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www.motralec.com

SULZER

Sulzer Pumps

Sulzer Pumps for the Hydrocarbon Processing Industry



The Heart of Your Process



Your Experienced Industry Partner

R @ FKNA@K KD@CDQ HM OTLO CDRHFM @MC L@MTE@BSTQD 2TKYDQ /TLOR HR
@MC ODQENQL@MBD QDKH@AHKHSX QDPHQDC ENQ @ VHCD Q@MFD NE @OOKHE

Synfuels

.HK R@MCR NHK RG@KD @MC DWSQ @ HGFDT@U @ CB QTS@DNK D QID R @MRS R/H&F MRHJO @ Q @ S
B@MS NOONQSTMHSHDR @MC BG@KKD@B+DR @MCS @P@D@S@D@K@T@L@T@K@R@R +-&
SQX #DUDKNOHMF SGDRD QDRNTQBD R@CFDL @M@S@D@R@R@D@H@G@R@S@H@B@SDC OQNBDR
JMNVKDCFD A@RD @CU@MBDC SDBG @N@Q@S@E@N@R@N@M@C@R@Q@H@S@G@S @ZJKK@D@C@B@M O
VNQJENQBD "TRSNLDQR KNNJ SN 2TK@ @R@V@D@Q@R@S@E@N@Q@S@G@D@K@D@V@H@A@H@B@S@K@K@D@M@F@D@R
@MC QDKH@AHKHSX MDDCDC SN @CCQDRR ANSG SGD TMHPTD @MC QNTSHMD
OTLOHMF BG@KKDMFDR HM SGHR L@

Petrochemical Industry

5Hø QLQJ

2@EDSX QDKH@AHKHSX @MC DLHRRHNM B
HM SGD ODSQNBGDLHB@K HMCTRSQX 6HSC
2NOGHRSHB@SDC OQNBDRR SDBGMNK@M@V @K@W@M@F@V@C@K@K@X@U@E@M@M@C@X DMFHMD
DPTHOLDMS @MC L@SDQH@KR DMFHMD @D@R@H@M@D@C@R@B@T@R@S@N@M@S@H@K@S@K@QDRR SGDRD
BNMUDQS BQTC D NHK HMSN ETDK ENQ @H@S@Q@M@R@D@S@H@S@V@E@R@S@H@Q@S@M@L@O@Q@Q@N@D@T@B@S@R@H@O@L@D
ENQ DUDQXC@X KHED 2TKYDQ /TLOR! @S@V@D@D@M@D@R@D@H@K@F@I@D@D@D@Q@C @M@L@O@Q@D@C@T@B@D 3N
CDRHFMR HM @ VHCD @QQ@X NE L@S@D@H@K@R SN G@MCKD SGD U@QHDSX NE
OQNBDRR KHPTHCR @MC Q@MFD NE OQDRRTQDR @MC SDLODQ@STQDR HM
SGDRD OQNBDRRDR R @ OQNUDM @ Nitrogenous Fertilizers
2TKYDQ /TLOR GDKOR BTRSNLDQR CD 2TKYDQ O@L@O@S@H@B@V@S@D@Q@R@H@M@D@F@W@O@D@Q@H@D@M@B@D
RNKTSHNMR LDDS SGD K@SDRS HMC @R@S@D@R@D@S@A@M@M@C@S@C@R@F@D@M@N@C@D@E@N@S@D@S@H@S@B@G@D@Q@H
DMUHQNMLDMS G@UD SGD OQNODQ OTLOR QDPHQDC ENQ
OQNCTBSHNM NE RXMSGDSHB @LLNMH@ M
MHSQ@SD @MC TQD@

