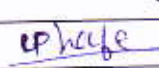
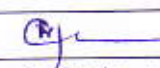
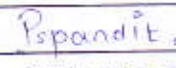


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Sr.No.	Test	Specification	Method of Analysis No.
1	Appearance	Clear, colourless, volatile liquid.	QC/PH-FG/SPEC/13-01
2	Solubility	Sparingly soluble in water, miscible with ethanol (96%).	QC/PH-FG/SPEC/13-02
3	Identification		QC/PH-FG/SPEC/13-03
	A) Refractive index at 20°C ± 0.5°C.	1.423 to 1.425 at 20°C ± 0.5°C.	
	B) By IR	The spectrum obtained with the sample corresponds in position & relative intensity to those in the spectrum obtained with that of Dichloromethane CRS or its Working standard.	QC/PH-FG/SPEC/13-04
	C) Relative density at 20°C	1.320 to 1.332 at 20°C.	QC/PH-FG/SPEC/13-07
	D) Chemical Test	A violet colour is produced.	QC/PH-FG/SPEC/13-12
	E) Chemical Test	Passes the test	QC/PH-FG/SPEC/13-13
4	Appearance of solution	The substance to be examined is clear and colourless	QC/PH-FG/SPEC/13-05
5	Acidity	Not more than 0.15 ml of 0.1M sodium hydroxide should require to change the colour of the indicator to blue.	QC/PH-FG/SPEC/13-06
6	Relative density at 20°C.	1.320 to 1.332 at 20°C.	QC/PH-FG/SPEC/13-07
7	Refractive index at 20°C ± 0.5°C.	1.423 to 1.425 at 20°C ± 0.5°C.	QC/PH-FG/SPEC/13-03
8	Ethanol, 2-methylbut-2-ene and volatile impurities (By GC) Ethanol 2-methylbut-2-ene Impurity A (Carbon tetra-chloride) Impurity B (Chloroform) Sum of impurities other than ethanol and 2-methylbut-2-ene	Maximum 2.0% v/v Maximum 300 ppm v/v Maximum 10 ppm v/v Maximum 50 ppm v/v Maximum 0.1% v/v	QC/PH-FG/SPEC/13-08
9	Free Chlorine	No blue colour should develops.	QC/PH-FG/SPEC/13-09
10	Residue on evaporation	Maximum 20 ppm.	QC/PH-FG/SPEC/13-10

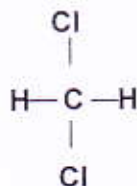
	PREPARED BY Q.C	CHECKED BY Q.C	AUTHORIZED BY Q.A
SIGNATURE			
DATE	28/12/2022	28/12/2022	29/12/2022

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11	Water	Maximum 0.02% m/m.		QC/PH-FG/SPEC/13-11
12	Residual solvents (By GC) a) Methanol b) Ethanol c) 2-Methyl-2-butene d) Chloroform e) Carbon tetra chloride	Not more than 3000 ppm v/v Not more than 5000 ppm v/v Not more than 300 ppm v/v Not more than 60 ppm v/v Not more than 4 ppm v/v		QC/PH-FG/SPEC/13-14

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GENERAL INFORMATION

Structure:

Molecular Formula: CH₂Cl₂
Molecular Weight: 84.9

Desirable Pack:

To be supplied in MS drums/SS containers/HDPE containers/HM-HDPE containers and Glass bottles. properly identified with a label having Name of the material, Name of the Manufacturer, Quantity, Manufacturer's Batch Number, Manufacturing Date, Expiry Date and or Retest Date.

Storage Condition:

In an airtight container, protected from light.

Handling precaution:

Use PPE (Personal Protective Equipments) during handling of the material.

Sampling SOP:

As per the current approved sampling procedure. (SOP/QC/GE01)

Quantity to be sampled:

Analysis Sample: About 575 ml
Control Sample: About 1150 ml
Stability Sample: About 6420 ml

Shelf Life:

Three years from the date of manufacturing.

Note:

- 1. For Bullet, Filter, Supporting equipments rinsing and Filter Cleaning-**
 - If previous product is any grade of Dichloromethane, then perform Appearance, Solubility, Identification by Refractive index at 20 ± 0.5°C and Water tests as per FG Specification.
 - If previous product is different then, then perform Appearance, Solubility tests as per FG specification and calculate previous product carry over by using "Purity (By GC)" method from Raw material specification. (Limit - NMT 0.2%) QC/SPEC/MDC_RM/01
- 2. For Tanker Rinsing-**
 - Perform Appearance, Solubility, Identification, Relative density at 20°C, Ethanol, 2-methylbut-2-ene and volatile impurities (By GC), Residue on evaporation and Water tests as per FG specification.
- 3. Bending and Packing-**
 - Perform all tests as per FG specification.
 - Residual solvents (By GC) to be perform only for Packing.

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Note to be continued...

4. For Stability testing-

Perform Appearance, Solubility, Identification, Relative density at 20°C, Ethanol, 2-methylbut-2-ene and volatile impurities (By GC), Residue on evaporation, Water and Residual solvents (By GC) tests as per FG specification. (Stability sample quantity- About 535 ml for single analysis).

