

**1. Identification**

(a) Product identifier used on the label:

Test Mix B

(b) Other means of identification:

Synonyms: NONE

Grade: N/A

Isco Part Numbers: 605244060, 605244109, 605247010 (Kit)

CAS Number: N/A (Mixture)

(c) Recommended use of the chemical and restrictions on use:

Chromatography equipment verification

(d) Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

Teledyne Instruments, Inc. d/b/a Teledyne Isco

4700 Superior Street

Lincoln, NE 68504

Telephone: (402)464-0231

(e) Emergency phone number:

ChemTel (Contract Number MIS8758990)

United States, Canada, Puerto Rico, and the U.S. Virgin Islands:

Toll Free: (800) 255-3924

International Access:

+01-813-248-0585

**2. Hazard(s) Identification**

(a) GHS Classification of the chemical in accordance with paragraph (d) of §1910.1200:

<u>Hazard Class</u>	<u>Category</u>
Skin Irritation	2
Eye Irritation	2A
Skin Sensitization	1
Carcinogenicity	2
Specific Target Organ Toxicity, Single	3 (Respiratory System)
Acute Aquatic Toxicity	1
Chronic Aquatic Toxicity	1

(b) Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200:

Hazard Symbol:



Signal Word: Warning

Hazard Statements:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

## 2. Hazard(s) Identification (continued)

### Hazard Statements (continued):

H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H410	Very toxic to aquatic life with long-lasting effects.

### Precautionary Statements:

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust.
P264	Wash hands/face thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351 +P338	IF IN EYES: Rise cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/Doctor if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention
P337+P313	If eye irritations persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P391	Collect spillage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation.

(c) Hazards not otherwise classified: None

## 3. Composition/Information on Ingredients

Ingredient:	CAS Number:	Percent:
4-Aminobenzoic acid (PABA): $C_7H_7NO_2$	150-13-0	50%
Methyl 4-hydroxybenzoate (Methyl paraben): $C_8H_8O_3$	99-76-3	25%
Benzophenone: $C_{13}H_{10}O$	119-61-9	25%

## 4. First-Aid Measures

General:	Consult a physician. Show this SDS to the doctor in attendance.
Inhalation:	Remove to fresh air. Get medical attention for any breathing difficulty.
Ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Skin Contact:	Wash exposed area with soap and water. Get medical advice if irritation develops.
Eye Contact:	Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Consult a physician.

## 5. Fire-Fighting Measures

Fire Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or CO<sub>2</sub>.  
Special Information: Carbon Oxides, Nitrogen oxides (NOx). Use protective clothing and breathing equipment appropriate for the fire.

## 6. Accidental Release Measures

- (a) Personal precautions, protective equipment:  
Use PPE (see section 8). Avoid dust formation. Avoid breathing vapors, mist, gas, or dust. Ensure adequate ventilation.
- (b) Environmental precautions:  
Do not let product enter drains.
- (c) Methods and materials for containment and cleaning up:  
Let any dust settle, then vacuum or sweep up material and place into a suitable disposal container. Avoid generating further dusty conditions by using a vacuum or wet sweeping.

## 7. Handling and Storage

- (a) Precautions for safe handling:  
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid material may result in the formation of combustible dust.
- (b) Conditions for safe storage:  
Keep in a tightly closed container, stored in a cool, dry, ventilated area. Air and light sensitive.  
Storage class (TRGS 510): Non-Combustible Solids.

## 8. Exposure Controls/Personal Protection

- (a) Airborne Exposure Limits:  
4-Aminobenzoic Acid (150-13-0): Workplace Environmental Exposure Level (WEEL): 5 mg/m<sup>3</sup> (TWA)  
Benzophenone (119-61-9): Workplace Environmental Exposure Level (WEEL): 5 mg/m<sup>3</sup> (TWA)
- (b) Appropriate engineering controls:  
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.
- (c) Individual protection measures, personal protective equipment (PPE):  
Eye/Face Protection: Safety Glasses and Face Shield, ANSI or NIOSH approved.  
Skin Protection: Handle using Nitrile gloves.  
Body Protection: If its use requires manual handling, wear long sleeves  
Respiratory Protection: For dusty conditions, dust respirator, NIOSH/MSHA approved.

