

Date Prepared: 04/15/2004

SDS No: Sn63 TT Date Revised: 08/21/2017

Revision No: 5

Delta® Tip Tinner (Sn63/Pb37)

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Delta® Tip Tinner (Sn63/Pb37)

PRODUCT DESCRIPTION: Tip Tinner

MANUFACTURER

Qualitek International, Inc.

315 Fairbank Street Addison, IL 60101

Emergency Phone: (800)535-5053 **Customer Service:** (630)-628-8083

24 HR. EMERGENCY TELEPHONE NUMBERS

1-800-535-5053 Infotrac 1-352-323-3500 Outside the U.S.

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Target Organ Toxicity (Repeated exposure), Category 1 Reproductive Toxicity, Category 1

GHS LABEL



Health hazard



Exclamation mark

SIGNAL WORD: DANGER HAZARD STATEMENTS

H372: Causes damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

H360: May damage fertility or the unborn child (state specific effect if known)(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

PRECAUTIONARY STATEMENT(S)

Prevention:

P264: Wash hands thoroughly after handling.

Response:

P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.



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Delta® Tip Tinner (Sn63/Pb37)

Disposal:

P501: Dispose of contents/container in accordance to local/regional/national/international regulations.

POTENTIAL HEALTH EFFECTS

EYES: Fumes from this and other soldering products may cause eye irritation.

SKIN: Fumes from this and other soldering products may cause skin irritation.

INGESTION: Ingestion of this or other soldering products may cause headache, nausea, and muscular pain.

INHALATION: Inhalation of the fumes from this or other soldering products may cause headache, nausea and muscular pain.

CARCINOGENICITY: Not listed as a carcinogen by NTP, OSHA, or ACGIH. IARC classifies "lead and its compounds" as a Group 28 Carcinogen (possibly carcinogenic to humans).

MEDICAL CONDITIONS AGGRAVATED: Pre-existing conditions of the lungs, kidneys, nervous system and possibly reproductive systems; diseases of the blood forming organs

ROUTES OF ENTRY: Inhalation, ingestion, eye or skin contact.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Tin	46.7 - 47.7	7440-31-5
Lead	27.3 - 28.3	7439-92-1
Monoammonium Phosphate	< 25	7722-76-1

4. FIRST AID MEASURES

SIGNS AND SYMPTOMS OF OVEREXPOSURE

CHRONIC EFFECTS: Prolonged or repeated exposure due to ingestion may cause anemia, insomnia, weakness, constipation and abdominal pain. Prolonged or repeated exposure due to skin exposure and inhalation may cause skin rash and damage to the mucous membranes.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, or alcohol-type foam.

EXPLOSION HAZARDS: Closed containers may explode when exposed to fire conditions.

FIRE FIGHTING EQUIPMENT: Self contained breathing apparatus with full face piece operated in positive pressure demand mode, appropriate turn-out gear and chemical resistant personal protective equipment is recommended.



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6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Extinguish all sources of ignition. If product is not contaminated, scoop into clean containers for use. If product is contaminated, scoop into containers and dispose appropriately.

RELEASE NOTES: Avoid repeated or prolonged breathing or skin contact. Wash hands immediately, and remove material from under the fingernails.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Do not store or use near sparks or open flames. Keep containers tightly closed and upright when not in use in order to prevent leakage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: General (mechanical) room ventilation is expected to be satisfactory where this product is stored and handled and in closed equipment. Special local ventilation is needed at points where vapors can be expected to escape into the workplace air.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Face shield, safety glasses with side shield or chemical splash goggles. When working with molten material, face shield is recommended.

SKIN: Rubber, chemical resistant gloves. When material is heated, wear gloves to protect against thermal burns.

RESPIRATORY: Not normally needed in well ventilated areas. If the ventilation is insufficient to remove smoke from soldering processes, use NIOSH/MSHA approved cartridge type respirator.

PROTECTIVE CLOTHING: Protective clothing and safety shoes as necessary to minimize contact.