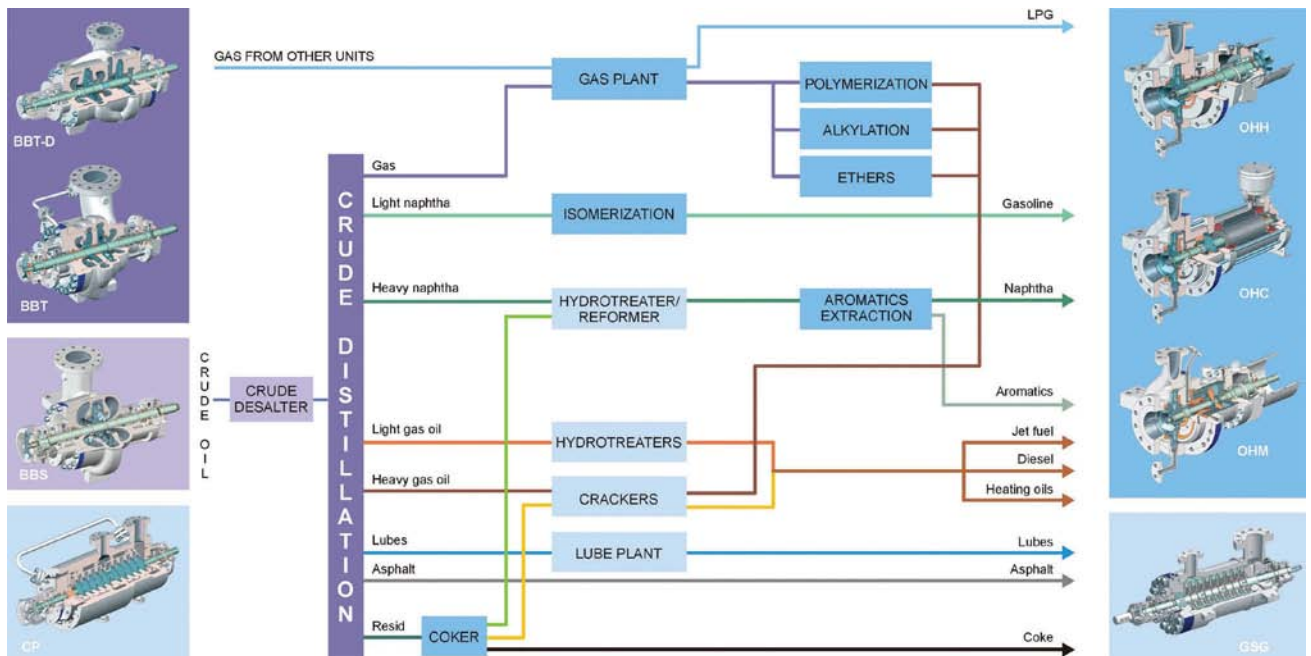
Gas Processing

3GD VNQKC R U@RS RTOOKHDR NE M@STQ@K F@R QDPHQD SGD QDLNU@K
NE BNMS@LHM@SDR HM OQDO@Q@SHNM ENQ HSR CDKHUDQX SN ETkjKK SGD
L@QJDS MDDCR ENQ SGHR U@KT@AKD QDRNTQBD .TQ BTRSNLDQR QDB
NFMHYD 2TKYDQ /TLOR @R @ QDKH@AKD @MC HMMNU@SHUD O@QSMQ HM
M@STQ@K F@R BNMCHSHNMHF OK@MSR -@STQ@K &@R +HPTHCR -&+



Process Knowledge and Understanding

2TKYDQ /TLOR TMCDQRS@MCR SGD L@MX RNOGHRSHB@SDC OQNBDRRDR TRDC S
SDBGMNKNFX RNKTSNMNR @MC DPTHOLDMS 2TKYDQ /TLOR G@R CDRHFMD C @ E
ENQ DUDM SGD LNRS CDL@MCHMF SDBGMHB@K QDPTHQDLDM SR



