

Schering-Plough HealthCare Products Canada,
a division of Schering-Plough Canada Inc.
3535 Trans-Canada
Pointe-Claire, Quebec
Canada H9R 1B4

MATERIAL SAFETY DATA SHEET

Schering-Plough urges each user or recipient of this MSDS to read the entire data sheet to become aware of the hazards associated with this material.

SECTION 1. IDENTIFICATION OF SUBSTANCE AND CONTACT INFORMATION

MSDS NAME: Coppertone Sunscreen Sprays (Alcohol-Based Aerosol)

SYNONYM(S): Coppertone Continuous Spray Sunscreen SPF 15-70
Coppertone Dry Oil Continuous Sunscreen Spray SPF 4-10
Coppertone Sport Pro Series Continuous Spray SPF 15
Coppertone Sport Pro Series Continuous Spray SPF 30
Coppertone Sport Pro Series Continuous Spray SPF 50+
Coppertone Kids Continuous Spray SPF 30-70+
Coppertone Sport Continuous Spray Sunscreen SPF 15-100+
Coppertone UltraGuard Continuous Sunscreen Spray SPF 15-70+
Coppertone Tanning Dry Oil Continuous Spray SPF 15

MSDS NUMBER: SP002612

EMERGENCY NUMBER(S): (908) 423-6000 (24/7/36) English Only

Transportation Emergencies - CANUTEC:
(613) 996-6666 (Canada)

INFORMATION: Schering-Plough HealthCare Products Canada
Customer Service (English): 1-800-361-6550
Service à la clientèle (French): 1-800-361-2431

MERCK MSDS HELPLINE: (908) 473-3371 (Worldwide)
Monday to Friday, 9am to 5pm (US Eastern Time)

SECTION 2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Aerosol
Clear to pale yellow
Mixture of fragrant and ethanol odors
Highly Flammable.
Severely irritating to eyes.
May cause effects to:
central nervous system
liver
kidney

Consumers: Refer to the package insert or product label for appropriate consumer-specific information about this product when used according to manufacturer's directions.

POTENTIAL HEALTH EFFECTS:

The health hazard information presented is based on studies conducted using the maximum concentrations of the active ingredients in the formulations. Any health effect would be expected to be similar to or less than those observed in those studies at the maximum concentration of total sunscreen agents tested.

Eye contact may cause severe eye irritation with temporary stinging, redness, tearing, and increased blinking. These products have been shown to be not sensitizing and not irritating to skin.

Ethanol (ethyl alcohol) is an eye, nose, and mucous membrane irritant. It may cause skin irritation or sensitization after prolonged exposure. Acute effects of ethanol may include headache, dizziness, nausea, sensations of warmth and cold, numbness, fatigue, breathing difficulty, cough, tearing, vision impairment, incoordination, decreased reaction time, alteration of mood and personality, slurred speech, coma and respiratory depression. Chronic effects may include concentration difficulty, sleepiness, kidney and liver damage, and cardiac effects. Chronic ingestion of ethanol may cause cancer of the oral cavity, pharynx, larynx, esophagus, and liver. Oral ingestion of alcohol during pregnancy may cause Fetal Alcohol Syndrome (FAS) including joint, limb, and cardiac abnormalities and behavioral and learning impairment. There have been no reports of FAS as a result of occupational handling of ethanol.

LISTED CARCINOGENS

INGREDIENT	CAS NUMBER	OSHA	IARC	NTP	ACGIH
Ethyl Alcohol	64-17-5			K	A3

Ethanol (ethyl alcohol): IARC (International Agency for Research on Cancer) has classified Alcoholic Beverages as Group 1 (indicating in their evaluation that the agent is carcinogenic to humans). However, occupational handling or manufacturer's specified use of this product is not expected to result in relevant exposures.

SECTION 3. COMPOSITION AND INFORMATION ON INGREDIENTS

PRODUCT USE: Consumer product

CHEMICAL FORMULA: Mixture.

The formulations for these products are proprietary information. These formulations have the same hazardous profile; however, the presence of hazardous ingredients may vary by formulation. Only hazardous ingredients in concentrations of 1% or greater and/or carcinogenic ingredients in concentrations of 0.1% or greater are listed in the Chemical Composition table. Active ingredients in any concentration are listed.

CHEMICAL COMPOSITION

INGREDIENT	CAS NUMBER	PERCENT
Ethyl Alcohol	64-17-5	45-85
Isopropyl Myristate	110-27-0	<15
Amines, Coco Alkyl Mixture		<10
Light Mineral Oil	8042-47-5	<10
Glycerin	56-81-5	<10
Avobenzone	70356-09-1	0-3
Homosalate	118-56-9	0-15
Octinoxate	5466-77-3	0-7.5
Octisalate	118-60-5	0-5
Octocrylene	6197-30-4	0-10
Oxybenzone	131-57-7	0-6

ADDITIONAL INFORMATION: This MSDS is written to provide health and safety information for individuals who will be handling the final product formulation during research, manufacturing, and distribution. For health and safety information for individual ingredients used during manufacturing, refer to the appropriate MSDS for each ingredient. Refer to the package insert or product label for handling guidance for the consumer.

SECTION 4. FIRST AID MEASURES

INHALATION: Remove to fresh air. If any trouble breathing, get immediate medical attention. Administer artificial respiration if breathing has ceased. If irritation or symptoms occur or persist, consult a physician.

SKIN CONTACT: In keeping with good hygienic practices, wash exposed areas thoroughly with soap and water.

