

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:

CERESINE WAXES

Recommended Use of the Chemical Cosmetic applications. and Restrictions on Use

Supplier:

Ixom Operations Pty Ltd (Bronson & Jacobs division) - incorporated in Australia

ABN: Street Address: 51 600 546 512 70 Marple Avenue Villawood NSW 2163

Australia

Telephone Number:

+61 2 8717 2929 +61 2 9755 9611

Facsimile: Emergency Telephone:

1 800 033 111 (ALL HOURS)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Based on available information, not classified as hazardous according to Safe Work Australia; NON-HAZARDOUS SUBSTANCE.

Poisons Schedule (SUSMP):

None allocated.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Ceresine wax	8001-75-0	100%	-

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin Contact:

If skin contact occurs, remove contaminated clothing and wash skin with running water. If irritation occurs seek medical advice. If molten material should contact the skin and adhere, cool quickly with running water - do not attempt to remove. Seek immediate medical assistance.

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Eve Contact:

If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice. For contact with the molten material treat as for skin burns.

Ingestion:

Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek medical advice.

Indication of immediate medical attention and special treatment needed:

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards arising from the substance or mixture:

Combustible solid. On burning will emit toxic fumes, including those of oxides of carbon.

Special protective equipment and precautions for fire-fighters:

Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion. Keep containers cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:

Shut off all possible sources of ignition. If contamination of sewers or waterways has occurred advise local emergency services.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

Slippery when spilt. Avoid accidents, clean up immediately. Avoid breathing in dust. Work up wind or increase ventilation. Wear protective equipment to prevent skin and eye contact. Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling:

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Avoid skin and eye contact and breathing in dust.

Avoid handling which leads to dust formation. May form flammable dust clouds in air. For precautions necessary refer to Safety Data Sheet "Dust Explosion Hazards". Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from sources of heat or ignition. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for spills.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for particulates:

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Dusts not otherwise classified: 8hr TWA = 10 mg/m³

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls:

Ensure ventilation is adequate to maintain air concentrations below Workplace Exposure Standards. Avoid generating and breathing in dusts. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as Personal Protective Equipment (PPE):

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES.







Wear overalls, safety glasses and impervious gloves. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. If determined by a risk assessment an inhalation risk exists, wear a dust mask meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Waxy solid

Colour:

White to Yellow

Odour:

Odourless

Odour Threshold:

Not available

Solubility:

Insoluble in water.

Specific Gravity:

0.880 - 0.935

Relative Vapour Density (air=1): Not available

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Vapour Pressure (20 °C): Not available

Flash Point (°C): 204.4 (COC) Minimum

Flammability Limits (%):

Autoignition Temperature (°C):

Melting Point/Range (°C):

Boiling Point/Range (°C):

Decomposition Point (°C):

pH:

Not available

54.4 - 92.2

Not available

Not available

Not available

Not available

Viscosity: Not applicable Partition Coefficient: Not available

10. STABILITY AND REACTIVITY

Reactivity: No information available.

Chemical stability: Stable under normal conditions.

Possibility of hazardous

reactions:

Hazardous polymerisation will not occur.

Conditions to avoid: Avoid exposure to heat, sources of ignition, and open flame. Avoid dust

generation.

Incompatible materials: Incompatible with strong oxidising agents.

Hazardous decomposition

products:

Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion: No adverse effects expected, however, large amounts may cause nausea and

vomiting.

Eye contact: May be an eye irritant. Contact with the hot material can result in pain, thermal

burns, and permanent injury.

Skin contact: Not expected to be a skin irritant. Contact with hot material may cause skin burns.

Inhalation: Breathing in dust may result in respiratory irritation. Where this material is used at

elevated temperatures, vapour may cause irritation to mucous membranes of the

respiratory tract, headache and nausea.

Acute toxicity: No LD50 data available for the product.

Skin corrosion/irritation: May caus Serious eye damage/irritation: May caus

May cause mechanical irritation. May cause mechanical irritation.

Respiratory or skin

Not classified.

sensitisation:

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Chronic effects: No information available for the product.

Not classified. Mutagenicity: Not classified. Carcinogenicity: Not classified. Reproductive toxicity: Not classified. Specific Target Organ Toxicity

(STOT) - single exposure:

Not classified. Specific Target Organ Toxicity

(STOT) - repeated exposure:

Not classified. Aspiration hazard:

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways. **Ecotoxicity**

No information available. Persistence/degradability:

Bioaccumulative potential: No information available.

