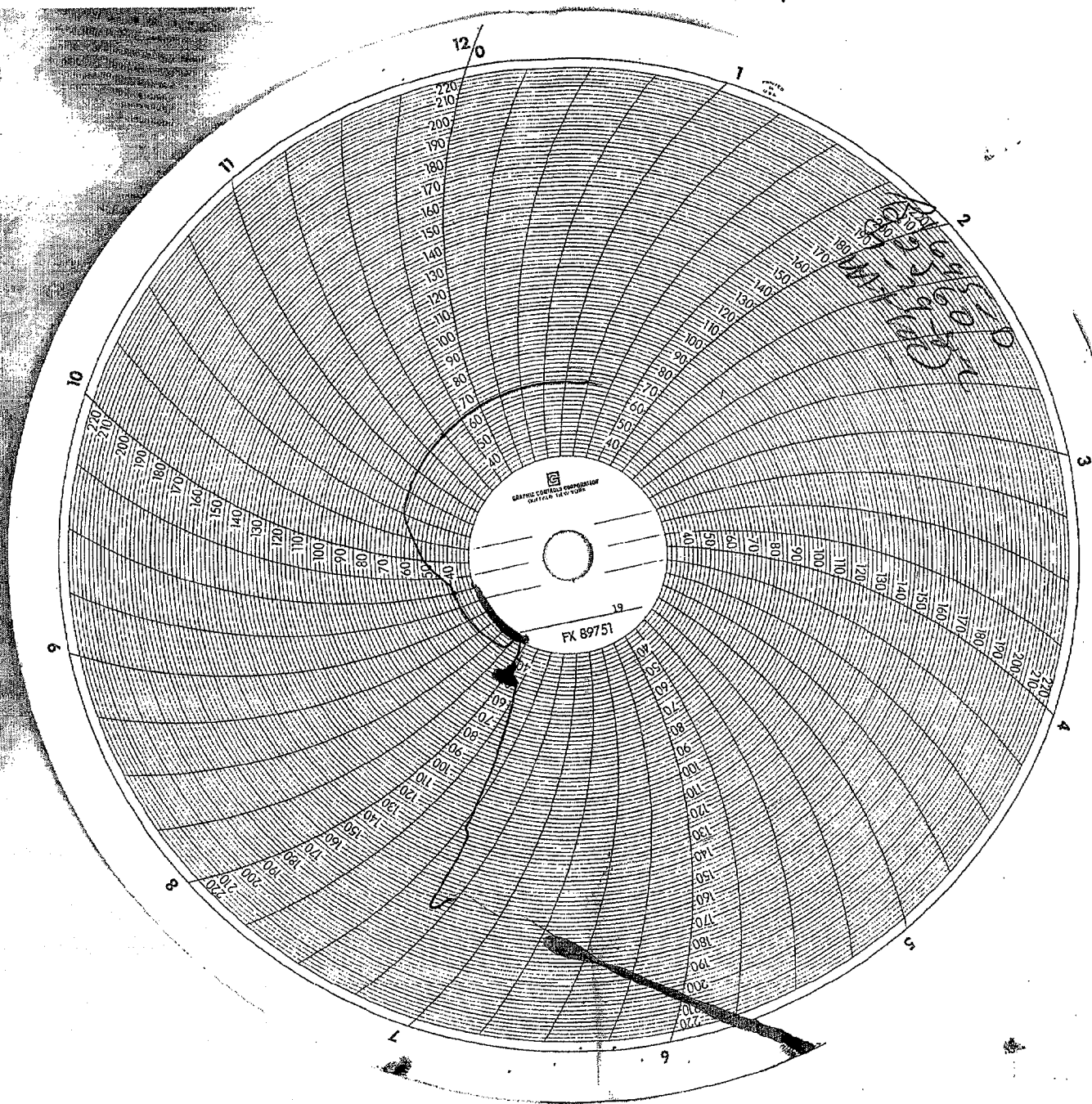
EQUIP | 4

USE | N-CODE | ACCT

| EQUIP<br>MENT     |  | PAGE 04 OF 04 CG 36 CODE RT-695-D (0)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | USE<br>LBS | N-CODE | ACCT<br>LBS |
|-------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------|-------------|
| 100<br>11<br>CONT |  | 2) IF PH IS 7.0-7.5, WEIGH 35# AS IS N-7-D<br>POUR INTO 50 GAL WATER (1/2 FULL) IN PT &<br>RUN INTO CV 100 IN 15 MIN. & RINSE IN PT.<br>STIR 5 MIN & RECORD: PH _____ (9.0-9.5)<br>3) IF PH IS 7.5-8.0, WEIGH 30# AS IS N-7-D<br>POUR INTO 50 GAL WATER (1/2 FULL) IN PT &<br>RUN INTO CV 100 IN 15 MIN. RINSE IN PT.<br>STIR 5 MIN & RECORD: PH _____ (9.0-9.5)<br>4) IF PH IS 8.0-8.5, WEIGH 10# AS IS N-7-D<br>POUR INTO 50 GAL WATER (1/2 FULL) IN PT &<br>RUN INTO CV 100 IN 15 MIN. & RINSE IN PT.<br>STIR 5 MIN & RECORD: PH _____ (9.0-9.5)<br>5) IF PH IS 8.5-8.9, WEIGH 5# AS IS N-7-D<br>POUR INTO 50 GAL WATER (1/2 FULL) IN PT &<br>RUN INTO CV 100 IN 15 MIN. & RINSE IN PT.<br>STIR 5 MIN & RECORD: PH <u>9.5</u> (9.0-9.5)<br>6) IF PH IS ABOVE 9.5, DO NOT ADJUST<br>57 RECORD: PH <u>9.5</u> SODIUM HYDROXIDE ASSUME 50%<br>NOTE: ADD N-28-D IN 5# "AS IS" INCREMENTS<br>TO APPROACH PH 9.0-9.5 THEN USE<br>LESS N-28-D HYDROCHLORIC ACID<br>(CONCENTRATED N-28-D & N-7-D AND TOO LOW<br>COUPLING TEMPERATURE CAUSES MASSTONE TO<br>GO TOO LIGHT)<br>58 SHUT OFF AGITATOR |            |        |             |

107 59 DURING S 53 HEAT V-107 TO 210-212 DEG. F  
12 & SHUT OFF STEAM  
NOTE: IF NECESSARY REHEAT V-107 TO 210-  
212 DEG. F PRIOR TO START OF STRIKE  
160 PUMP V-100 INTO V-107 IN 70-75 MIN.  
LET V-107 TEMP DROP TO 200-205 DEG. F  
DURING STRIKE THEN MAINTAIN AT 200-205 DEG. F  
FOR BALANCE OF STRIKE WITH AGITATOR SHUT  
OFF IN V-100  
RECORD: START 1200 TOTAL MIN 90  
64 WHEN STRIKE COMPLETE, HEAT TO 210-212 DEG. F  
62 STIR 15 MIN AT 210-212 DEG. F  
63 FLOOD TO 180-190" (18240G)  
RECORD: PH 7.0 (6.5-7.2) AND STOP  
AGITATOR

|              |             |            |
|--------------|-------------|------------|
| START        | FINISH      | OPERATOR   |
| <u>140PM</u> | <u>3PM</u>  | <u>292</u> |
| <u>3.0</u>   | <u>1.50</u> | <u>292</u> |
| <u>1100P</u> | <u>2.5A</u> | <u>292</u> |



N32582.01

DUP050463673