EYE CONTACT: In case of eye contact, IMMEDIATELY rinse eyes thoroughly with plenty of water. If wearing contact lenses, remove only after initial rinse, and continue rinsing eyes for at least 15 minutes. Get IMMEDIATE medical attention.

INGESTION: Rinse mouth and drink a glass of water. Do not induce vomiting unless under the direction of a qualified medical professional or Poison Control Center. If symptoms persist, consult a physician.

SECTION 5. FIRE FIGHTING MEASURES

FLAMMABILITY DATA:

Flash Point: 13 deg C (55.4 deg F)
Classification: Highly Flammable (EU Criteria)
Flammable (US OSHA Criteria)
Flammable (Canada WHMIS Criteria)

SPECIAL FIRE FIGHTING PROCEDURES:

Wear full protective clothing and self-contained breathing apparatus (SCBA).

SUITABLE EXTINGUISHING MEDIA:

Carbon dioxide (CO₂), extinguishing powder or water spray.

See Section 9 for Physical and Chemical Properties.

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Wear appropriate personal protective equipment as specified in Section 8. Keep personnel away from the clean-up area.

SPILL RESPONSE / CLEANUP:

All spills should be handled according to site requirements and based on precautions cited in the MSDS. In the case of liquids, use proper absorbent materials. For laboratories and small-scale operations, incidental spills within a hood or enclosure should be cleaned by using a HEPA filtered vacuum or wet cleaning methods as appropriate. For large dry or liquid spills or those spills outside enclosure or hood, appropriate emergency response personnel should be notified. In manufacturing and large-scale operations, HEPA vacuuming prior to wet mopping or cleaning is required.

See Sections 9 and 10 for additional physical, chemical, and hazard information.

SECTION 7. HANDLING AND STORAGE

HANDLING:

Contents under pressure. Avoid contact with eyes. Keep containers adequately sealed during material transfer, transport, or when not in use. Wash face, hands, and any exposed skin after handling. Do not eat, drink, or smoke when using this substance or mixture.

Appropriate handling of this material is dependent on many factors, including physical form, duration and frequency of process or task, and effectiveness of engineering controls. Site-specific risk assessments should be conducted to determine the feasibility and the appropriateness of all exposure control measures. See Section 8 (Exposure Controls) for additional guidance.

STORAGE:

Keep away from heat, sparks, open flames, and direct sunlight. Store in a cool, dry, well ventilated area. Store at <48.9 deg C.

See Section 8 for exposure controls and additional safe handling information.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE CONTROLS

The health hazard risks of handling this material are dependent on many factors, including physical form, duration and frequency of process or task, and effectiveness of engineering controls. Site-specific risk assessments should be conducted to determine the feasibility and the appropriateness of all exposure control measures. Exposure controls for normal operating or routine procedures follow a tiered strategy. Engineering controls are the preferred means of long-term or permanent exposure control. If engineering controls are not feasible, appropriate use of personal protective equipment (PPE) may be considered as alternative control measures. Exposure controls for non-routine operations must be evaluated and addressed as part of the site-specific risk assessment.

RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE):

Respiratory Protection: None required for consumer use of this product.

Respiratory protective equipment (RPE) may be required for certain laboratory and large-scale manufacturing tasks if potential airborne breathing zone concentrations of substances exceed the relevant exposure limit(s). Workplace risk assessment should be completed before specifying and implementing RPE usage. Potential exposure points and pathways, task duration and frequency, potential employee contact with the substance, and the ability of the substance to be rendered airborne during specific tasks should be evaluated. Initial and ongoing strategies of quantitative exposure measurement should be obtained as required by the workplace risk assessment. All RPE must conform to local and regional specifications for efficacy and performance. Consult your site or corporate health and safety professional for additional guidance.

Skin Protection: None required for consumer use of this product.

Gloves that provide an appropriate barrier to the skin are recommended if there is potential for contact with this material. Consult your site safety staff for guidance.

Eye Protection: None required for consumer use of this product.

Safety glasses with side shields. Use of goggles or full face protection is required if there is potential for contact with this material. Consult your site safety staff for guidance.

Body Protection: None required for consumer use of this product.

In small-scale or laboratory operations, lab coats or equivalent protection is required. Disposable Tyvek or other dust impermeable suit should be considered based on procedure or level of exposure. Use of additional PPE such as shoe coverings, gauntlets, hood, or head covering may be necessary. Consult your site safety staff for guidance.

In large-scale or manufacturing operations, disposable Tyvek or other dust impermeable suit is recommended and based on level of exposure. Use of additional PPE such as shoe coverings, gauntlets, hood, or head covering may be necessary. Consult your site safety staff for guidance.

EXPOSURE LIMIT VALUES

INGREDIENT	CAS NUMBER	ACGIH TLV (TWA)	OSHA PEL (TWA)
Ethyl Alcohol	64-17-5		1000 ppm 1900 mg/m ³
Light Mineral Oil	8042-47-5	5 mg/m ³	5 mg/m ³
Glycerin	56-81-5	10 mg/m ³	15 mg/m ³

INGREDIENT	CAS NUMBER	ACGIH TLV (STEL / SKIN)	ACGIH TLV (CEIL)	OSHA PEL (STEL / SKIN)	OSHA PEL (CEIL)
Ethyl Alcohol	64-17-5	1000 ppm			

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

FORM: Aerosol
COLOR: Clear to pale yellow
ODOR: Mixture of fragrant and ethanol odors
BOILING POINT / RANGE: 78 deg C
SPECIFIC GRAVITY: 0.9112
SOLUBILITY:
Water: Emulsifies to a milky, white solution.
Ethanol: Soluble

See Section 5 for flammability/explosivity information.

