

SAFETY DATA SHEET (SDS)

SDS – 085

Revision number: 1

Rev. 5/16

AUTION CHECK Plus Control–Level 2

Part Numbers: 102478

**For use with the AUTION HYBRID AU-4050, AUTION MAX
AX-4280 & AUTION MAX AX-4030**

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SAFETY DATA SHEET

SDS No. : 73527UA-2
Issue Date : 13 Apr. 2016
Revision Date :-

1. IDENTIFICATION

1.1 Product Identifier

Product name: AUTION CHECK Plus Level 2

Product number: 102478

1.2 Intended Use of the Product

Laboratory Quality Control Material. For professional use only.

1.3 Name, Address, and Telephone of the Responsible Party

ARKRAY FACTORY, Inc.

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1.4 Emergency telephone number

Emergency Number: +31-20-545-2450

2. HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

GHS – US classification

Skin Sens. 1 H317

Full text of H-phrases: see section 16

2.2 Label Elements

GHS–US Labeling

Hazard Pictograms (GHS-US):



Signal Word (GHS-US): Warning

Hazard Statements (GHS-US): H317 – May cause an allergic skin reaction.

Precautionary Statements (GHS-US): P261 – Avoid breathing vapors, mist, or spray.

P272 – Contaminated work clothing should not be allowed out of the workplace.

P280 – Wear protective gloves, protective clothing, and eye protection.

P302 + P352 – IF ON SKIN: Wash with plenty of water.

P333 + P313 – if skin irritation or rash occurs: Get medical advice/attention.

P363 – Wash contaminated clothing before reuse.

P501 – Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3 Other Hazards

No additional information available.

2.4 Unknown Acute Toxicity (GHS–US) No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Not applicable

3.2 Mixture

| Name | Product identifier | %(w/w) | GHS – US classification |
|--|---------------------|--------|--|
| 2,4-Pentanedione | (CAS No) 123-54-6 | 0.11 | Flam.Liq.3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox, 3 (Inhalation: vapour), H331 Aquatic Acute 3, H402 |
| Mixture, 3(2H)-isothiazolone,5-chloro- 2-methyl-with 2-methyl-3(2H)-isothiazolone | (CAS No) 55965-84-9 | 0.003 | Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 |

Full text of H-phrases: see section 16

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.(show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion: Rinse mouth, Do NOT induce vomiting.

4.2 Most Important Symptoms and Effects Both Acute and Delayed

General: May cause an allergic reaction in sensitive individuals.

Inhalation: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

Skin Contact: May cause sensitization of susceptible persons by skin contact.

Eye Contact: May cause eye irritation.

Ingestion: If a large quantity has been ingested: May cause nausea, vomiting, and diarrhea.

Chronic Symptoms: None expected under anticipated conditions of normal use.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container at hand.

5. FIRE - FIGHTING MEASURES**5.1 Extinguishing Media**

Suitable Extinguishing Media: Carbon dioxide, dry chemical powder, alcohol foam, polymer foam, water spray, fog

Un suitable Extinguishing Media: None known.

5.2 Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3 Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

Firefighting Instructions: Exercise caution when fighting any chemical fire.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: The product is not flammable. However, under fire conditions, decomposition may produce carbon monoxide and carbon dioxide.

Reference to Other Sections

Refer to section 9 for flammability properties.

6. ACCIDENTAL RELEASE MEASURES**6.1 Personal Precautions, Protective Equipment and Emergency Procedures**

General Measures: Avoid breathing vapor, mist, or spray. Avoid contact with skin, eyes, or clothing.

6.1.1 For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency procedures: Evacuate unnecessary personnel.

6.1.2 For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

6.2 Environmental Precautions

Prevent entry to sewers and public waters.

6.3 Methods and Material for Containment and Cleaning Up

For Containment: Absorb and/or contain spill with inert material, then place in suitable container.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely.

6.4 Reference to Other Sections

See heating 8, Exposure Controls and Personal Protection.

7. HANDLING AND STORAGE**7.1 Precautions for Safe Handling**

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

7.3 Specific End Use(s)

Laboratory Quality Control Material. For professional use only.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

| 2,4-Pentanedione (123-54-6) | | |
|------------------------------------|-------------------------|--|
| USA ACGIH | ACGIH TWA (ppm) | 25 ppm |
| USA ACGIH | ACGIH chemical category | Skin–potential significant contribution to overall exposure by the cutaneous route |
| Manitoba | OEL TWA (ppm) | 25 ppm |
| Newfoundland & Labrador | OEL TWA (ppm) | 25 ppm |
| Nova Scotia | OEL TWA (ppm) | 25 ppm |
| Ontario | OEL TWA (ppm) | 25 ppm |
| Prince Edward Island | OEL TWA (ppm) | 25 ppm |

8.2 Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

Personal Protective Equipment: Protective goggles. Gloves. Protective clothing.