No information available. Mobility in soil:

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Refer to Waste Management Authority. Dispose of contents/container in accordance with local/regional/national/international regulations.

14. TRANSPORT INFORMATION

Road and Rail Transport

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

15. REGULATORY INFORMATION

Classification:

Substance No: 000000033711

Based on available information, not classified as hazardous according to Safe Work Australia; NON-HAZARDOUS SUBSTANCE.

None allocated. Poisons Schedule (SUSMP):

This material is not listed on the Australian Inventory of Chemical Substances.

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16. OTHER INFORMATION

This safety data sheet has been prepared by Ixom Operations Pty Ltd Toxicology & SDS Services.

Reason(s) for Issue:

5 Yearly Revised Primary SDS

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Bronson & Jacobs representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

Bronson and Jacobs incorporating the businesses of Woods and Woods and Keith Harris.

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Enriching lives through innovation

TRIETHANOLAMINE 99%

Version

1.0

Revision Date:

07/15/2015

SDS Number: 400001020109

Date of last issue: -

Date of first issue: 07/15/2015

SECTION 1. IDENTIFICATION

Product name : TRIETHANOLAMINE 99%

Manufacturer or supplier's details

Company name of supplier

: Huntsman International LLC

Address

Telephone

: P.O. Box 4980 The Woodlands,

The Woodlands

United States of America TechInfo: (281) 719-7780

E-mail address of person

responsible for the SDS

: MSDS@huntsman.com

Emergency telephone

: Chemtrec: (800) 424-9300 or (703) 527-3887

Recommended use of the chemical and restrictions on use

Recommended use

: Intermediate

Component of a Polyurethane System.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Hazardous ingredients

Chemical Name	CAS-No.	Concentration (%)
Ethanol, 2,2',2"-nitrilotris-	102-71-6	>= 60 - <= 100

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Consult a physician.

Show this material safety data sheet to the doctor in

attendance.

If inhaled : Move to fresh air in case of accidental inhalation of dust or

fumes from overheating or combustion.



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If breathing is irregular or stopped, administer artificial

respiration.

If unconscious place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact : Take off contaminated clothing and shoes immediately.

Wash off with soap and plenty of water.

In case of eye contact : Flush eyes with water as a precaution.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

Do not induce vomiting without medical advice.

If a person vomits when lying on his back, place him in the

recovery position.

Obtain medical attention.

Most important symptoms and effects, both acute and

delayed

: None known.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : U

: Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Unsuitable extinguishing

media

: No data is available on the product itself.

Specific extinguishing

methods

: No data is available on the product itself.

Further information

: Standard procedure for chemical fires.

Special protective equipment

for fire-fighters

: In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.

Keep people away from and upwind of spill/leak.

Ensure adequate ventilation.

Use personal protective equipment.

Environmental precautions

No special environmental precautions required.

Try to prevent the material from entering drains or water

courses.



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Methods and materials for containment and cleaning up

: Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against

fire and explosion

: Normal measures for preventive fire protection.

Advice on safe handling

: For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Conditions for safe storage

Store in original container.

Keep container tightly closed in a dry and well-ventilated

place

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Materials to avoid

Keep away from oxidizing agents. Keep away from strong acids. Keep away from strong bases.

Keep away from metals.

No special restrictions on storage with other products.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

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Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Ethanol 2.2'.2"-nitrilotris-	102-71-6	TWA	5 mg/m3	ACGIH

Personal protective equipment

Respiratory protection

: Wear a full face respirator conforming to EN 136 with type

A/P2 filter or better

Respiratory protection

: No personal respiratory protective equipment normally

required.

Hand protection

Material

butyl-rubber

Break through time

> 8 h

Nitrile rubber

Remarks

: The selected protective gloves have to satisfy the

specifications of EU Directive 89/689/EEC and the standard

EN 374 derived from it.

Eye protection

: Safety glasses with side-shields



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Eye wash bottle with pure water

Skin and body protection

: Lab coat

Choose body protection according to the amount and

concentration of the dangerous substance at the work place.

Hygiene measures

Handle in accordance with good industrial hygiene and safety

practice.

When using do not eat, drink or smoke.