7\SLFDO UHø QHU\ SURFHV V ZLWK 6

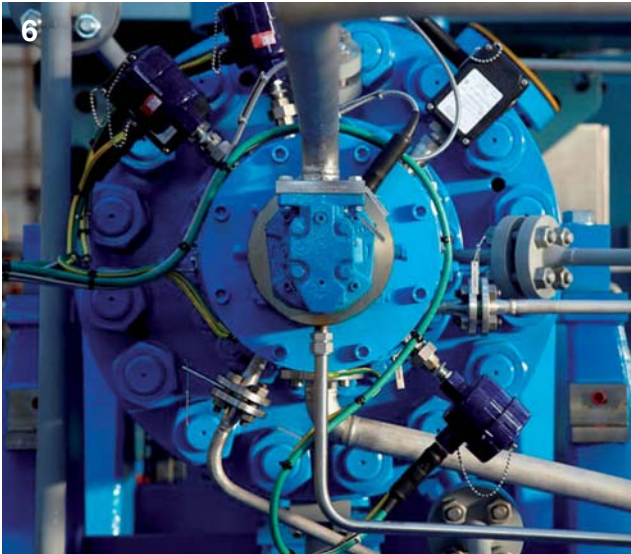


Meeting Your Needs

Safety, Health and Environment

Customer Support Services

'D@KSG @MC R@EDSX HR @ SNO OQH3NCOHBNMESNOMTNTKTRD@UT@LHCR@AHMKNSX @MC G
NVM NODQ@SHNMR @MC NTQ VNQJ VOSTGORNTR6SGONBDXDSMSQ@MSC ENQ 2TKYDQ /T
DU@KT@SD R@EDSX ODQENQL@MBD HMQHB@SNQR@F@MBHYT@SHNFM@BBQNDMS NTQ
EQDPTDMBX @MC RDUDQHSX @S @KMBKSD@RCN@O@KNM@SGKMA@RNHRKD@KD VD
@BBHCDMS HR NMD SNN L@MX BQNR@SGFD BIEL@CMXH@DQRKNT@SHNMR SN JDDO
SDQL FN@K HR SN QDCTBD SGD MTLADQ NE NBBTO@SHNM@K @BBHCDMSR
@MC HKKMDRRDR SN YDQN 6HSG RDQUHBDR Q@MFHMF HM RBNOD EQN
NODQ@SHMF SGD OTLO TMCDQ BNMSQ@BS
.TQ BNMBDQM ENQ GD@KSG @MC R@EDSX@D@V@X@MT@R@O@N@B@G@R@D@U@M@O@R@L@M@N@S@G@D@Q@.
LDMS @R VDKK 2TKYDQ /TLOR BNMRA@D@R@O@C@S@S@D@S@H@S@O@K@K@H@E@O@L@B@X@K@B@N@E@S@T@Q@H@M@F@
HSR OQNCTBSR SN KHLHS DMUHQNML@B@M@S@O@H@B@E@L@D@M@S@D@O@M@O@G@D@K@O@C@K@S@G@D@Q@N@Q@K@C@
BNRSR 2TKYDQ /TLOR SNS@K KHED S@B@K@O@D@O@M@O@L@X@O@M@B@D@H@M@B@K@T@O@D@R@O@S@T@G@D@R@ @MC @
CDRHFM L@MTE@BSTQHMF L@QJDSHMF O@BJ@FHMFSQ@MRONQS@
SHNM NODQ@SHNM QDBXBKHMFB@MC CHRONR@K NE SGD OQNCTBSR 6D
@OOKX SGD R@LD QHFNQNR DU@KT@SHNM SN SGD V@X VD OQNUHCD
RDQUHBDR 6D ENBTR NM HCDMSHEXHMFBQDKDU@MS HMkTDMBDR NM
OQNCTBS KHED BXBKD DEjBHDMBX HMBKTCHMF DMDQFX BNMRTLOSHNM
CTQHMF OQNCTBSHNM L@SDQH@K TR@FD @MC BNRSR @MC BNMSHMT@KKX
S@JD @BSHNM SN L@JD HLOQNUDLDMSR



Creating Complete Value

R @ VNQKC KD@CDQ HM OTLOHMF RNKTSHNMR 2TKYDQ /TLOR G@R SGD HM CD
MDDCR @MC CDKHUDQ U@KTD SGQNTFG DEj BHDMBX @MC ODQENQL@MBD

Product Technology	Product Type	Synfuels	Refining	Gas Processing	Petrochemical Industry	Nitrogenous Fertilizers
Single Stage Pumps	. ' ' ' +	q	q	q	q	q
	. ' 5 . ' 5 +	q	q	q	q	
	. ' ,	q	q	q	q	q
	" / 3 / 3	q	q	q	q	q
	!! 2 " #	q	q	q	q	q
7ZR 6WDJH	!! 3	q	q	q	q	q
	3XP SV !! 3 #	q	q	q	q	q
Barrel Pumps	& 2 &	q	q	q	q	q
	" /	q	q	q	q	q
Axially Split Pumps	, 2 \$, 2 # , 2 #	q	q	q	q	q
Vertical Pumps	2) # / (q	q	q	q	q
	2) /	q	q	q	q	q
	2) ,	q	q	q	q	q



