



## INSTRUCTIONS TO PARTICIPATING LABORATORIES

To ensure that results from this programme can be analysed properly, participating laboratories are asked to strictly adhere to the following instructions.

1. Participating laboratories are supplied with three samples, which are in sealed plastic bottles covered with dark packaging and labeled as “Test Sample”. All samples contain sunset yellow and tartrazine. The matrix is orange juice. The names and structures were listed in Annex A of this file. The concentration of sunset yellow or tartrazine in each sample is in the range of 40~400mg/kg.
2. Upon receipt of the samples, participating laboratories should carefully inspect the samples for any physical damages and defects. If presence of abnormality is detected, please contact the coordinator at [yaojiab@lnciq.gov.cn](mailto:yaojiab@lnciq.gov.cn) immediately. New sample(s) will be replaced if necessary.
3. If the conditions of the samples are satisfactory, participating laboratories shall promptly acknowledge the receipt of the samples by returning the “Receipt Form” electronically to the coordinator at [yaojiab@lnciq.gov.cn](mailto:yaojiab@lnciq.gov.cn).
4. Analysis may commence as soon as the sample is received. The sample should be stored in the original packaging at 0-4°C until analysis commences.
5. The following analyses are to be performed. Analysis results, in mg/kg on as-received basis, and other information should be reported on the given “Results Sheet”.
  - i. Sunset yellow [the limit of quantitation (LOQ) of sunset yellow should be better than 20mg/kg.]
  - ii. Tartrazine [the limit of quantitation (LOQ) of tartrazine should be better than 20mg/kg.]Participating laboratories should be aware of analyte stability and perform the analyses in an appropriate order.
6. All samples must be analyzed and reported. The samples could be analyzed with preferably selected methods and it is recommended to use HPLC, HPLC-MS methods or other suitable methods. Whatever method you selected, it should be recorded on the TESTING RECORD FORMS. It is recommended that each sample should be mixed, prior to test, thoroughly and respectively. It is suggested that the mass of each duplicated test portion should be exceed 5g. Please record relevant information in TESTING RECORD FORMS in details, all you report will be benefit for analyzing testing results.
7. For each sample, please report 4 duplicated test result and their mean result with uncertainty of sunset yellow and tartrazine respectively on the RESULT SHEET. The test results shall be corrected by recovery. Measurement uncertainty shall be evaluated and reported referring to Annex B for each result.



8. Please fill out all relevant information, then email or fax the RESULT SHEET to the coordinator of this program and your accreditation body **NO LATER THAN THE DEADLINE 10<sup>th</sup> Feb., 2010.** And the TESTING RECORD FORMS, relevant spectrums, your preferred form of Measurement Uncertainty Report and any supporting documents should be submitted to your accreditation body before the deadline. At the same time, email or mail all the documents to the coordinator of this program at [yaojiab@lnciq.gov.cn](mailto:yaojiab@lnciq.gov.cn).

(Notes: 1. Under normal circumstances, results submitted after the deadline will not be accepted. 2. Owing to possible poor transmission quality, results submitted by fax are generally not acceptable.)

9. For enquires, please contact the coordinator at [yaojiab@lnciq.gov.cn](mailto:yaojiab@lnciq.gov.cn).

## Annex A

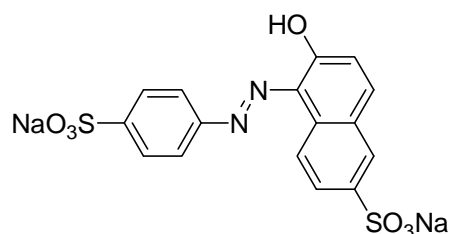
### Structure of sunset yellow and tartrazine to Be Analyzed

#### 1. sunset yellow

CAS Registering Number: 2783-94-0

Molecular Formula:  $C_{16}H_{10}N_2Na_2O_7S_2$  , molecular weight : 452.37

Structure:

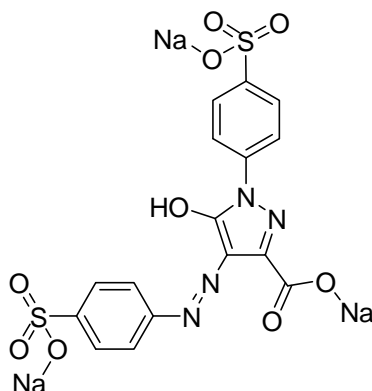


#### 2. tartrazine

CAS Registering Number: 1934-21-0

Molecular Formula:  $C_{16}H_9O_9N_4S_2Na_3$  , molecular weight : 534.37

Structure:





## RECEIPT FORM

We are pleased to announce that in accordance with the distribution schedule of APLAC food synthetic dyestuff proficiency testing program T072. we have dispatched the samples on 28<sup>th</sup> Dec. 2009 through TNT Express or FebEx, along with INSTRUCTIONS TO PARTICIPANTS, RECEIPT FORM, RESULT SHEET AND TESTING RECORD FORMS.

In order to monitor status of the samples, we kindly ask each participating laboratory on receipt of the samples to fill out this RECEIPT FORM and return a copy by **email or fax URGENTLY to:**

**Mr. Yao Jiabiao**

**Fax No. : +86 024-24123659**

**E-mail: yaojiabiao@lnciq.gov.cn**

Thank you in advance for your cooperation.

**NAME OF LABORATORY:**

**LAB CODE: T072-XXX**

**DATE SAMPLE RECEIVED: \_\_\_\_\_ SAMPLE AMOUNT: \_\_\_\_\_**

**The samples are labelled as follows: ZXXX,ZXXX,ZXXX**

**Inspect the packaging. Was there any visible damage?  Yes  No**

**If yes, or any other problem is available, describe the problem below.**

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**Signature:**

**Date:**



# Results Sheet

**Lab Code: T072-XXX**

<b>SAMPLE RECEIVED DATE:</b> _____	<b>REPORT DATE:</b> _____
<b>SAMPLE PROCESSED DATE:</b> From _____ to _____	

## Results of Contents of Sunset Yellow in beverage

Sample	Duplicated Testing Results(mg/kg)				Mean Result with Uncertainty (mg/kg)	Limit of Quatitation (mg/kg)
	1	2	3	4		
ZXXX						
ZXXX						
ZXXX						

## Results of Contents of Tartrazine in beverage

Sample	Duplicated Testing Results(mg/kg)				Mean Result with Uncertainty (mg/kg)	Limit of Quatitation (mg/kg)
	1	2	3	4		
ZXXX						
ZXXX						
ZXXX						

**Signature :**

**Date:**

Return this Results Sheet (including the Testing Record Form) by no later than the deadline 10<sup>th</sup> Feb. 2010 (we will confirm it by local postmark) by fax or email, and then mail to:

**Mr. Yao Jiabiao**

**Address: 106, Dong Binhe Road, Shen He Qu, ShenYang110016, P. R. China**

**Phone: +86-24-24123659、 +86-24-24808859**

**Fax(Auto) : +86-24-24123659**

**E-mail: yaojiabiao@lnciq.gov.cn**