SECTION 10. STABILITY AND REACTIVITY

STABILITY/ REACTIVITY:
Stable under normal conditions.

INCOMPATIBLE MATERIALS / CONDITIONS TO AVOID:

Open flames and high temperatures.

HAZARDOUS DECOMPOSITION PRODUCTS / REACTIONS:

No dangerous decomposition is expected if used according to manufacturer's specifications.

SECTION 11. TOXICOLOGICAL INFORMATION

These data are from studies using the maximum concentrations of the active ingredients in the final formulation. The information presented below pertains to the formulated product unless indicated otherwise.

ACUTE TOXICITY DATA**SKIN:**

Slightly irritating.

EYE:

Severely irritating.

ORAL:

Practically not toxic.

DERMAL AND RESPIRATORY SENSITIZATION:

Not sensitizing.

ADDITIONAL INFORMATION:

Negative in phototoxicity and photosensitivity studies.

REPEAT DOSE TOXICITY DATA**SUBCHRONIC / CHRONIC TOXICITY:**

Repeated oral and inhalation exposure to high concentrations of ethanol has caused kidney and liver damage in animals.

REPRODUCTIVE / DEVELOPMENTAL TOXICITY:

Ethanol: Exposure to large doses during gestation is reported to cause effects on reproduction, including fetotoxicity and growth retardation in mice, rats, and rabbits. However, no teratogenic effects were reported.

MUTAGENICITY / GENOTOXICITY:

Ethanol was positive in a bacterial mutagenicity study (Ames) and negative in a mammalian mutagenicity study (mouse lymphoma).

CARCINOGENICITY:

Rats given 25 to 50% ethanol by oral gavage or in the drinking water for one to two years did not show a significant increase in tumors compared to the control groups. Mice given 43% ethanol in drinking water for three years showed an increase in papillomas of the forestomach, malignant lymphomas and lung adenomas. Ethanol was an effective promoter of liver tumors in rats given a single intraperitoneal dose of diethylnitrosamine followed by treatment of ethanol in the drinking water for 12 to 18 months.

SECTION 12. ECOLOGICAL INFORMATION

There are no data for the final product or its formulation(s). The information presented below pertains to the following ingredient(s).

ECOTOXICITY DATA**INGREDIENT ECOTOXICITY**

Ethanol: 96-hr (static) LC50 (rainbow trout): 13 g/L
Ethanol: 96-hr (flow-through) LC50 (fathead minnow): 12.9-15.3 g/L
Avobenzone:
96-hr NOEL (fish): 7.7 mg/L
48-hr EC50 (daphnia): 1.97 mg/L

ENVIRONMENTAL DATA**OTHER INGREDIENT ENVIRONMENTAL DATA:**

Avobenzone is not readily biodegradable.

SECTION 13. DISPOSAL CONSIDERATIONS

MATERIAL WASTE:

Disposal must be in accordance with applicable federal, state/provincial, and/or local regulations. Incineration is the preferred method of disposal, when appropriate. Operations that involve the crushing or shredding of waste materials or returned goods must be handled to meet the recommended exposure limit(s).

PACKAGING AND CONTAINERS:

Disposal must be in accordance with applicable federal, state/provincial, and/or local regulations.

SECTION 14. TRANSPORT INFORMATION

This product may be shipped as a Consumer Commodity when packaged and shipped for consumer use. Refer to site-specific procedures and requirements for additional guidance.

DOT CLASSIFICATION:

Proper Shipping Name: Aerosols
Hazard Class: 2.1
UN Number: UN 1950
Packing Group: None

IATA/ICAO CLASSIFICATION:

Proper Shipping Name: Aerosols, flammable
Hazard Class: 2.1
UN Number: UN 1950
Packing Group: None

ADR CLASSIFICATION:

Proper Shipping Name: Aerosols
Hazard Class: 2.1
UN Number: UN 1950
Packing Group: None

IMDG/IMO CLASSIFICATION:

Proper Shipping Name: Aerosols
Hazard Class: 2.1
UN Number: UN 1950
Packing Group: None

SECTION 15. REGULATORY INFORMATION

WHMIS CLASSIFICATIONS:

This product has been classified in accordance with the hazard criteria on the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. The final packaged product is not subject to WHMIS classification. The following classification applies to the bulk formulation handled in the workplace.

Controlled Product Class: B2: Flammable Liquid
D2B: Toxic



TSCA LISTING

INGREDIENT	TSCA
Ethyl Alcohol	X
Isopropyl Myristate	X
Light Mineral Oil	X
Glycerin	X
Avobenzone	X

Homosalate	X
Octinoxate	X
Octisalate	X
Octocrylene	X
Oxybenzone	X

SECTION 16. OTHER INFORMATION

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequence of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).

DEPARTMENT ISSUING MSDS:

Global Safety & the Environment
Merck & Co., Inc.
One Merck Drive
Whitehouse Station, NJ 08889

MERCK MSDS HELPLINE:

(800) 770-8878 (US and Canada)
(908) 473-3371 (Worldwide)
Monday to Friday, 9am to 5pm (US Eastern Time)

MSDS CREATION DATE:

09-Dec-2011

SUPERSEDES DATE:

09-Dec-2011

SECTIONS CHANGED (CAN SUBFORMAT):

1

SIGNIFICANT CHANGES (CAN SUBFORMAT):

Synonyms



MERCK

Schering-Plough, S.A. de C.V.
Avenida 16 de Septiembre No. 301
Xaltocan, Xochimilco Mexico 16090 MEXICO, D.F.