Materials for Protective Clothing: Chemically resistant fabrics and materials.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Other Information: When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

| | | |
|--|---|---|
| Physical State | : | Liquid |
| Appearance | : | Amber Yellow |
| Odor | : | Odorless |
| Odor Threshold | : | Not available |
| pH | : | 6 |
| Evaporation Rate | : | Not available |
| Melting Point | : | Not available |
| Freezing Point | : | Not available |
| Boiling Point | : | Not available |
| Flash Point | : | Not available |
| Auto-ignition Temperature | : | Not available |
| Decomposition Temperature | : | Not available |
| Flammability (solid, gas) | : | Not available |
| Lower Flammable Limit | : | Not available |
| Upper Flammable Limit | : | Not available |
| Vapor Pressure | : | Not available |
| Relative Vapor Density at 20°C | : | Not available |
| Specific Gravity | : | 1 |
| Solubility | : | Not available |
| Partition Coefficient N-Octanol/Water | : | Not available |
| Viscosity | : | Not available |
| Explosion Data–Sensitivity to Mechanical Impact | : | Not expected to present an explosion hazard due to mechanical impact. |
| Explosion Data–Sensitivity to Static Discharge | : | Not expected to present an explosion hazard due to static discharge. |

10. STABILITY AND REACTIVITY

10.1 Reactivity: Hazardous reactions will not occur under normal conditions.

10.2 Chemical Stability: Product is stable.

10.3 Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4 Conditions to Avoid: Direct sunlight. Extremely high or low temperatures.

10.5 Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

10.6 Hazardous Decomposition Products: The product is not flammable. However, under fire conditions, decomposition may produce carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects - Product

Acute Toxicity: Not classified

- LD50 and LC50 Data:** Not available
- Skin Corrosion/Irritation:** Not classified
- Serious Eye Damage/Irritation:** Not classified
- Respiratory or Skin Sensitization:** May cause an allergic skin reaction.
- Germ Cell Mutagenicity:** Not classified
- Teratogenicity:** Not available
- Carcinogenicity:** Not classified
- Specific Target Organ Toxicity (Repeated Exposure):** Not classified
- Reproductive Toxicity:** Not classified
- Specific Target Organ Toxicity (Single Exposure):** Not classified
- Aspiration Hazard:** Not classified
- Symptoms/Injuries After Inhalation:** Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
- Symptoms/Injuries After Skin Contact:** May cause sensitization of susceptible persons by skin contact.
- Symptoms/Injuries After Eye Contact:** May cause eye irritation.
- Symptoms/Injuries After Ingestion:** If a large quantity has been ingested: May cause nausea, vomiting, and diarrhea.
- Chronic Symptoms:** None expected under anticipated conditions of normal use.

11.2. Information on Toxicological Effects–Ingredient(s)

LD50 and LC50 Data:

| Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone (55965-84-9) | |
|--|--------------------------|
| LD50 Oral Rat | 53 mg/kg |
| ATE US (oral) | 53.00 mg/kg body weight |
| ATE US (dermal) | 300.00 mg/kg body weight |
| ATE US (dust, mist) | 0.50 mg/l/4h |

| 2,4-Pentanedione (123-54-6) | |
|------------------------------------|--------------|
| LD50 Oral Rat | 760 mg/kg |
| LD50 Dermal Rabbit | 770 mg/kg |
| LC50 Inhalation Rat | 5.01 mg/l/4h |
| LC50 Inhalation Rat | 1224 ppm/4h |

12. ECOLOGICAL INFORMATION

12.1 Toxicity No additional information available

| 2,4-Pentanedione (123-54-6) | |
|------------------------------------|---|
| LC50 Fish 1 | 98.3 - 110 mg/l (Exposure time: 96 h – Species : Pimephales promelas [flow - through]) |
| EC50 Daphnia 1 | 34.4 mg/l (Exposure time: 48 h – Species :Daphnia magna) |
| LC50 Fish 2 | 50.3 – 71.8 ml/l (Exposure time: 96 h – Species : Lepomis macrochirus [flow - through]) |

12.2 Persistence and Degradability

| AUTION CHECK Plus Level 2 | |
|--------------------------------------|------------------|
| Persistence and Degradability | Not established. |

12.3 Bioaccumulative Potential

| | |
|----------------------------------|------------------|
| AUTION CHECK Plus Level 2 | |
| Bioaccumulative Potential | Not established. |

| | |
|------------------------------------|------|
| 2,4-Pentanedione (123-54-6) | |
| Log Pow | 0.34 |

12.4 Mobility in Soil Not available

12.5 Other Adverse Effects

Other information: Avoid release to the environment.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal Recommendations: Dispose of waste material in accordance with all local, regional, and international regulations.