WORK HYGIENIC PRACTICES: Good personal hygiene practices should be used. Wash after any contact, before eating, and at the end of the work period.

OTHER USE PRECAUTIONS: Eye wash station and quick drench safety shower in immediate work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Mild.

APPEARANCE: Powder. **COLOR:** Metallic gray.

FLASH POINT AND METHOD: None FLAMMABLE LIMITS: Not Established

AUTOIGNITION TEMPERATURE: Not Determined

VAPOR PRESSURE: Not Determined



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Delta® Tip Tinner (Sn63/Pb37)

VAPOR DENSITY: Not Determined

BOILING POINT: 730°C (1346°F) (vehicle)

MELTING POINT: 183°C (361.4°F)

SOLUBILITY IN WATER: Partially Soluble

SPECIFIC GRAVITY: 8.4 to 8.42 (water=1)

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Will not occur.

STABILITY: Stable under ordinary use and storage conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: May emit toxic fumes of carbon monoxide and carbon

diox ide.

INCOMPATIBLE MATERIALS: Strong acids and strong oxidizers should be avoided...

11. TOXICOLOGICAL INFORMATION

GENERAL COMMENTS: No toxicological information available at this time.

12. ECOLOGICAL INFORMATION

GENERAL COMMENTS: No information on ecological toxicity or biodegradability is available at this time.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of this material, contaminated absorbent material and other contaminated materials in an approved waste disposal facility, according to all applicable Federal, State, and Local regulations. Recovery and reuse, rather than disposal, should be the ultimate goal in handling efforts.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not regulated by DOT

AIR (ICAO/IATA)

SHIPPING NAME: Not regulated

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Acute health, chronic health and fire hazard.



Date Prepared: 04/15/2004

SDS No: Sn63 TT Date Revised: 08/21/2017

Revision No: 5

Delta® Tip Tinner (Sn63/Pb37)

313 REPORTABLE INGREDIENTS: This product may contain one or both of the following: Lead CAS# 7439-92-1 or Silver CAS# 7440-22-4. Exact weight percentages can be determined from the product label.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: All ingredients are listed or are exempt from listing (as polymers) on the Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

CALIFORNIA PROPOSITION 65: The following components are known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement Act of 1986.": Lead CAS# 7439-92-1

16. OTHER INFORMATION

REASON FOR ISSUE: New format

APPROVED BY: P. Han **TITLE:** Technical Director

PREPARED BY: J. Saleda-Layton **Date Revised:** 08/21/2017

INFORMATION CONTACT: (630) 628-8083

REVISION SUMMARY: This SDS replaces the 04/30/2015 SDS. Revised: **Section 1:** SDS No.

HMIS RATING



MANUFACTURER DISCLAIMER: The information contained herein is based upon data considered to be accurate and is offered solely for information, customer consideration and investigation. The manufacturer extends no warranties, makes no representations and assumes no responsibility as to the accuracy, completeness or suitability of this data for any purchaser's use. The content of this Safety Data Sheet relates only to this product as sold and does not relate to use with any other material or in any process. All chemical products should be used only by, or under, the direction of technically qualified personnel, who are aware of the hazards involved and of the necessity for reasonable care in handling. Hazard communication regulations, United States Occupational Health and Safety (OSHA) and Canadian Workplace Hazardous Materials Information System (WHMIS) require that employees must be trained in the use of Safety Data Sheets as a source of hazards information and response.



Date Prepared: 12/10/2009

SDS No: SAC305 TT Date Revised: 08/21/2017

Revision No: 4

Delta® Tip Tinner (Sn96.5/Ag3.0/Cu0.5)

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Delta® Tip Tinner (Sn96.5/Ag3.0/Cu0.5)

PRODUCT DESCRIPTION: Lead Free Tip Tinner

MANUFACTURER

24 HR. EMERGENCY TELEPHONE NUMBERS

1-800-535-5053 Infotrac

1-352-323-3500 Outside the U.S.