Wash hands before breaks and immediately after handling

the product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

: viscous liquid

Color

: light yellow

Odor

ammoniacal

Odor Threshold

: No data is available on the product itself.

рΗ

: 11. Concentration: 20 g/l (20 °C)

Freezing point

: 20.5 °C

Melting point

20.5 °C

: 335.4 - 360 °C

No information available.

336.1 °C

(1,013.25 hPa)

Flash point

: 193 °C

Method: ISO 2719, closed cup

Evaporation rate

: < 0.1

Flammability (solid, gas)

: No data is available on the product itself.

Upper explosion limit

: 7.2 %(V)

Lower explosion limit

: 3.6 %(V)

Vapor pressure

: < 0.0003 hPa (21 °C)

Relative vapor density

: 5.2

Relative density

: 1.125 (20 °C)

Density

: 1.125 g/cm3 (20 °C)



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Solubility(ies)

Water solubility

; > 1,000 g/l completely miscible (20 °C)

Solubility in other solvents

: Solvent: Methanol

Description: soluble, partly soluble

Partition coefficient: n-

octanol/water

: log Pow: -2.3 (25 °C)

pH: 7.1

Autoignition temperature

; ca.

330 °C

Decomposition temperature

: > 270 °C

Method: Other guidelines

> 250 °C

Method: Isoperibol Lütolf

> 120 °C

Method: Dewar

Viscosity

Viscosity, dynamic

: 934 mPa.s (20 °C)

Viscosity, kinematic

: 527 mm2/s (25 °C)

Oxidizing properties

: None.

Self-Accelerating

decomposition temperature

(SADT)

Molecular weight

: No data is available on the product itself.

: 149.19 g/mol

SECTION 10. STABILITY AND REACTIVITY

Reactivity

: Stable under recommended storage conditions.

Chemical stability

: Stable under normal conditions.

No decomposition if stored and applied as directed.

Possibility of hazardous

reactions

None known.

Stable under normal conditions.

Conditions to avoid

: No data available

Hazardous decomposition

products

: Carbon monoxide

Carbon dioxide (CO2)

Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION



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exposure

Information on likely routes of : No data is available on the product itself.

Acute toxicity

Acute oral toxicity - Product

: LD50 (Rat, male and female): 6,400 mg/kg

Method: OECD Test Guideline 401

Assessment: The substance or mixture has no acute oral

toxicity

Acute inhalation toxicity

: No data available

Acute dermal toxicity -

: LD50 (Rabbit): > 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Acute toxicity (other routes of : No data available

administration)

Skin corrosion/irritation

Product:

Product

Species: Rabbit

Assessment: No skin irritation Method: OECD Test Guideline 404

Result: No skin irritation

GLP: no

Serious eye damage/eye irritation

Product:

Species: Rabbit

Result: Normally reversible injuries Assessment: No eye irritation Method: OECD Test Guideline 405

GLP: no

Remarks: According to the classification criteria of the European Union, the product is not

considered as being an eye irritant.

Respiratory or skin sensitization

Product:

Routes of exposure: Skin Species: Guinea pig

Method: OECD Test Guideline 406 Result: Does not cause skin sensitization.

Remarks: No data available

Assessment:

No data available



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Germ cell mutagenicity

Product:

Genotoxicity in vitro

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Concentration: 0 - 1500 µg/L

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Genotoxicity in vivo

: No data available

Carcinogenicity

Product:

Species: Rat, (male and female) Application Route: Dermal Exposure time: 103 weeks

Dose: 250 mg/kg

Frequency of Treatment: 5 daily Method: OECD Test Guideline 451

Result: negative

Carcinogenicity -

: No data available

Assessment

Reproductive toxicity

Product:

Effects on fertility

Species: Rat, male and female

Application Route: Oral

Method: OECD Test Guideline 416

Product:

Effects on fetal development

: Species: Rat, male and female

Application Route: Oral

General Toxicity Maternal: NOAEL (No observed adverse

effect level): > 1,000 mg/kg body weight Method: OECD Test Guideline 421 Result: No teratogenic effects.

Species: Rat

Application Route: Dermal

General Toxicity Maternal: NOAEL (No observed adverse

effect level): 75 mg/kg body weight Method: OECD Test Guideline 414 Result: No teratogenic effects.