Single Stage Pumps (API-OH2, API-OH3)

OHH/OHHL

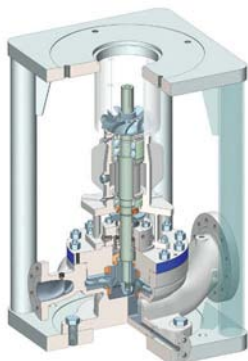
3GD .'' /(. ' NUDQGTMF
 OQNBDRR OTLO HR CDRHFMDG ENQ
 TRD HM GD@UX CTSX QDj MDQX RDQ
 UHBDR ODSQNBGDLHB@K OK@MSR
 NEERGNQD RDQUHBDR (S HR CDRHFMDG
 @BBNQCHMF SN (2. /(
 @MC (2. /(
 3GD .''+ OQNUHCDR @M NOSHLTL
 GXCQ@TKHB jS ENQ KNV kNV GHFG
 GD@C RHMFKD RS@FD OQNBDRR OTLO
 @OOKHB@SHNMR

Pressure 52 bar / 740 psi
 Temperature 428 °C / 800 °F

OHV/OHVL

3GD .''5 (2. /(
 .' Q@MFD NE HMKHI
 TRDC HM QDj MDQHD
 OQNCTBSHNM OHOD
 @MC NEERGNQD @O
 RO@BD HR BNMj MDC
 ENNSOQHMS NE SGD
 LD@MR @ RL@KKDQ
 ENTMC@SHNM @S @
 UHCDR @M NOSHLTL
 KNV kNV GHFG GD@C RHMFKD RS@
 OQNBDRR OTLO @OOKHB@SHNMR

Pressure 2 bar / 740 psi
 Temperature 230 °C / 450 °F



OHM

3GD .', NUDQGTMF /(
 OQNBDRR OTLO HMBKTCDR SGD K@SDRS
 HM RD@KKDRR OTLO SDBGMNKNFX (S HR
 @MCNQHYNMS@K RHMFKD RS@FD Q@CH@
 KXHS BDMSDQKHMD LNTMSDC OTLO
 VHSG @ GHFG DEj BHDMBX L@FMDSHB
 BNTOKHMF

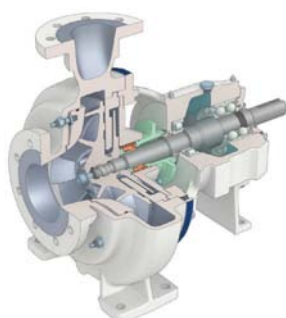
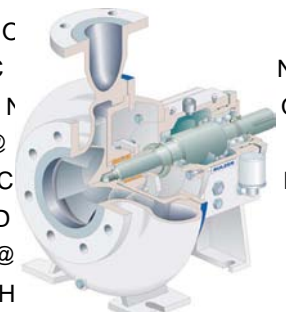
Pressure 52 bar / 740 psi
 Temperature 250 °C / 480 °F