Qualitek International, Inc. 315 Fairbank Street

Addison, IL 60101

Emergency Phone: (800)535-5053 **Customer Service:** (630)-628-8083

2. HAZARDS IDENTIFICATION

GHS LABEL

HAZARD STATEMENTS

H303: May be harmful if swallowed.

PRECAUTIONARY STATEMENT(S)

Prevention:

P264: Wash hands thoroughly after handling.

Response:

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Disposal:

P501: Dispose of contents/container in accordance to local/regional/national/international regulations.

POTENTIAL HEALTH EFFECTS

EYES: Fumes from this and other soldering products may cause eye irritation.

SKIN: Fumes from this and other soldering products may cause skin irritation.

INGESTION: Ingestion of this or other soldering products may cause headache, nausea, and muscular pain.

INHALATION: Inhalation of the fumes from this or other soldering products may cause headache, nausea and muscular pain.

CARCINOGENICITY: Not listed as a carcinogen by NTP, OSHA, or ACGIH. IARC classifies "lead and its compounds" as a Group 28 Carcinogen (possibly carcinogenic to humans).

MEDICAL CONDITIONS AGGRAVATED: Pre-existing conditions of the lungs, kidneys, nervous system and possibly reproductive systems; diseases of the blood forming organs



Date Prepared: 12/10/2009

SDS No: SAC305 TT Date Revised: 08/21/2017

Revision No: 4

Delta® Tip Tinner (Sn96.5/Ag3.0/Cu0.5)

ROUTES OF ENTRY: Inhalation, ingestion, eye or skin contact.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Tin	< 57.9	7440-31-5
Silver	< 1.8	7440-22-4
Copper	< 0.3	7440-50-8
Monoammonium Phosphate	< 40	7722-76-1

4. FIRST AID MEASURES

EYES: MOLTEN PRODUCT: Cool burns with plenty of low-pressure water. Get immediate medical attention. SOLID PRODUCT: Remove any contact lenses. Immediately flush eyes with large quantities of water for at least 15 minutes. Get medical attention if irritation develops.

SKIN: MOLTEN PRODUCT: Immeditely cool skin burns with water and cold packs for at least 15 minutes. Do not put ice directly on the skin. Do not attempt to remove solidified product from the skin, as damage may result. Get immediate medical attention. SOLID PRODUCT: Immediately wash skin with soap and copious amounts of water. Use lotion to prevent dryness. Get medical attention if irritation develops.

INGESTION: If person is conscious, immediately give 2 glasses of water. Do not induce vomiting. Get immediate medical attention.

INHALATION: If symptoms of overexposure are experienced, evacuate to fresh air. If symptoms persist, seek medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

SKIN: Discomfort or rash.

INHALATION: Irritation of the pulmonary system.

CHRONIC EFFECTS: Prolonged or repeated exposure due to ingestion may cause anemia, insomnia, weakness, constipation and abdominal pain. Prolonged or repeated exposure due to skin exposure and inhalation may cause skin rash and damage to the mucous membranes.

COMMENTS: If victims of chemical over-exposure are taken for medical attention, give a copy of the label or this SDS to the physician/health care professional.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, or alcohol-type foam.

EXPLOSION HAZARDS: Closed containers may explode when exposed to fire conditions.



Date Prepared: 12/10/2009

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Delta® Tip Tinner (Sn96.5/Ag3.0/Cu0.5)

FIRE FIGHTING EQUIPMENT: Self contained breathing apparatus with full face piece operated in positive pressure demand mode, appropriate turn-out gear and chemical resistant personal protective equipment is recommended.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Scoop up material and deposit in appropriate containers. Clean up residual spill area with isopropanol or detergent water.

RELEASE NOTES: Avoid repeated or prolonged breathing or skin contact. Wash hands immediately, and remove material from under the fingernails.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Do not store or use near sparks or open flames. Keep containers tightly closed and upright when not in use in order to prevent leakage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: General (mechanical) room ventilation is expected to be satisfactory where this product is stored and handled and in closed equipment. Special local ventilation is needed at points where vapors can be expected to escape into the workplace air.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Face shield, safety glasses with side shield or chemical splash goggles. When working with molten material, face shield is recommended.