Species: Rabbit



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Application Route: Dermal

General Toxicity Maternal: NOAEL (No observed adverse

effect level): 10 mg/kg body weight Method: OECD Test Guideline 414 Result: No teratogenic effects.

Reproductive toxicity -

Assessment

: No data available

STOT-single exposure

No data available

STOT-repeated exposure

No data available

Repeated dose toxicity

Product:

Species: Rat, male and female NOEC: 1000 mg/kg, 500 mg/m3 Application Route: Ingestion Test atmosphere: dust/mist

Exposure time: 672 h

Method: OECD Test Guideline 412

Species: Rat, male and female NOEC: 125 - 500 mg/kg, 420 mg/m3 Application Route: Skin contact Test atmosphere: dust/mist Exposure time: 2,160 h Number of exposures: 6 h Method: Subchronic toxicity

Repeated dose toxicity -

: No data available

Assessment

Aspiration toxicity

No data available

Experience with human exposure

General Information:

No data available

Inhalation:

No data available

Skin contact:

No data available

Eye contact:

No data available

Ingestion:

No data available



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Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxicity to fish - Product

: LC50 (Pimephales promelas (fathead minnow)): 11,800 mg/l

Exposure time: 96 h

Test Type: flow-through test Test substance: Fresh water

GLP: no

Toxicity to daphnia and other

aquatic invertebrates -

Product

: EC50 (Ceriodaphnia dubia (Water flea)): 609.88 mg/l

Exposure time: 48 h Test Type: static test

Test substance: Fresh water

Toxicity to algae - Product

ErC50 (Desmodesmus subspicatus (Scenedesmus

subspicatus)): 512 mg/l Exposure time: 72 h Test Type: static test

Test substance: Fresh water

Method: DIN 38412

M-Factor (Acute aquatic

toxicity)

: No data available

Toxicity to fish (Chronic

toxicity)

: No data available

Toxicity to daphnia and other

aquatic invertebrates

(Chronic toxicity) - Product

: NOEC (Daphnia magna (Water flea)): 16 mg/l

Exposure time: 21 d Test Type: semi-static test Test substance: Fresh water

M-Factor (Chronic aquatic

toxicity)

: No data available

Toxicity to bacteria - Product

: EC50 (activated sludge): > 1,000 mg/l

Exposure time: 3 h Test Type: static test

Test substance: Fresh water Method: OECD Test Guideline 209



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Toxicity to soil dwelling

organisms

: No data available

Plant toxicity

: No data available

Sediment toxicity

No data available

Toxicity to terrestrial

: No data available

organisms

Organisms

No data avallable

Ecotoxicology Assessment

Acute aquatic toxicity

: No data available

Chronic aquatic toxicity

: No data available

Toxicity Data on Soil

: No data available

Other organisms relevant to

the environment

No data available

: No data available

Further information:

Persistence and degradability

Biodegradability - Product

Inoculum: activated sludge Concentration: 5.7 mg/l Result: Readily biodegradable. Biodegradation: ca. 100 %

Exposure time: 5 d

Biochemical Oxygen

Demand (BOD)

: No data available

Chemical Oxygen Demand

(COD) - Product

BOD/COD

: 1600 mgO2/g

: No data available

ThOD

: No data available

BOD/ThOD

: No data available

Dissolved organic carbon

(DOC)

: No data available

Physico-chemical

removability

: No data available

Stability in water

: No data available

Photodegradation

: No data available

Impact on Sewage

Treatment

: No data available



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Bioaccumulative potential

Bioaccumulation - Product

: Species: Cyprinus carpio (Carp)

Bioconcentration factor (BCF): < 3.9

Exposure time: 42 d

Test substance: Fresh water Method: flow-through test

Partition coefficient: n-octanol/water - Product

: log Pow: -2.3 (25 °C)

pH: 7.1

Mobility in soil

Mobility

: No data available

Distribution among

environmental compartments

: Koc: 18.

- Product

Stability in soil

: No data available

Other adverse effects

Environmental fate and

pathways

: No data available

Results of PBT and vPvB

assessment

: No data available

Endocrine disrupting

potential

: No data available

Adsorbed organic bound

halogens (AOX)

: No data available

Hazardous to the ozone layer

Ozone-Depletion Potential

Not applicable

: No data available

Additional ecological information - Product

Global warming potential

(GWP)

: There is no data available for this product.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Do not dispose of waste into sewer.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Contaminated packaging : Empty remaining contents.