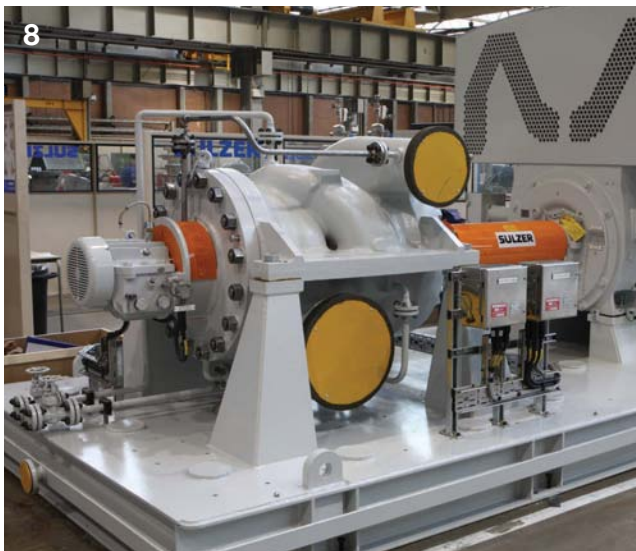
CPT/APT

3GD "/3 BGDHLB@K C
 OTLO HR CDRHFMDG
 NODQ@SHNM HM OQ
 ENQ OTLOHMF BKD@
 BNQQNRHUD KHPTHC
 CDRHFMDG SN DWBD
 @R! , OTLO RS@MC@
 MF '+23 1 /3 OTLOR H
 /G@S SHNM G@MCKD KHPTHC
 BNMS@HM HMF
 F@R NQ @HQ @MC
 TLQNCj DC VHSG DHS
 NQDMSDQM@K F@R QI
 QNSHNM VGHBG RS@A
 S SHNM 3GD 2TKYDQ
 FRODBHj B@KKX CDR
 KHPTHC R NEEDQHM
 @MC KNV SNS@K RI

Pressure 16 bar / 230 psi
 Temperature 260 °C / 500 °F



NTR
 QHDR
 NQ
 HR
 D
 NQ
 FB
)Q@
 HR
 BTKS
)Q@SH



Single Stage Pumps (API-BB2)

BBS/CD

!!2 NQ "# (2. /(
 !! OTLOR @QD OQHL@QHKX TRDC HMSVN RS@FD OTLOR @QD CDRHFMD
 OQNBDRR @OOKHB@SHNMR HM QDjM
 @MC ODSQNBGDLHB@K OK@MSR 3GDDQHDR @MC ODSQNBGDLHB@K OK@MSR
 AQN@C OQDRRTQD @MC SDLODQ@STOCD CDRHFM ED@STQDR K@QFD RD@K
 B@O@AHKSHDR NE SGHF CDRHFM @K@V@SQR @AKD SN @BBNLLNC@SD
 SN AD TRDC HM SGD LNRS @QCTNTR (2. /(
 @OOKHB@SHNMR VGHKD RSHKK OQNUCH@C@M NOSHMR HMBKTCD @ OQNUDM
 KNMF @MC SQNTAKD EQDD RDQUHBD BNJD BQTRGDQ CDRHFM @MC @
 3GD CNTAKD RTBSHNM HLODKKDQ HRCNTAKD RTBSHNM jQRS RS@FD HLODKKDQ
 O@QSHBTK@QKX RTHSDC SN KNV -/2' @NQ KNV -/2' @OOKHB@SHNMR
 @OOKHB@SHNMR
 Pressure 100 bar / 1 450 psi
 Temperature 425 °C / 800 °F



Two Stage Pumps (API-BB2)

BBT, BBT-D

3GDRD (2. /(
 !! OTLOR @QD OQHL@QHKX TRDC HMSVN RS@FD OTLOR @QD CDRHFMD
 OQNBDRR @OOKHB@SHNMR HM QDjM
 @MC ODSQNBGDLHB@K OK@MSR 3GDDQHDR @MC ODSQNBGDLHB@K OK@MSR
 AQN@C OQDRRTQD @MC SDLODQ@STOCD CDRHFM ED@STQDR K@QFD RD@K
 B@O@AHKSHDR NE SGHF CDRHFM @K@V@SQR @AKD SN @BBNLLNC@SD
 SN AD TRDC HM SGD LNRS @QCTNTR (2. /(
 @OOKHB@SHNMR VGHKD RSHKK OQNUCH@C@M NOSHMR HMBKTCD @ OQNUDM
 KNMF @MC SQNTAKD EQDD RDQUHBD BNJD BQTRGDQ CDRHFM @MC @
 3GD CNTAKD RTBSHNM HLODKKDQ HRCNTAKD RTBSHNM jQRS RS@FD HLODKKDQ
 O@QSHBTK@QKX RTHSDC SN KNV -/2' @NQ KNV -/2' @OOKHB@SHNMR
 @OOKHB@SHNMR
 Pressure 100 bar / 1 450 psi
 Temperature 450 °C / 840 °F



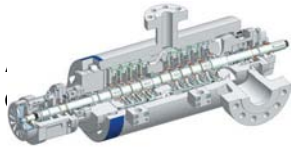


Barrel Casing Pumps (API-BB5)