SKIN: Rubber, chemical resistant gloves. When material is heated, wear gloves to protect against thermal burns.

RESPIRATORY: Not normally needed in well ventilated areas. If the ventilation is insufficient to remove smoke from soldering processes, use NIOSH/MSHA approved cartridge type respirator.

PROTECTIVE CLOTHING: Protective clothing and safety shoes as necessary to minimize contact.

WORK HYGIENIC PRACTICES: Good personal hygiene practices should be used. Wash after any contact, before eating, and at the end of the work period.

OTHER USE PRECAUTIONS: Eye wash station and quick drench safety shower in immediate work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Mild.

APPEARANCE: Powder. **COLOR:** Metallic gray.

FLASH POINT AND METHOD: None



Date Prepared: 12/10/2009

SDS No: SAC305 TT Date Revised: 08/21/2017

Revision No: 4

Delta® Tip Tinner (Sn96.5/Ag3.0/Cu0.5)

FLAMMABLE LIMITS: Not Established

AUTOIGNITION TEMPERATURE: Not Determined

VAPOR PRESSURE: Not Determined VAPOR DENSITY: Not Determined

BOILING POINT: 730°C (1346°F) (vehicle)

MELTING POINT: 217°C (423°F) to 219°C (426°F)

SOLUBILITY IN WATER: Partially Soluble

SPECIFIC GRAVITY: 7.4

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Will not occur under normal use and storage conditions.

STABILITY: Stable under ordinary use and storage conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: May emit toxic fumes of carbon monoxide and carbon dioxide.

INCOMPATIBLE MATERIALS: Strong acids and strong oxidizers should be avoided...

11. TOXICOLOGICAL INFORMATION

CARCINOGENICITY

IARC: Not listed.
NTP: Not listed.
OSHA: Not listed.

GENERAL COMMENTS: No toxicological information available at this time.

12. ECOLOGICAL INFORMATION

GENERAL COMMENTS: No information on ecological toxicity or biodegradability is available at this time.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of this material, contaminated absorbent material and other contaminated materials in an approved waste disposal facility, according to all applicable Federal, State, and Local regulations. Recovery and reuse, rather than disposal, should be the ultimate goal in handling efforts.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)



Date Prepared: 12/10/2009

SDS No: SAC305 TT Date Revised: 08/21/2017

Revision No: 4

Delta® Tip Tinner (Sn96.5/Ag3.0/Cu0.5)

PROPER SHIPPING NAME: Not regulated by DOT

AIR (ICAO/IATA)

SHIPPING NAME: Not regulated

CANADA TRANSPORT OF DANGEROUS GOODS

SHIPPING NAME: Not regulated

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Chronic health hazard.

313 REPORTABLE INGREDIENTS: This product may contain one or more of the following: Lead CAS# 7439-92-1, Silver CAS# 7440-22-4, or Antimony CAS# 7440-36-0. Exact weight percentages can be determined from the product label.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: All ingredients are listed or are exempt from listing (as polymers) on the Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

CALIFORNIA PROPOSITION 65: The following components are known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement Act of 1986.": Lead CAS# 7439-92-1

16. OTHER INFORMATION

REASON FOR ISSUE: New format

APPROVED BY: P. Han **TITLE:** Technical Director

PREPARED BY: J. Saleda-Layton **Date Revised:** 08/21/2017

INFORMATION CONTACT: (630) 628-8083

REVISION SUMMARY: This SDS replaces the 05/04/2015 SDS.