MATERIAL SAFETY DATA SHEET

Schering-Plough urges each user or recipient of this MSDS to read the entire data sheet to become aware of the hazards associated with this material.

SECTION 1. IDENTIFICATION OF SUBSTANCE AND CONTACT INFORMATION

MSDS NAME: Coppertone Lotions (Low/No Oil)

SYNONYM(S): Coppertone Kids Lotion SPF 30
Coppertone Kids Spray SPF 45
Coppertone Oil Free Lotion SPF 8-50
Coppertone Oil Free Faces SPF-30
Coppertone Sport Dual Defense Lotion SPF 50+
Coppertone Sport Dual Defense Lotion SPF 80
Coppertone Sport Faces Lotion SPF 50
Coppertone Sport Lotion SPF 8-100+
Coppertone Lotion SPF 4 -8
Coppertone Lotions (Low/No Oil)
Coppertone Oil Free Faces Lotion SPF 15

MSDS NUMBER: SP000038

EMERGENCY NUMBER(S): (908) 423-6000 (24/7/365) English Only

MERCK SDS HELPLINE: +1 (908) 473-3371 (Worldwide)
Monday to Friday, 9am to 5pm (US Eastern Time)

SECTION 2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Color according to product specification
Lotion
Product-specific odor

Consumers: Refer to the package insert or product label for appropriate consumer-specific information about this product when used according to manufacturer's directions.

POTENTIAL HEALTH EFFECTS:

Although some ingredients used in the manufacture of this product are considered hazardous on an individual basis, the final formulation of this product is considered non-hazardous when used according to manufacturer's directions.

These products have been shown to be not irritating and not sensitizing to human skin. Eye contact may cause slight eye irritation with temporary stinging, redness, tearing, and increased blinking.

LISTED CARCINOGENS

Fields in the above table that do not contain data indicate that the materials have not been classified as human or animal carcinogens.

No carcinogens or potential carcinogens listed by OSHA, IARC, NTP or ACGIH are present in concentrations >0.1% in this mixture. Triethanolamine is classified by IARC as a Group 3 carcinogen (unclassifiable as to carcinogenicity in humans). Starch is classified by ACGIH as a Group A4 carcinogen (not classifiable as a human carcinogen).

SECTION 3. COMPOSITION AND INFORMATION ON INGREDIENTS

PRODUCT USE: Consumer product

CHEMICAL FORMULA: Mixture.

The formulations for these products are proprietary information. These formulations have the same hazardous profile; however, the presence of hazardous ingredients may vary by formulation. Only hazardous ingredients in concentrations of 1% or greater and/or carcinogenic ingredients in concentrations of 0.1% or greater are listed in the Chemical Composition table. Active ingredients in any concentration are listed.

CHEMICAL COMPOSITION

INGREDIENT	CAS NUMBER	EC NUMBER	EU CLASSIFICATION	PERCENT
Butyloctyl Salicylate	190085-41-7		R53	<15
Sorbitol	50-70-4	200-061-5		<10
Polyethylene Glycol	25322-68-3		Not Classified	<10
1,3-Butylene Glycol	107-88-0	203-529-7		<10
Aluminum Starch Octenylsuccinate	9087-61-0			<10
Propylene Glycol	57-55-6	200-338-0	Not Classified	<10
Stearic Acid	57-11-4	200-313-4		<10
Germaben II	Mixture			<10
Triethanolamine	102-71-6	203-049-8		<10
Benzyl Alcohol	100-51-6	202-859-9	Xn; R20/22 R52/53	<10
Avobenzone	70356-09-1	274-581-6	N;R51-53	0-3
Homosalate	118-56-9	204-260-8	Not Classified	0-15
Octinoxate	5466-77-3	226-775-7		0-7.5
Octisalate	118-60-5	204-263-4	Not Classified	0-5
Octocrylene	6197-30-4	228-250-8	N; R51/53	0-10
Oxybenzone	131-57-7	205-031-5	Not Classified	0-6

ADDITIONAL INFORMATION: This MSDS is written to provide health and safety information for individuals who will be handling the final product formulation during research, manufacturing, and distribution. For health and safety information for individual ingredients used during manufacturing, refer to the appropriate MSDS for each ingredient. Refer to the package insert or product label for handling guidance for the consumer.

See section 15 for EU hazard classification symbols and risk and safety phrases.

SECTION 4. FIRST AID MEASURES

INHALATION: Remove to fresh air. If any trouble breathing, get immediate medical attention. Administer artificial respiration if breathing has ceased. If irritation or symptoms occur or persist, consult a physician.

SKIN CONTACT: In keeping with good hygienic practices, wash exposed areas thoroughly with soap and water.

EYE CONTACT: In case of eye contact, immediately rinse eyes thoroughly with plenty of water. If wearing contact lenses, remove only after initial rinse, and continue rinsing eyes for at least 15 minutes. If irritation occurs or persists, consult a physician.

INGESTION: Rinse mouth with water. If symptoms develop, consult a physician.

SECTION 5. FIRE FIGHTING MEASURES

FLAMMABILITY DATA:

Flash Point: >93 deg C (>199.4 deg F)

SPECIAL FIRE FIGHTING PROCEDURES:

Wear full protective clothing and self-contained breathing apparatus (SCBA).

SUITABLE EXTINGUISHING MEDIA:

Carbon dioxide (CO₂), extinguishing powder or water spray.