14. TRANSPORT INFORMATION

- 14.1. In Accordance with DOT Not regulated for transport
- 14.1. In Accordance with IMDG Not regulated for transport
- 14.1. In Accordance with IATA Not regulated for transport
- 14.1. In Accordance with TDG Not regulated for transport

15. REGULATORY INFORMATION


15.1. US Federal Regulations

| | |
|---|--|
| 2,4-Pentanedione (123-54-6) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| EPA TSCA Regulatory Flag | S - S – indicates a substance that is identified in a proposed or final Significant New Uses Rule. |

15.2. US State Regulations

| |
|--|
| 2,4-Pentanedione (123-54-6) |
| U.S. – Massachusetts – Right To Know List |
| U.S. – New Jersey – Right to know Hazardous Substance List |
| U.S. – Pennsylvania – RTK (Right to know) List |

15.3. Canadian Regulations

| | |
|---|---|
| AUTION CHECK Plus Level 2 | |
| WHMIS Classification | Class D Division 2 Subdivision B – Toxic material causing other toxic effects |
|  | |

| | |
|---|--|
| 2,4-Pentanedione (123-54-6) | |
| Listen on the Canadian DSL (Domestic Substances List) | |
| Listen on the Canadian IDL (Ingredient Disclosure List) | |

| | |
|-----------------------|--|
| IDL Concentration 1 % | |
| WHMIS Classification | Class B Division 2 – Flammable Liquid Class D Division 1 Subdivision B – Toxic material causing immediate and serious toxic effects Class D Division 1 Subdivision A – Very toxic material causing immediate and serious toxic effects |

| | |
|--|--|
| Mixture, 3(2H)–isothiazolone, 5–chloro–2–methyl– with 2–methyl–3(2H)–isothiazolone (55965–84–9) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| WHMIS Classification | Class D Division 2 Subdivision B – Toxic material causing other toxic effects Class E – Corrosive Material Class D Division 1 Subdivision B – Toxic material causing immediate and serious toxic effects |

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

16. OTHER INFORMATION, INCLUDING DATA OF PREPARATION OR LAST REVISION

Date sources: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full text Phrases:

| | |
|---------------------------------------|--|
| Acute Tox. 3 (Dermal) | Acute toxicity (dermal) Category 3 |
| Acute Tox. 3 (Inhalation: dust, mist) | Acute toxicity (inhalation: dust, mist) Category 3 |
| Acute Tox. 3 (Inhalation: vapour) | Acute toxicity (inhalation: vapour) Category 3 |
| Acute Tox. 3 (Oral) | Acute toxicity (Oral) Category 3 |
| Acute Tox. 4 (Oral) | Acute toxicity (Oral) Category 4 |
| Aquatic Acute 1 | Hazardous to the aquatic environment – Acute Hazard Category 1 |
| Aquatic Acute 2 | Hazardous to the aquatic environment – Acute Hazard Category 2 |
| Aquatic Acute 3 | Hazardous to the aquatic environment – Acute Hazard Category 3 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment – Chronic Hazard Category 1 |
| Eye Dam. 1 | Serious eye damage/eye irritation Category 1 |
| Flam. Liq. 3 | Flammable liquids Category 3 |
| Met. Corr. 1 | Corrosive to metals Category 1 |
| Skin Corr. 1A | Skin corrosion/irritation Category 1A |
| Skin Corr. 1B | Skin corrosion/irritation Category 1B |
| Skin Sens. 1 | Skin Sensitization Category 1 |
| STOT SE 3 | Specific target organ toxicity (Single exposure) Category 3 |
| H226 | Flammable liquid and vapour |
| H290 | May be corrosive to metals |
| H301 | Toxic if swallowed |
| H302 | Harmful if swallowed |
| H311 | Toxic in contact with skin |
| H314 | Causes severe skin burns and eye damage |

| | |
|------|--|
| H317 | May cause an allergic skin reaction |
| H318 | Causes serious eye damage |
| H331 | Toxic if inhaled |
| H335 | May cause respiratory irritation |
| H400 | Very toxic to aquatic life |
| H401 | Toxic to aquatic life |
| H402 | Harmful to aquatic life |
| H410 | Very toxic to aquatic life with long lasting effects |

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.