

## Englisch

### Hinweise:

- Es ist auf eine gut lesbare und saubere Darstellung zu achten
- Jede Aufgabe ist direkt auf das Aufgabenblatt in dem dafür vorgesehenen Feld zu lösen
- Erlaubte Hilfsmittel: An der Prüfung abgegebene Wörterbücher (Allg. + Fachwörterbuch Chemie)
- Die Punktzahl von Teil 1 beträgt 41 und 35 für Teil 2 (Teil 1 zählt 2/3, Teil 2 zählt 1/3 der Note); Es gilt der Notenschlüssel der Expertengruppe
- Prüfungszeit: 60 Minuten (Teil 1 ca. 40 Minuten, Teil 2 ca. 20 Minuten)

***Die Expertengruppe wünscht Ihnen gutes Gelingen und viel Erfolg!***

Name, Vorname:

Note

### Teil 1: Übersetzung englischer Fachtext ins Deutsche

Bitte übersetzen Sie den Text der Originalliteratur auf der 2. Seite und schreiben Sie die Übersetzung auf die 6. Seite und deren Rückseite.

*Hinweis : Jeder übersetzte Satz muss auf einer neuen Zeile begonnen werden.*

## OXIDATIVE CLEAVAGE OF AN AROMATIC RING: *cis, cis*-MONOMETHYL MUCONATE FROM 1,2-DIHYDROXYBENZENE

### 1. Procedure

A 1000-mL, three-necked, round-bottomed flask is equipped with a mechanical stirrer and an addition funnel. The flask is charged with 400 mL of pyridine, 5 mL (0.12 mol) of methanol and 9.9 g (0.10 mol) of cuprous chloride under an atmosphere of nitrogen (Note 1). The resultant yellow solution is stirred vigorously at room temperature until the cuprous chloride dissolves. The nitrogen is removed and oxygen is bubbled into the flask below the surface of the liquid for approximately 30 min (Note 2). A solution, composed of 1000 mL of pyridine, 5.5 g (0,05 mol) of 1,2-dihydroxybenzene (catechol), and 5 mL (0.12 mol) of methanol, is degassed and slowly added to the flask over a 2-hr period with efficient stirring (Note 3). The reaction mixture is stirred for an additional 30 min before the pyridine is removed at reduced pressure. The dark green residue is dissolved in 300 mL of ethyl ether (Note 4) and 300 mL of 6 N hydrochloric acid; this solution is stirred for 10 min and filtered over Celite, and the organic layer is isolated. The ether is removed at reduced pressure and the resultant brown residue is boiled sequentially with six 50-mL portions of hexane. The hot liquid is carefully decanted, leaving behind most of the dark residue. The yellow-to-colorless solid is crystallized from hot hexane (or methanol) to yield 5.6-6.2 g (71-80%) of colorless needles, mp 80-81°C).

### 2. Notes

1. Pyridine was distilled over potassium hydroxide, bp 114-116°C. Cuprous chloride was prepared fresh, washed with anhydrous methanol (distilled from magnesium metal), and dried under reduced pressure. Methanol was dried over molecular sieves.
2. As oxygen is introduced into the flask the solution becomes dark green and slightly viscous.
3. Catechol was purchased from Fisher Scientific Company (resublimed). The addition funnel should be charged with a nitrogen atmosphere throughout addition to obviate oxidation of the catechol.
4. Ethyl ether was purchased from Mallinckrodt Inc.; methylene chloride may be substituted, but the monomethyl ester is more soluble in ether. At least two other extractions will be necessary to optimize the yield when methylene chloride used.

Submitted by Ronald Mc Donald  
Checked by Kin G. Burger

**Teil 2: Grammatik**

**1. Aufgabe** (10 Punkte)

**Put these sentences into the passive; use the correct times!**

*Active*

- 1) He drew a wonderful picture of the town.
- 2) They have sent many letters.
- 3) She keeps all money.
- 4) The guests broke many windows in the hotel.
- 5) The murderer has killed 25 people.
- 6) The car overtook all other cars.

*Passive*

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_
- 5) \_\_\_\_\_
- 6) \_\_\_\_\_

**Write the active sentences in the passive and the passive sentences in the active:**

- 1) They have made a lot of changes in the pub.

\_\_\_\_\_

- 2) A new house was built last year.

\_\_\_\_\_

- 3) They use the firm as a sports centre.

\_\_\_\_\_

- 4) 50 new theatres will be opened next year.

\_\_\_\_\_

**2. Aufgabe** (10 Punkte)

**Put the verbs in the correct form using the Past Simple or the Present Perfect.**

1. Mother: I want to prepare dinner. (you / wash) \_\_\_\_\_ the dishes yet?
2. Daughter: I (wash) \_\_\_\_\_ the dishes yesterday, but I (have / not) \_\_\_\_\_ the time yet to do it today.
3. Mother: (you / do / already) \_\_\_\_\_ your homework?
4. Daughter: No, I (come / just) \_\_\_\_\_ home from school.
5. Mother: You (come) \_\_\_\_\_ home from school two hours ago!
6. Daughter: Well, but my friend Lucy (call) \_\_\_\_\_ when I (arrive) \_\_\_\_\_ and I (finish / just) \_\_\_\_\_ the phone call.
7. Mother: (you / see / not) \_\_\_\_\_ Lucy at school in the morning?
8. Daughter: Yes, but we (have / not) \_\_\_\_\_ time to talk then.

*Anmerkung: Antwort 6 ergibt insgesamt 1 Punkt!*

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**3. Aufgabe** (5 Punkte)

**Use the correct future form: future simple, progressive or going – to – future.**

1. I love London. I (probably / go) \_\_\_\_\_ there next year.
2. Our train (leave) \_\_\_\_\_ at 4:47.
3. What (wear / you) \_\_\_\_\_ at the party tonight?
4. I haven't made up my mind yet. But I think I (find) \_\_\_\_\_ something nice in my mum's wardrobe.
5. This is my last day here. I (go) \_\_\_\_\_ back to England tomorrow.

**4. Aufgabe** (10 Punkte)

**Correct the sentences!**

1. He's more older than he looks.
2. Ann's as tall than her mother.
3. "What does Paris like?" - "It's beautiful, especially in the spring".
4. Concorde is the most fast passenger plane in the world.
5. Trains in Tokyo are crowdedder than in London.
6. Oxford is one of oldest universities in Europe.
7. He isn't as intelligent than his sister.
8. This is more hard than I expected.
9. Who is the most rich man in the world?
10. Everything is more cheap in my country.

**Punkte Teil 2**

**Note Teil 2**

Name, Vorname:

Punkte Teil 1

Note Teil 1

Deutsche Übersetzung (Teil 1):