See Section 9 for Physical and Chemical Properties.

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Wear appropriate personal protective equipment as specified in Section 8. Keep personnel away from the clean-up area.

SPILL RESPONSE / CLEANUP:

All spills should be handled according to site requirements and based on precautions cited in the MSDS. In the case of liquids, use proper absorbent materials. For laboratories and small-scale operations, incidental spills within a hood or enclosure should be cleaned by using a HEPA filtered vacuum or wet cleaning methods as appropriate. For large dry or liquid spills or those spills outside enclosure or hood, appropriate emergency response personnel should be notified. In manufacturing and large-scale operations, HEPA vacuuming prior to wet mopping or cleaning is required.

See Sections 9 and 10 for additional physical, chemical, and hazard information.

SECTION 7. HANDLING AND STORAGE

HANDLING:

Keep containers adequately sealed during material transfer, transport, or when not in use. Wash face, hands, and any exposed skin after handling. Do not eat, drink, or smoke when using this substance or mixture.

Appropriate handling of this material is dependent on many factors, including physical form, duration and frequency of process or task, and effectiveness of engineering controls. Site-specific risk assessments should be conducted to determine the feasibility and the appropriateness of all exposure control measures. See Section 8 (Exposure Controls) for additional guidance.

STORAGE:

Store in a cool, dry, well ventilated area.

See Section 8 for exposure controls and additional safe handling information.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE CONTROLS

The health hazard risks of handling this material are dependent on many factors, including physical form, duration and frequency of process or task, and effectiveness of engineering controls. Site-specific risk assessments should be conducted to determine the feasibility and the appropriateness of all exposure control measures. Exposure controls for normal operating or routine procedures follow a tiered strategy. Engineering controls are the preferred means of long-term or permanent exposure control. If engineering controls are not feasible, appropriate use of personal protective equipment (PPE) may be considered as alternative control measures. Exposure controls for non-routine operations must be evaluated and addressed as part of the site-specific risk assessment.

RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE):

Respiratory Protection: None required for consumer use of this product.

Respiratory protective equipment (RPE) may be required for certain laboratory and large-scale manufacturing tasks if potential airborne breathing zone concentrations of substances exceed the relevant exposure limit(s). Workplace risk assessment should be completed before specifying and implementing RPE usage. Potential exposure points and pathways, task duration and frequency, potential employee contact with the substance, and the ability of the substance to be rendered airborne during specific tasks should be evaluated. Initial and ongoing strategies of quantitative exposure measurement should be obtained as required by the workplace risk assessment. All RPE must conform to local and regional specifications for efficacy and performance. Consult your site or corporate health and safety professional for additional guidance.

Skin Protection: None required for consumer use of this product.

Gloves that provide an appropriate barrier to the skin are recommended if there is potential for contact with this material. Consult your site safety staff for guidance.

Eye Protection: None required for consumer use of this product.

Safety glasses with side shields. Use of goggles or full face protection may be required based on hazard, potential for contact, or level of exposure. Consult your site safety staff for guidance.

Body Protection: None required for consumer use of this product.

In small-scale or laboratory operations, lab coats or equivalent protection is required. Disposable Tyvek or other dust impermeable suit should be considered based on procedure or level of exposure. Use of additional PPE such as shoe coverings, gauntlets, hood, or head covering may be necessary. Consult your site safety staff for guidance.

In large-scale or manufacturing operations, disposable Tyvek or other dust impermeable suit is recommended and based on level of exposure. Use of additional PPE such as shoe coverings, gauntlets, hood, or head covering may be necessary. Consult your site safety staff for guidance.

EXPOSURE LIMIT VALUES:

INGREDIENT	CAS NUMBER	ACGIH TLV (TWA)	OSHA PEL (TWA)
Triethanolamine	102-71-6	5 mg/m ³	

Fields in the above table(s) that do not contain data indicate that exposure limits are not available for those endpoints.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

FORM: Lotion
COLOR: Color according to product specification
ODOR: Product-specific odor
pH: 3.5 to 6 at 100% concentration
BOILING POINT / RANGE: >93 deg C
SPECIFIC GRAVITY: 0.950 to 1.03
SOLUBILITY:
 Water: Slightly soluble

See Section 5 for flammability/explosivity information.

SECTION 10. STABILITY AND REACTIVITY

STABILITY/ REACTIVITY:
 Stable under normal conditions.

INCOMPATIBLE MATERIALS / CONDITIONS TO AVOID:
 None known.

HAZARDOUS DECOMPOSITION PRODUCTS / REACTIONS:
 No dangerous decomposition is expected if used according to manufacturer's specifications.

SECTION 11. TOXICOLOGICAL INFORMATION

Although some ingredients used in the manufacture of this product are considered hazardous on an individual basis, the final formulation of this product is considered non-hazardous when used according to manufacturer's directions. The information presented below pertains to the formulated product unless indicated otherwise.

ACUTE TOXICITY DATA

SKIN:
Practically not irritating.

EYE:
Slightly irritating.

ORAL:
Practically not toxic.

DERMAL AND RESPIRATORY SENSITIZATION:
Not sensitizing.

ADDITIONAL INFORMATION:
Negative in phototoxicity and photoallergy studies.

REPEAT DOSE TOXICITY DATA

These products have not been tested for repeat dose toxicity.

CARCINOGENICITY:
This material or product has not been evaluated for carcinogenicity.

SECTION 12. ECOLOGICAL INFORMATION

There are no data for the final product or its formulation(s). The information presented below pertains to the following ingredient(s).