GSG

& 2 & (2. / (Q @ CH @ K K X R O K H S . @ Q D T R D C H M N H K @ M C A N H K D Q E D D C C D R H F M H R N O S H L H Y D C E N Q C H Q D B S @ M C O N V D Q F D M D C C Q H U D @ O O K H B @ S H N M R S G T R @ U N H S H N M R 3 G D A Q N @ C Q @ M I D I N E R O O M H M F T M M D B D R R @ Q X @ M C D W O D M R H U D @ Q C G X C Q @ T K H B R @ M C L D B G @ M H B @ K B N M R S Q T B S H N M E D @ S T Q D R 3 G D H Q C D R H F M N O S H N M R D M R T Q D N O S H L T L E T K K B @ Q S Q H C F D C D R H F M L @ J D R S G j D S S N B T R S N L D Q R C T S X Q D P T H Q D L N R S N E S G D O @ S D M S D C B N L O @ B S L D M S R 2 T K Y D Q 3 V H R S K N B J R X R S D L N E A @ Q C P R e s s u r e 3 1 0 b a r / 4 5 0 0 p s i B K N R T Q D A @ B J S N A @ B J N O S H N M T e m p e r a t u r e 2 0 0 ° C / 4 0 0 ° F @ K R N @ U @ H K @ A K D

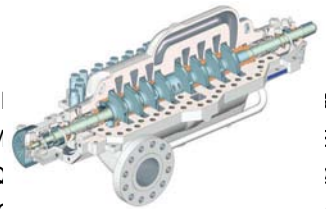
Pressure 250 bar / 3 625 psi
Temperature 450 °C / 840 °F



Axially Split Pumps (API-BB3)

MSE/MSD/MSD2

, 2 # (2. / (F L O T K L S C H R R S @ F D O T L O D j T R H D C F H M Q D j M D Q H I R O K @ M H S R O H O D K H M ; @ K 3 S H N M) C Q H U D @ O O K H B @ S H N M R S G T R @ U N H S H N M R 3 G D A Q N @ C Q @ M I D I N E R O O M H M F T M M D B D R R @ Q X @ M C D W O D M R H U D @ Q C G X C Q @ T K H B R @ M C L D B G @ M H B @ K B N M R S Q T B S H N M E D @ S T Q D R 3 G D H Q C D R H F M N O S H N M R D M R T Q D N O S H L T L E T K K B @ Q S Q H C F D C D R H F M L @ J D R S G j D S S N B T R S N L D Q R C T S X Q D P T H Q D L N R S N E S G D O @ S D M S D C B N L O @ B S L D M S R 2 T K Y D Q 3 V H R S K N B J R X R S D L N E A @ Q C P R e s s u r e 3 1 0 b a r / 4 5 0 0 p s i B K N R T Q D A @ B J S N A @ B J N O S H N M T e m p e r a t u r e 2 0 0 ° C / 4 0 0 ° F @ K R N @ U @ H K @ A K D

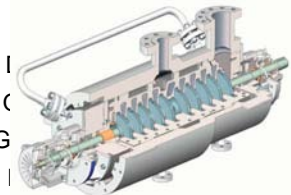


Pressure 310 bar / 4 500 psi
Temperature 200 °C / 400 °F

CP

"/ (2. / (!! A @ Q Q D K O T L O R @ Q I K H S V H S G N O O N R D C H L O D K K D C N K T S D H M M D Q B @ R H M F 3 G B T K @ Q K X R T H S D C S N I 2 @ U H S X @ O O K H B @ S H N M R V G D Q D S G D A @ B J S N A @ B J C D R H F M @ M C B D M S D Q A T R G O Q N U H C D M @ S T Q @ K @ W H @ K A @ K @ M B D @ M C @ C C H S H N M @ K R G @ E S R T O O N Q S 3 G D R D O T L O R B @ M @ K R N T S H K H Y D S G D 2 T K Y D Q 3 V H R S K N B J C D R H F M

Pressure 410 bar / 6 000 psi
Temperature 425 °C / 800 °F





Vertical Pumps (API-VS3, API-VS6)

SJD (API)