Date Prepared: 12/10/2009

SDS No: SAC305 TT Date Revised: 08/21/2017

Revision No: 4

Delta® Tip Tinner (Sn96.5/Ag3.0/Cu0.5)

HMIS RATING



MANUFACTURER DISCLAIMER: The information contained herein is based upon data considered to be accurate and is offered solely for information, customer consideration and investigation. The manufacturer extends no warranties, makes no representations and assumes no responsibility as to the accuracy, completeness or suitability of this data for any purchaser's use. The content of this Safety Data Sheet relates only to this product as sold and does not relate to use with any other material or in any process. All chemical products should be used only by, or under, the direction of technically qualified personnel, who are aware of the hazards involved and of the necessity for reasonable care in handling. Hazard communication regulations, United States Occupational Health and Safety (OSHA) and Canadian Workplace Hazardous Materials Information System (WHMIS) require that employees must be trained in the use of Safety Data Sheets as a source of hazards information and response.



Date Prepared: 09/01/2010

SDS No: Sn42Bi58 TT Date Revised: 08/21/2017

Revision No: 3

Delta® Tip Tinner (Sn42/Bi58)

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Delta® Tip Tinner (Sn42/Bi58) **PRODUCT DESCRIPTION:** Lead Free Tip Tinner

MANUFACTURER

Qualitek International, Inc.

315 Fairbank Street Addison, IL 60101

Emergency Phone: (800)535-5053 **Customer Service:** (630)-628-8083

24 HR. EMERGENCY TELEPHONE NUMBERS

1-800-535-5053 Infotrac 1-352-323-3500 Outside the U.S.

2. HAZARDS IDENTIFICATION

GHS LABEL

HAZARD STATEMENTS

H303: May be harmful if swallowed.

PRECAUTIONARY STATEMENT(S)

Prevention:

P264: Wash hands thoroughly after handling.

Response:

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Disposal:

P501: Dispose of contents/container in accordance to local/regional/national/international regulations.

POTENTIAL HEALTH EFFECTS

EYES: Fumes from this and other soldering products may cause eye irritation.

SKIN: Fumes from this and other soldering products may cause skin irritation.

INGESTION: Ingestion of this or other soldering products may cause headache, nausea, and muscular pain.

INHALATION: Inhalation of the fumes from this or other soldering products may cause headache, nausea and muscular pain.

CARCINOGENICITY: Not listed as a carcinogen by NTP, OSHA, or ACGIH. IARC classifies "lead and its compounds" as a Group 28 Carcinogen (possibly carcinogenic to humans).

MEDICAL CONDITIONS AGGRAVATED: Pre-existing conditions of the lungs, kidneys, nervous system and possibly reproductive systems; diseases of the blood forming organs



Date Prepared: 09/01/2010 SDS No: Sn42Bi58 TT

Date Revised: 08/21/2017

Revision No: 3

Delta® Tip Tinner (Sn42/Bi58)

ROUTES OF ENTRY: Inhalation, ingestion, eye or skin contact.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Tin	< 25.2	7440-31-5
Bismuth	< 34.8	7440-69-9
Monoammonium Phosphate	< 40	7722-76-1

4. FIRST AID MEASURES

EYES: MOLTEN PRODUCT: Cool burns with plenty of low-pressure water. Get immediate medical attention. SOLID PRODUCT: Remove any contact lenses. Immediately flush eyes with large quantities of water for at least 15 minutes. Get medical attention if irritation develops.

SKIN: MOLTEN PRODUCT: Immeditely cool skin burns with water and cold packs for at least 15 minutes. Do not put ice directly on the skin. Do not attempt to remove solidified product from the skin, as damage may result. Get immediate medical attention. SOLID PRODUCT: Immediately wash skin with soap and copious amounts of water. Use lotion to prevent dryness. Get medical attention if irritation develops.

INGESTION: If person is conscious, immediately give 2 glasses of water. Do not induce vomiting. Get immediate medical attention.

INHALATION: If symptoms of overexposure are experienced, evacuate to fresh air. If symptoms persist, seek medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

SKIN: Discomfort or rash.

INHALATION: Irritation of the pulmonary system.

CHRONIC EFFECTS: Prolonged or repeated exposure due to ingestion may cause anemia, insomnia, weakness, constipation and abdominal pain. Prolonged or repeated exposure due to skin exposure and inhalation may cause skin rash and damage to the mucous membranes.