Document number	Supersede	Changes made	Reason for change
QC/PH-FG/SPEC/13	Rev.0	Format change – 1. General Information added. 2. History page added. 3. Reference updated	As per requirement of Schedule M. BP-2013
	Rev.1	Reference updated	BP- 2014
	Rev.2	1. Reference updated 2. Detector and injector temperature is decreased from 300°C to 230°C and 260°C to 200°C respectively. 3. RUNA Logo inserted along with name of company.	BP- 2015 Refer change control No. RCPL/CC/QC/004-15 As per SOP of Document and Data control
	Rev.3	Carrier gas Helium is used instead of Nitrogen. 0.25mm x 60m fused silica column coated with a 1.4µm film of phase 643 used. Column temp. Program is change. Split ratio and column flow increased from 1:40 to 1:50 and 1.0mL/min to 1.07mL/min respectively.	(Refer change control No.RCPL/CC/QC/009-15) (Refer Method validation protocol No. RCPL/QC/VAL-Methylene chloride-BP & Ph.Eur/2015)
	Rev.4	1. Reference updated 2. For refractive index test temperature condition is changed from 20°C to 20±0.5°C and Limit texts for Ethanol, 2-methyl-2-ene and volatile impurities test	BP- 2016 (Refer change control No. RCPL/CC/QC/015-15)
	Rev.5	Reference updated	BP- 2017 (Refer change control No. RCPL/CC/QC/010-16)
	Rev.6	For Ethanol,2-methylbut-2-ene and volatile impurities (By GC) test- Split Ratio is reduced from 50 to 30]	(Refer change control No. RCPL/CC/QC/004-17
	Rev.7	Reference Updated.	BP. 2018 (Refer Change Control No. RCPL/CC/QC/006-17)
	Rev.8	1. Mentioned tests to be perform for Bullet Rinsing, Filter Rinsing and Tanker Rinsing. 2. Shelf Life is added.	Refer Change Control No. RCPL/CC/QC/003-18

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Document number	Supersede	Changes made	Reason for change
QC/PH-FG/SPEC/13	Rev.9	<ol style="list-style-type: none"> 1. Reference Updated. 2. Mentioned tests to be perform for Supporting equipments 3. Quantity of Stability sample is added. 	BP-2019 Refer Change Control No. RCPL/CC/QC/010-18 Refer Change Control No. RCPL/CC/PDN/003-18
	Rev.10	Test wise method of analysis (MOA) is prepared. Method of Analysis No. is added.	Refer Change Control No. RCPL/CC/QC/003-19
	Rev.11	<ol style="list-style-type: none"> 1. Reference updated. 2. In MOA No. QC/PH-FG/SPEC/13-01 <ol style="list-style-type: none"> a) Procedure is updated b) "Interpretation" is added. 3. In MOA No. QC/PH-FG/SPEC/13-02 <ol style="list-style-type: none"> c) Procedure is updated d) "Interpretation" is added. 4. In MOA No. QC/PH-FG/SPEC/13-03 <ol style="list-style-type: none"> a) "Limit" is added. 5. In MOA No. QC/PH-FG/SPEC/13-04 <ol style="list-style-type: none"> a) Procedure is updated for spectrum range. b) Working standard added with CRS and Purity Index added. 6. In MOA No. QC/PH-FG/SPEC/13-05 <ol style="list-style-type: none"> a) "Interpretation" is added. 7. In MOA No. QC/PH-FG/SPEC/13-06 <ol style="list-style-type: none"> a) Solution preparation is updated for addition of volumetric solution. 8. In MOA No. QC/PH-FG/SPEC/13-07 <ol style="list-style-type: none"> a) The term "sample" replaced by "substance to be examine". b) "Limit" is added. 9. In MOA No. QC/PH-FG/SPEC/13-08 <ol style="list-style-type: none"> a) Chromatographic condition is updated for addition of flow Control Mode, Pressure, Purge Flow, Makeup flow, Hydrogen Flow, Air Flow and Equilibration time. b) In procedure "sample" term replaced by "Test solution" 10. In MOA No. QC/PH-FG/SPEC/13-09 <ol style="list-style-type: none"> a) Solution preparation is updated. 11. In MOA No. QC/PH-FG/SPEC/13-10 <ol style="list-style-type: none"> a) In procedure "sample" term replaced by "substance to be examine" b) "Limit" is added. 	BP-2020 (Refer Change Control No. RCPL/CC/QC/007-19)

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Document number	Supersede	Changes made	Reason for change	
QC/PH-FG/SPEC/13		12. In MOA No. QC/PH-FG/SPEC/13-11 a) The term "sample" is replaced by "substance" 13. Following points are added in general information. a) Quantity to be sampled is modified by adding term "About" b) Mentioned tests to be perform for stability testing. c) Quantity for stability sample for single analysis is added. d) Desirable pack updated for addition of HM-HDPE containers e) Filter cleaning is added.		
	Rev.12	1. Reference updated.	BP-2021 (Refer change control No. RCPL/CC/QC/001-21)	
	Rev.13	1. Reference updated. 2. Identification by Relative density at 20°C, and Chemical tests are added also new MOA No. QC/PH-FG/SPEC/13-12 and QC/PH-FG/SPEC/13-13 added. Same test added in Tanker rinsing and stability testing. 3. In MOA No. QC/PH-FG/SPEC/13-08 chromatographic condition is updated for addition of Total Flow. Procedure is updated for injection sequence. 4. Residual solvents (By GC) test is added also new MOA No. QC/PH-FG/SPEC/13-14 is added. Same test is added in stability testing. 5. Quantity to be sampled and stability quantity for single analysis is updated.	BP-2022 (Refer change control No. RCPL/CC/QC/004-21)	
	Rev.14	1. Reference updated.	BP-2023 (Refer change control No. RCPL/CC/QC/009-22)	