ECOTOXICITY DATA

INGREDIENT ECOTOXICITY

Avobenzone:
96-hr NOEL (fish): 7.7 mg/L
48-hr EC50 (daphnia): 1.97 mg/L

ENVIRONMENTAL DATA

OTHER INGREDIENT ENVIRONMENTAL DATA: Avobenzone is not readily biodegradable.

SECTION 13. DISPOSAL CONSIDERATIONS

MATERIAL WASTE:

Disposal must be in accordance with applicable federal, state/provincial, and/or local regulations. Incineration is the preferred method of disposal, when appropriate. Operations that involve the crushing or shredding of waste materials or returned goods must be handled to meet the recommended exposure limit(s).

PACKAGING AND CONTAINERS:

Disposal must be in accordance with applicable federal, state/provincial, and/or local regulations.

SECTION 14. TRANSPORT INFORMATION

This material is not subject to the transportation regulations of DOT, IATA, IMO, and the ADR.

SECTION 15. REGULATORY INFORMATION**TSCA LISTING**

INGREDIENT	TSCA
Sorbitol	X
Polyethylene Glycol	X
1,3-Butylene Glycol	X
Aluminum Starch Octenylsuccinate	X
Propylene Glycol	X
Stearic Acid	X
Triethanolamine	X
Benzyl Alcohol	X
Avobenzone	X
Homosalate	X
Octinoxate	X
Octisalate	X
Octocrylene	X
Oxybenzone	X

EUROPEAN UNION REGULATIONS:

Based on available data, this material or product does not require labelling according to the EC directives.

SECTION 16. OTHER INFORMATION

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequence of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).

DEPARTMENT ISSUING MSDS:

Global Safety & the Environment
Merck & Co., Inc.
One Merck Drive
Whitehouse Station, NJ 08889

MERCK SDS HELPLINE:

+1 (908) 473-3371 (Worldwide)
Monday to Friday, 9am to 5pm (US Eastern Time)

MSDS CREATION DATE:

12-Aug-1999

SUPERSEDES DATE:

01-Feb-2012

SECTIONS CHANGED (LAM SUBFORMAT):

1

SIGNIFICANT CHANGES (LAM SUBFORMAT):

Synonyms, OEB



MERCK

MSD Consumer Care, Inc.
3030 Jackson Avenue
Memphis, TN 38151

MATERIAL SAFETY DATA SHEET

MSD Consumer Care, Inc. urges each user or recipient of this MSDS to read the entire data sheet to become aware of the hazards associated with this material.

SECTION 1. IDENTIFICATION OF SUBSTANCE AND CONTACT INFORMATION

MSDS NAME: COPPERTONE QuickCover Lotion Sprays

SYNONYM(S): COPPERTONE QuickCover Lotion Sprays
COPPERTONE Kids QuickCover Lotion Spray SPF 30-50
COPPERTONE Oil Free QuickCover Lotion Spray SPF 30-50
COPPERTONE Sport QuickCover Lotion Spray SPF 30
COPPERTONE UltraGUARD QuickCover Lotion Spray SPF 30-50
COPPERTONE WaterBabies QuickCover Lotion Spray SPF 50
COPPERTONE Dry Oil 4 C-Spray
COPPERTONE Ultraguard 15 C-Spray
COPPERTONE Ultraguard 30 C-Spray
COPPERTONE Sport 30 C-Spray
COPPERTONE Kids 50 C-Spray
COPPERTONE Oil Free C-Spray
CT Waterbabies C-Spray SPF50

MSDS NUMBER: SP001797

EMERGENCY NUMBER(S): +1 (908) 423-6000 (24/7/365) English Only

Transportation Emergencies - CHEMTREC:
(800) 424-9300 (Inside Continental USA)
(703) 527-3887 (Outside Continental USA)

MERCK MSDS HELPLINE: (800) 770-8878 (US and Canada)
(908) 473-3371 (Worldwide)
Monday to Friday, 9am to 5pm (US Eastern Time)

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SECTION 2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Lotion, Aerosol, Spray
White
Product-specific odor
Highly Flammable.
May cause frostbite with prolonged contact.
May be irritating to eyes, nose, and mucous membranes.
May be harmful by inhalation.
May cause effects to:
central nervous system

Consumers: Refer to the package insert or product label for appropriate consumer-specific information about this product when used according to manufacturer's directions.

POTENTIAL HEALTH EFFECTS:

These products have been shown to be not sensitizing to human skin. These products may cause slight skin irritation under occlusive conditions. Eye contact may cause slight eye irritation with temporary stinging, redness, tearing, and increased blinking.

Only information about the ingredients that are expected to contribute significantly to the potential health hazard profile of the formulation(s) is presented.

Dimethyl ether is an anesthetic. Eye contact or prolonged skin contact with liquified dimethyl ether may cause severe frostbite. Eye contact with dimethyl ether vapor may cause eye irritation with discomfort, tearing, or blurring of vision. Inhalation may cause nausea, headache, or weakness. Inhalation exposure to high concentrations may cause nervous system depression with anesthetic effects such as dizziness, confusion, incoordination, loss of consciousness, or intoxication, heart irregularities, unconsciousness or death.

LISTED CARCINOGENS

No carcinogens or potential carcinogens listed by OSHA, IARC, NTP or ACGIH are present in concentrations >0.1% in this mixture.

SECTION 3. COMPOSITION AND INFORMATION ON INGREDIENTS

PRODUCT USE: Consumer product

CHEMICAL FORMULA: Mixture.