COMMENTS: If victims of chemical over-exposure are taken for medical attention, give a copy of the label or this SDS to the physician/health care professional.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, or alcohol-type foam.

EXPLOSION HAZARDS: Closed containers may explode when exposed to fire conditions.

FIRE FIGHTING EQUIPMENT: Self contained breathing apparatus with full face piece operated in positive



Date Prepared: 09/01/2010

SDS No: Sn42Bi58 TT Date Revised: 08/21/2017

Revision No: 3

Delta® Tip Tinner (Sn42/Bi58)

pressure demand mode, appropriate turn-out gear and chemical resistant personal protective equipment is recommended.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Scoop up material and deposit in appropriate containers. Clean up residual spill area with isopropanol or detergent water.

RELEASE NOTES: Avoid repeated or prolonged breathing or skin contact. Wash hands immediately, and remove material from under the fingernails.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Do not store or use near sparks or open flames. Keep containers tightly closed and upright when not in use in order to prevent leakage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: General (mechanical) room ventilation is expected to be satisfactory where this product is stored and handled and in closed equipment. Special local ventilation is needed at points where vapors can be expected to escape into the workplace air.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Face shield, safety glasses with side shield or chemical splash goggles. When working with molten material, face shield is recommended.

SKIN: Rubber, chemical resistant gloves. When material is heated, wear gloves to protect against thermal burns.

RESPIRATORY: Not normally needed in well ventilated areas. If the ventilation is insufficient to remove smoke from soldering processes, use NIOSH/MSHA approved cartridge type respirator.

PROTECTIVE CLOTHING: Protective clothing and safety shoes as necessary to minimize contact.

WORK HYGIENIC PRACTICES: Good personal hygiene practices should be used. Wash after any contact, before eating, and at the end of the work period.

OTHER USE PRECAUTIONS: Eye wash station and quick drench safety shower in immediate work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Mild.

APPEARANCE: Powder. **COLOR:** Metallic gray.

FLASH POINT AND METHOD: None FLAMMABLE LIMITS: Not Established



Date Prepared: 09/01/2010

SDS No: Sn42Bi58 TT Date Revised: 08/21/2017

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Delta® Tip Tinner (Sn42/Bi58)

AUTOIGNITION TEMPERATURE: Not Determined

VAPOR PRESSURE: Not Determined VAPOR DENSITY: Not Determined

BOILING POINT: > 1650°C (3000°F) (vehicle)

MELTING POINT: 139°C (282.2°F) SOLUBILITY IN WATER: Insoluble

SPECIFIC GRAVITY: 8.64 to 8.80 (water=1)

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Will not occur under normal use and storage conditions.

STABILITY: Stable under ordinary use and storage conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: May emit toxic fumes of carbon monoxide and carbon dioxide.

INCOMPATIBLE MATERIALS: Strong acids and strong oxidizers should be avoided...

11. TOXICOLOGICAL INFORMATION

CARCINOGENICITY

IARC: Not listed.
NTP: Not listed.
OSHA: Not listed.

GENERAL COMMENTS: No toxicological information available at this time.

12. ECOLOGICAL INFORMATION

GENERAL COMMENTS: No information on ecological toxicity or biodegradability is available at this time.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of this material, contaminated absorbent material and other contaminated materials in an approved waste disposal facility, according to all applicable Federal, State, and Local regulations. Recovery and reuse, rather than disposal, should be the ultimate goal in handling efforts.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not regulated by DOT



Date Prepared: 09/01/2010

SDS No: Sn42Bi58 TT Date Revised: 08/21/2017

Revision No: 3

Delta® Tip Tinner (Sn42/Bi58)

AIR (ICAO/IATA)

SHIPPING NAME: Not regulated

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Chronic health hazard.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: All ingredients are listed or are exempt from listing (as polymers) on the Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

CALIFORNIA PROPOSITION 65: The following components are known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement Act of 1986.": Lead CAS# 7439-92-1

16. OTHER INFORMATION

REASON FOR ISSUE: New format

APPROVED BY: P. Han **TITLE:** Technical Director

PREPARED BY: J. Saleda-Layton **Date Revised:** 08/21/2017

INFORMATION CONTACT: (630) 628-8083

REVISION SUMMARY: This SDS replaces the 05/04/2015 SDS.