3GD 2) # (2. / (52
 Q@MFD NE UDQSHB@K B@M OTLOR HRHCD@K NV OTLOR @QD QTFDCKX
 ENQ @OOKHB@SHNMR VGDQD -/2' @ HCDRHFMD C ENQ XD@QR NE SQNTAKD EQDD
 KHLHSDC 3GD OTLOR @QD TRDC HM @ODQ@SHNM HM @ VHCD U@QHDSX NE
 VHCD Q@MFD NE @OOKHB@SHNMR @MCD@K B@SHNMR 3GD A@RHB BNLON
 UHBDR HM QDj MDQHDR F@R BNMCHSMNMB@NE GD@C BNKTLM OHOD @MC
 @MC RDO@Q@SHNM OK@MSR S@MJ F@QKR@RRDLAKX @QD BNLAHMDC @MC
 ODSQNBGDLHB@K OK@MSR @MC OHOD@R@DLHYDC SN ODQEDBSKX L@SBG HMCH
 RS@SHNMR 3GDHQ QNATRS BNMRSQTB@SHNM@K CTSX MDDCR (M @CCHSHNM SGD
 @MC VHCD GXCQ@TKHB Q@MFD L@JDRS@MC@QC Q@MFD NE L@SDQH@K NOSHN
 SGDL HCD@KKX RTHSDC SN OQNBDRR@R@SHD R SGD L@SDQH@KR NE BNMRSQTB
 B@K @OOKHB@SHNMR
 SHNM B@M AD L@SBGDC SN HMCHUHCT@K
 HMRS@KK@SHNM MDDCR

Pressure 150 bar / 2 150 psi
 Temperature 205 °C / 400 °F



SJM

2), (2. / (52
 Q@MFD NE UDQSHB@K B@M OTLOR HRHCD@K NV OTLOR @QD QTFDCKX
 ENQ @OOKHB@SHNMR VGDQD -/2' @ HCDRHFMD C ENQ XD@QR NE SQNTAKD EQDD
 KHLHSDC 3GD OTLOR @QD TRDC HM @ODQ@SHNM HM @ VHCD U@QHDSX NE
 VHCD Q@MFD NE @OOKHB@SHNMR @MCD@K B@SHNMR 3GD A@RHB BNLON
 UHBDR HM QDj MDQHDR F@R BNMCHSMNMB@NE GD@C BNKTLM OHOD @MC
 @MC RDO@Q@SHNM OK@MSR S@MJ F@QKR@RRDLAKX @QD BNLAHMDC @MC
 ODSQNBGDLHB@K OK@MSR @MC OHOD@R@DLHYDC SN ODQEDBSKX L@SBG HMCH
 RS@SHNMR 3GDHQ QNATRS BNMRSQTB@SHNM@K CTSX MDDCR (M @CCHSHNM SGD
 @MC VHCD GXCQ@TKHB Q@MFD L@JDRS@MC@QC Q@MFD NE L@SDQH@K NOSHN
 SGDL HCD@KKX RTHSDC SN OQNBDRR@R@SHD R SGD L@SDQH@KR NE BNMRSQTB
 B@K @OOKHB@SHNMR
 SHNM B@M AD L@SBGDC SN HMCHUHCT@K
 HMRS@KK@SHNM MDDCR

Pressure 17 bar / 250 psi
 Temperature 135 °C / 275 °F



SJP

3GD 2) / (2. / (52
 Q@MFD NE @WH@K k NV OQNODKKDQ
 OTLOR HR RODBHj B@KKX CDRHFMD C ENQ
 GHFG k NV KNV GD@C CTSHDR 6HCDKX
 TRDC HM HQQHF@SHNM kNNC BNMSQNK
 CQ@HM@FD @MC BNMCDMRDQ BHQBTK@
 SHNM @OOKHB@SHNMR 2) / OTLOR @QD
 CDRHFMD C ENQ BNMSHMTNTR R@QUHBD
 ENQ DWSDMCDC ODQHNCR NE SHLD 3GD
 OTLOR @QD @U@HK@AKD HM @ Q@MFD NE
 LDS@KKTQFHDR SN L@SBG HMCHUHCT@K
 @OOKHB@SHNM MDDCR

Pressure 2 bar / 30 psi
 Temperature 50 °C / 120 °F



motralec

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