The formulation for this product is proprietary information. Only hazardous ingredients in concentrations of 1% or greater and/or carcinogenic ingredients in concentrations of 0.1% or greater are listed in the Chemical Composition table. Active ingredients in any concentration are listed.

CHEMICAL COMPOSITION

INGREDIENT	CAS NUMBER	PERCENT
Homosalate	118-56-9	0-15
Octisalate	118-60-5	0-5
Oxybenzone	131-57-7	0-6
Octocrylene	6197-30-4	0-10
Avobenzon	70356-09-1	0-3
Dimethyl Ether	115-10-6	30-40
Sorbitol	50-70-4	<10

ADDITIONAL INFORMATION: This MSDS is written to provide health and safety information for individuals who will be handling the final product formulation during research, manufacturing, and distribution. For health and safety information for individual ingredients used during manufacturing, refer to the appropriate MSDS for each ingredient. Refer to the package insert or product label for handling guidance for the consumer.

SECTION 4. FIRST AID MEASURES

INHALATION: Remove to fresh air. If any trouble breathing, get immediate medical attention. Administer artificial respiration if breathing has ceased. If irritation or symptoms occur or persist, consult a physician.

SKIN CONTACT: In case of cold burns (frostbite) caused by rapidly expanding gas or vaporizing liquids, seek IMMEDIATE medical attention for appropriate treatment.

EYE CONTACT: In case of cold burns (frostbite) caused by rapidly expanding gas or vaporizing liquids, get IMMEDIATE medical attention.

INGESTION: Rinse mouth and drink a glass of water. Do not induce vomiting unless under the direction of a qualified medical professional or Poison Control Center. If symptoms persist, consult a physician.

SECTION 5. FIRE FIGHTING MEASURES

FLAMMABILITY DATA:

Flash Point: -41.1 deg C (-42 deg F) (dimethyl ether)

UEL: 26.7% (dimethyl ether)

LEL: 3.4% (dimethyl ether)

Autoignition Temperature: 350 deg C (662 deg F) (dimethyl ether)

SPECIAL FIRE FIGHTING PROCEDURES:

Wear full protective clothing and self-contained breathing apparatus (SCBA).

SUITABLE EXTINGUISHING MEDIA:

Carbon dioxide (CO₂), extinguishing powder or water spray.

See Section 9 for Physical and Chemical Properties.

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Wear appropriate personal protective equipment as specified in Section 8. Keep personnel away from the clean-up area.

SPILL RESPONSE / CLEANUP:

All spills should be handled according to site requirements and based on precautions cited in the MSDS. In the case of liquids, use proper absorbent materials. For laboratories and small-scale operations, incidental spills within a hood or enclosure should be cleaned by using a HEPA filtered vacuum or wet cleaning methods as appropriate. For large dry or liquid spills or those spills outside enclosure or hood, appropriate emergency response personnel should be notified. In manufacturing and large-scale operations, HEPA vacuuming prior to wet mopping or cleaning is required.

See Sections 9 and 10 for additional physical, chemical, and hazard information.

SECTION 7. HANDLING AND STORAGE
--

HANDLING:

Keep containers adequately sealed during material transfer, transport, or when not in use. Wash face, hands, and any exposed skin after handling. Do not eat, drink, or smoke when using this substance or mixture.

Appropriate handling of this material is dependent on many factors, including physical form, duration and frequency of process or task, and effectiveness of engineering controls. Site-specific risk assessments should be conducted to determine the feasibility and the appropriateness of all exposure control measures. See Section 8 (Exposure Controls) for additional guidance.

STORAGE:

Keep away from heat, sparks, open flames, and direct sunlight. Store in a cool, dry, well ventilated area.

See Section 8 for exposure controls and additional safe handling information.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE CONTROLS

The health hazard risks of handling this material are dependent on many factors, including physical form, duration and frequency of process or task, and effectiveness of engineering controls. Site-specific risk assessments should be conducted to determine the feasibility and the appropriateness of all exposure control measures. Exposure controls for normal operating or routine procedures follow a tiered strategy. Engineering controls are the preferred means of long-term or permanent exposure control. If engineering controls are not feasible, appropriate use of personal protective equipment (PPE) may be considered as alternative control measures. Exposure controls for non-routine operations must be evaluated and addressed as part of the site-specific risk assessment.

RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE):

Respiratory Protection:

None required for consumer use of this product.

Respiratory protective equipment (RPE) may be required for certain laboratory and large-scale manufacturing tasks if potential airborne breathing zone concentrations of substances exceed the relevant exposure limit(s). Workplace risk assessment should be completed before specifying and implementing RPE usage. Potential exposure points and pathways, task duration and frequency, potential employee contact with the substance, and the ability of the substance to be rendered airborne during specific tasks should be evaluated. Initial and ongoing strategies of quantitative exposure measurement should be obtained as required by the workplace risk assessment. All RPE must conform to local and regional specifications for efficacy and performance. Consult your site or corporate health and safety professional for additional guidance.

Skin Protection:

None required for consumer use of this product.

Gloves that provide an appropriate barrier to the skin are recommended if there is potential for contact with this material. Consult your site safety staff for guidance.

Eye Protection:

None required for consumer use of this product.

Safety glasses with side shields. Use of goggles or full face protection may be required based on hazard, potential for contact, or level of exposure. Consult your site safety staff for guidance.

Body Protection: None required for consumer use of this product.