HMIS RATING



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SDS No: Sn42Bi58 TT Date Revised: 08/21/2017

Revision No: 3

Delta® Tip Tinner (Sn42/Bi58)

sold and does not relate to use with any other material or in any process. All chemical products should be used only by, or under, the direction of technically qualified personnel, who are aware of the hazards involved and of the necessity for reasonable care in handling. Hazard communication regulations, United States Occupational Health and Safety (OSHA) and Canadian Workplace Hazardous Materials Information System (WHMIS) require that employees must be trained in the use of Safety Data Sheets as a source of hazards information and response.



Date Prepared: 08/04/2014

SDS No: Sn99.3/Cu0.7 TT **Date Revised:** 08/21/2017

Revision No: 2

Delta® Tip Tinner (Sn99.3/Cu0.7)

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Delta® Tip Tinner (Sn99.3/Cu0.7) **PRODUCT DESCRIPTION:** Lead Free Tip Tinner

MANUFACTURER

Qualitek International, Inc.

315 Fairbank Street Addison, IL 60101

Emergency Phone: (800)535-5053 **Customer Service:** (630)-628-8083

24 HR. EMERGENCY TELEPHONE NUMBERS

1-800-535-5053 Infotrac 1-352-323-3500 Outside the U.S.

2. HAZARDS IDENTIFICATION

GHS LABEL

HAZARD STATEMENTS

H303: May be harmful if swallowed.

PRECAUTIONARY STATEMENT(S)

Response:

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Disposal:

P501: Dispose of contents/container in accordance to local/regional/national/international regulations.

POTENTIAL HEALTH EFFECTS

EYES: Fumes from this and other soldering products may cause eye irritation.

SKIN: Fumes from this and other soldering products may cause skin irritation.

INGESTION: Ingestion of this or other soldering products may cause headache, nausea, and muscular pain.

INHALATION: Inhalation of the fumes from this or other soldering products may cause headache, nausea and muscular pain.

CARCINOGENICITY: Not listed as a carcinogen by NTP, OSHA, or ACGIH. IARC classifies "lead and its compounds" as a Group 28 Carcinogen (possibly carcinogenic to humans).

MEDICAL CONDITIONS AGGRAVATED: Pre-existing conditions of the lungs, kidneys, nervous system and possibly reproductive systems; diseases of the blood forming organs

ROUTES OF ENTRY: Inhalation, ingestion, eye or skin contact.

3. COMPOSITION / INFORMATION ON INGREDIENTS



Date Prepared: 08/04/2014

SDS No: Sn99.3/Cu0.7 TT **Date Revised:** 08/21/2017

Revision No: 2

Delta® Tip Tinner (Sn99.3/Cu0.7)

Chemical Name	Wt.%	CAS
Tin	< 60	7440-31-5
Copper	< 0.5	7440-50-8
Monoammonium Phosphate	< 40	7722-76-1

4. FIRST AID MEASURES

EYES: MOLTEN PRODUCT: Cool burns with plenty of low-pressure water. Get immediate medical attention. SOLID PRODUCT: Remove any contact lenses. Immediately flush eyes with large quantities of water for at least 15 minutes. Get medical attention if irritation develops.

SKIN: MOLTEN PRODUCT: Immeditely cool skin burns with water and cold packs for at least 15 minutes. Do not put ice directly on the skin. Do not attempt to remove solidified product from the skin, as damage may result. Get immediate medical attention. SOLID PRODUCT: Immediately wash skin with soap and copious amounts of water. Use lotion to prevent dryness. Get medical attention if irritation develops.

INGESTION: If person is conscious, immediately give 2 glasses of water. Do not induce vomiting. Get immediate medical attention.

INHALATION: If symptoms of overexposure are experienced, evacuate to fresh air. If symptoms persist, seek medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

SKIN: Discomfort or rash.