## 9. Physical and Chemical Properties

- (a) Appearance (physical state, color, etc.): Solid, off-white powder
- (b) Odor: No data
- (c) Odor threshold: No data
- (d) pH: 3.5 at 5 g/l at 20 °C
- (e) Melting point/freezing point: Melting: 187-189 °C
- (f) Initial boiling point and boiling range: No data
- (g) Flash point: No data

## 9. Physical and Chemical Properties (continued)

(h) Evaporation rate:	No data
(i) Flammability (solid, gas):	No data
(j) Upper/lower flammability or explosive limits:	No data
(k) Vapor pressure:	No data
(l) Vapor density:	No data
(m) Relative Density:	1.38 g/cm <sup>3</sup> at 25 °C
(n) Solubility (ies):	1.88 g/l at 20 °C (68 °F) - OECD Test 105 – soluble (PABA)
(o) Partition coefficient: n-octanol/water:	log Pow: 1.33
(p) Auto-ignition temperature:	No data
(q) Decomposition temperature:	No data
(r) Viscosity:	No data

## 10. Stability and Reactivity

(a) Reactivity:	See below
(b) Chemical stability:	Stable under ordinary conditions of use and storage
(c) Possibility of hazardous reactions:	See below
(d) Conditions to avoid:	Exposure to light (may discolor)
(e) Incompatible materials:	Strong oxidizing agents, strong bases
(f) Hazardous decomposition products:	Will not occur, in the event of fire, see Section 5

## 11. Toxicological Information

- (a) Likely routes of exposure: inhalation, ingestion, skin and eye contact
- (b) Symptoms related to the physical, chemical and toxicological characteristics: No data available
- (c) Delayed and immediate effects, chronic effects from short- and long-term exposure: No data available
- (d) Toxicity:

Inhalation: May cause respiratory irritation.

LD50 Oral, Rat – 2,150 mg/kg (Behavioral: Somnolence, Muscle weakness)

LD50 Oral - Rabbit - 1,830 mg/kg

Skin Corrosion/Irritation:

LD50 Dermal, Rat, male and female - >2,000mg/kg (OECD Test Guideline 402)

Serious eye damage/eye irritation: No data available

Respiratory or skin sensitization: No data available

Germ cell mutagenicity: Mouse - DNA damage

Reproductive: No data available

- (e) NTP / IARC / OSHA Carcinogen Listing:

Ingredient:	IARC:	Category:
Benzophenone	119-61-9	2B
4-Aminobenzoic Acid	150-13-0	3

## 12. Ecological information

### (a) Ecotoxicity (aquatic and terrestrial)

Toxicity to fish: mortality NOEC - Pimephales promelas (fathead minnow) - 5.86 mg/l - 7.0 d  
mortality LOEC - Pimephales promelas (fathead minnow) - 9.24 mg/l - 7.0 d  
LC50 - Pimephales promelas (fathead minnow) - 14.2 mg/l - 96.0 h

Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 0.28 mg/l - 24 h

### (b) Persistence and degradability

Biodegradability: aerobic - Exposure time 28 d (PABA)  
Result: 89 % - Readily biodegradable (OECD Test Guideline 301B)

### (c) Bioaccumulative potential;

### (d) Mobility in soil;

(e) Other adverse effects: No data available

## 13. Disposal Considerations

Product: Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations.

Container: Dispose of container as unused product in accordance with federal, state and local requirements.

## 14. Transport Information

DOT (US): Not dangerous goods

IMDG:

UN number: 3077      Class: 9      Packing group: III      EMS-No: F-A, S-F  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Benzophenone)  
Marine pollutant: yes

IATA:

UN number: 3077      Class: 9      Packing group: III  
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Benzophenone)

Further information:

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

## 15. Regulatory Information

### 15.1 US Federal Regulations

Toxic Substances Control Act (TSCA) Section 8(b): This material or its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory.

CERCLA Regulated Chemicals: This material does not contain any CERCLA regulated chemicals.

SARA Title III - Section 302 - Notification and Information: This material does not contain any SARA extremely hazardous substances.

## 15. Regulatory Information (continued)

SARA 311/312 Hazard Class: Chronic Health Hazard

SARA Title III - Section 313 - Toxic Chemical Release Reporting: This material does not contain any SARA 313 chemicals above de minimus levels.

HAPS (Hazardous Air Pollutants): This material does not contain any hazardous air pollutants.

### 15.2 US States Regulatory Reporting

CA Proposition 65 Carcinogens:

WARNING! This product contains a chemical known to the State of California to cause cancer.

Ingredient	CAS-No.	Revision Date
Benzophenone	119-61-9	2012-07-20

CA Proposition 65 Reproductive Toxins: This product does not contain any substances known to the State of California to cause reproductive harm.

Massachusetts Substance List: This material contains no listed components.

New Jersey, Pennsylvania Right-to-Know Hazardous Substance Lists:

Ingredient:	CAS Number:
4-Aminobenzoic acid (PABA): $C_7H_7NO_2$	150-13-0
Benzophenone	119-61-9

## 16. Other Information

NFPA 704 (National Fire Protection Association):

Health: 2, Flammability: 1, Reactivity: 0, Others: None

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide):

Health: 2, Flammability: 0, Physical Hazard: 0, PPE: X

This SDS has been prepared to meet the requirements defined in 29CFR1910.1200 - Hazard Communication, and its appendices; and organized per Table D.1. Teledyne Isco provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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