In small-scale or laboratory operations, lab coats or equivalent protection is required. Disposable Tyvek or other dust impermeable suit should be considered based on procedure or level of exposure. Use of additional PPE such as shoe coverings, gauntlets, hood, or head covering may be necessary. Consult your site safety staff for guidance.

In large-scale or manufacturing operations, disposable Tyvek or other dust impermeable suit is recommended and based on level of exposure. Use of additional PPE such as shoe coverings, gauntlets, hood, or head covering may be necessary. Consult your site safety staff for guidance.

EXPOSURE LIMIT VALUES

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

FORM: Lotion, Aerosol, Spray
COLOR: White
ODOR: Product-specific odor
pH: 7.75-8.75
SOLUBILITY:
Water: Not determined

See Section 5 for flammability/explosivity information.

SECTION 10. STABILITY AND REACTIVITY

STABILITY/ REACTIVITY:
Stable under normal conditions.

INCOMPATIBLE MATERIALS / CONDITIONS TO AVOID:
None known.

HAZARDOUS DECOMPOSITION PRODUCTS / REACTIONS:
No dangerous decomposition is expected if used according to manufacturer's specifications.

SECTION 11. TOXICOLOGICAL INFORMATION

The information presented below is for the formulation or from studies using similar formulas, unless indicated otherwise.

ACUTE TOXICITY DATA

INHALATION:

Dimethyl Ether: Inhalation LC50 (4hr): 164,000 ppm (rat)
Anesthetic effects, including sedation and narcosis, were observed in rats exposed to dimethyl ether at concentrations ranging from 10,000 ppm to 164,00 ppm. In dogs, 200,000 ppm caused weak cardiac sensitization.

SKIN:
Slightly irritating.

EYE:
Slightly irritating.

ORAL:
Practically not toxic.

DERMAL AND RESPIRATORY SENSITIZATION:
Not sensitizing.

REPEAT DOSE TOXICITY DATA

SUBCHRONIC / CHRONIC TOXICITY:

Effects observed in animals exposed to dimethyl ether at concentrations ranging from 100 to 50,000 ppm for up to 30 weeks included anesthesia, decreases in body weights, changes in red and white blood cell counts, changes in serum levels, or liver and kidney weight changes. Effects were reversible. Other effects observed in animals exposed to high concentrations were hemolysis or death.

REPRODUCTIVE / DEVELOPMENTAL TOXICITY:

Dimethyl ether caused reduced fetal weights and increases in skeletal variations in rats exposed to 20,000 ppm or greater. No other effects were observed.

MUTAGENICITY / GENOTOXICITY:

Dimethyl ether was negative in bacterial mutagenicity studies.

CARCINOGENICITY:

Dimethyl ether did not cause cancer or chronic toxicity in rats exposed to 25,000 ppm in a lifetime study.

SECTION 12. ECOLOGICAL INFORMATION

There are no data for the final product or its formulation(s). The information presented below pertains to the following ingredient(s).

ECOTOXICITY DATA**INGREDIENT ECOTOXICITY**

Avobenzone:
 96-hr NOEL (fish): 7.7 mg/L
 48-hr EC50 (daphnia): 1.97 mg/L

Dimethyl ether: 48-hr NOEC (guppies): >4000 mg/L
 Dimethyl ether: 48-hr NOEC (Daphnia magna): >4000 mg/L

ENVIRONMENTAL DATA**OTHER INGREDIENT ENVIRONMENTAL DATA:**

Avobenzone is not readily biodegradable.

SECTION 13. DISPOSAL CONSIDERATIONS
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MATERIAL WASTE:

Disposal must be in accordance with applicable federal, state/provincial, and/or local regulations. Incineration is not the preferred method of disposal. Operations that involve the crushing or shredding of waste materials or returned goods must be handled to meet the recommended exposure limit(s).

PACKAGING AND CONTAINERS:

Disposal must be in accordance with applicable federal, state/provincial, and/or local regulations.

SECTION 14. TRANSPORT INFORMATION
--

Refer to site-specific procedures and requirements for additional guidance.

DOT CLASSIFICATION:

Proper Shipping Name:	Aerosols
Hazard Class:	2.1
UN Number:	UN 1950
Packing Group:	None

IATA/ICAO CLASSIFICATION:

Proper Shipping Name:	Aerosols, flammable
Hazard Class:	2.1
UN Number:	UN 1950
Packing Group:	None

ADR CLASSIFICATION:

Proper Shipping Name:	Aerosols
Hazard Class:	2.1
UN Number:	UN 1950
Packing Group:	None
Classification Code:	5F

IMDG/IMO CLASSIFICATION:

Proper Shipping Name:	Aerosols
Hazard Class:	2
UN Number:	UN 1950
Packing Group:	None

SECTION 15. REGULATORY INFORMATION

TSCA LISTING

INGREDIENT	TSCA
Homosalate	X
Octisalate	X
Oxybenzone	X
Octocrylene	X
Avobenzone	X
Dimethyl Ether	X
Sorbitol	X

This material or product is not subject to TSCA requirements.

U.S. STATE REGULATIONS

INGREDIENT	California Proposition 65	CARTK	NJRTK	CTRTK	MARTK
Dimethyl Ether			0758		X

INGREDIENT	PARTK	MNRTK	MIRTK	RIRTK
Dimethyl Ether	X	X		X

Fields in the above tables that do not contain data indicate that those materials have not been listed by local regulations.

SECTION 16. OTHER INFORMATION

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequence of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).

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SIGNIFICANT CHANGES (US SUBFORMAT):

New regional format