INHALATION: Irritation of the pulmonary system.

CHRONIC EFFECTS: Prolonged or repeated exposure due to ingestion may cause anemia, insomnia, weakness, constipation and abdominal pain. Prolonged or repeated exposure due to skin exposure and inhalation may cause skin rash and damage to the mucous membranes.

COMMENTS: If victims of chemical over-exposure are taken for medical attention, give a copy of the label or this SDS to the physician/health care professional.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, or alcohol-type foam.

EXPLOSION HAZARDS: Closed containers may explode when exposed to fire conditions.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Scoop up material and deposit in appropriate containers. Clean up residual spill area with isopropanol or detergent water.



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RELEASE NOTES: Avoid repeated or prolonged breathing or skin contact. Wash hands immediately, and remove material from under the fingernails.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Do not store or use near sparks or open flames. Keep containers tightly closed and upright when not in use in order to prevent leakage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: General (mechanical) room ventilation is expected to be satisfactory where this product is stored and handled and in closed equipment. Special local ventilation is needed at points where vapors can be expected to escape into the workplace air.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Face shield, safety glasses with side shield or chemical splash goggles. When working with molten material, face shield is recommended.

SKIN: Rubber, chemical resistant gloves. When material is heated, wear gloves to protect against thermal burns.

RESPIRATORY: Not normally needed in well ventilated areas. If the ventilation is insufficient to remove smoke from soldering processes, use NIOSH/MSHA approved cartridge type respirator.

PROTECTIVE CLOTHING: Protective clothing and safety shoes as necessary to minimize contact.

WORK HYGIENIC PRACTICES: Good personal hygiene practices should be used. Wash after any contact, before eating, and at the end of the work period.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Mild.

APPEARANCE: Powder. **COLOR:** Metallic gray.

FLASH POINT AND METHOD: None FLAMMABLE LIMITS: Not Established

AUTOIGNITION TEMPERATURE: Not Determined

BOILING POINT: > 1650°C (3000°F) (vehicle)

MELTING POINT: 227°C (440.6°F)

SOLUBILITY IN WATER: Partially Soluble

SPECIFIC GRAVITY: 7.22 to 7.38 (water=1)

10. STABILITY AND REACTIVITY



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HAZARDOUS POLYMERIZATION: Will not occur under normal use and storage conditions.

STABILITY: Stable under ordinary use and storage conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: May emit toxic fumes of carbon monoxide and carbon dioxide.

INCOMPATIBLE MATERIALS: Strong acids and strong oxidizers should be avoided...

11. TOXICOLOGICAL INFORMATION

CARCINOGENICITY

IARC: Not listed.
NTP: Not listed.
OSHA: Not listed.

GENERAL COMMENTS: No toxicological information available at this time.

12. ECOLOGICAL INFORMATION

GENERAL COMMENTS: No information on ecological toxicity or biodegradability is available at this time.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of this material, contaminated absorbent material and other contaminated materials in an approved waste disposal facility, according to all applicable Federal, State, and Local regulations. Recovery and reuse, rather than disposal, should be the ultimate goal in handling efforts.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not regulated by DOT

AIR (ICAO/IATA)

SHIPPING NAME: Not regulated

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Chronic health hazard.

313 REPORTABLE INGREDIENTS: This product may contain Silver CAS# 7440-22-4 and/or Copper CAS# 7440-50-8 (weight percentages can be determined from product label)

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)



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CERCLA REGULATORY: Not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: All ingredients are listed or are exempt from listing (as polymers) on the Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

CALIFORNIA PROPOSITION 65: The following components are known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement Act of 1986.": Lead CAS# 7439-92-1

16. OTHER INFORMATION

REASON FOR ISSUE: New format

APPROVED BY: P. Han **TITLE:** Technical Director

PREPARED BY: J. Saleda-Layton **Date Revised:** 08/21/2017

INFORMATION CONTACT: (630) 628-8083

REVISION SUMMARY: This SDS replaces the 05/04/2015 SDS.

HMIS RATING



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