Empty containers should be taken to an approved waste

handling site for recycling or disposal.



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SECTION 14. TRANSPORT INFORMATION

International Regulation

IATA

Not regulated as a dangerous good

IMDG

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

DOT Classification

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

TSCA - 5(a) Significant New

Use Rule List of Chemicals

: Not relevant

California Prop 65

: This product does not contain any chemicals known to the

State of California to cause cancer, birth, or any other

reproductive defects.

The ingredients of this product are reported in the following inventories:

CH INV : The mixture contains substances listed on the Swiss Inventory

water

2-aminoethanol 2,2'-iminodiethanol

TSCA : On TSCA Inventory

All components of this product are on the Canadian DSL. DSL On the inventory, or in compliance with the inventory AICS On the inventory, or in compliance with the inventory NZIoC On the inventory, or in compliance with the inventory **ENCS** On the inventory, or in compliance with the inventory ISHL : On the inventory, or in compliance with the inventory KECI : On the inventory, or in compliance with the inventory **PICCS** On the inventory, or in compliance with the inventory **IECSC**

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)



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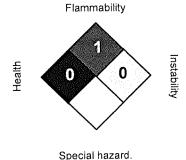
Date of last issue: -

Date of first issue: 07/15/2015

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

PHYSICAL HAZARD	0
FLAMMABILITY	1
HEALTH	0

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High

4 = Extreme, * = Chronic

Revision Date : 07/15/2015

While the information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE.

IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE. THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED HUNTSMAN EMPLOYEE IS AUTHORIZED TO PROVIDE OR MAKE AVAILABLE DATA SHEETS FOR HUNTSMAN PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE. NO PART OF THIS DATA SHEET MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM, OR BY ANY MEANS, WITHOUT PERMISSION IN WRITING FROM HUNTSMAN. ALL REQUESTS FOR PERMISSION TO REPRODUCE MATERIAL FROM THIS DATA SHEET SHOULD BE DIRECTED TO HUNTSMAN, MANAGER, PRODUCT SAFETY AT THE ABOVE ADDRESS.

ALLICE DECOMBY IAI

3P-422 NF, SP-422P NF

Beeswax

:: Beeswax

Cera Alba

Insect Wax

ty: STRAHL & PITSCH INC.

230 Great East Neck Road

West Babylon, NY 11704

For further information, contact

631 587-9000

8 AM - 5 PM Eastern Time

Monday thru Friday

None anticipated

5: This material may burn but will not ignite readily. Keep away from all sources of ignition.

Slab, Pastilles

White - Off white

slight - characteristic

NFPA Hazard Class:

Health:

0 (Least)

Flammability: 1 (Slight)

Reactivity: 0 (Least)

formation on Ingredients

classified as hazardous according to the GHS.

-3 100%

cation

Effects:

rial is not expected to be an eye irritant; however, contact with molten wax may cause rns. Vapors from molten wax may cause watering of the eyes.

rial is not expected to be a skin irritant; however, skin contact with molten wax may cause

. No harmful effects from skin absorption are expected.

hing): Vapors emitted from molten wax are expected to have a low degree of irritation by inhalation.

wing): No harmful effects expected

toms: Effects of overexposure may include irritation of the nose and throat

ı available

No data available

No data available

lical Conditions: None known

res

or redness develops from exposure to fumes generated during hot-melt processing operations, away from exposure and into fresh air. Flush eyes with clean water. If irritation or redness peredical attention. For contact with the molten material, gently open eyelids and flush affected old water. Seek immediate medical attention.

with molten material, leave material on skin and flush or immerse affected area(s), using cold

medical attention.

hing): If respiratory symptoms develop from exposure to fumes emitted by the molten material,

erties: Flash Point (ASTM D92): 400 Degrees F (COC) Minimum

OSHA Flammability Class: Not regulated

LEL/UEL: No data

Autoignition Temperature: No data

Burn Rate (solids): No data

Explosion Hazards: This material may burn, but will not ignite readily.

edia: Dry chemical, foam, water, sand, or earth is recommended.

tructions: Emergency responders in the danger area should wear bunker gear and self-reathing apparatus for fires beyond the incipient state (29CFR 1910.156). In addition, wear other protective equipment as conditions warrant (see Section 8). Isolate danger area, keep d personnel out. Contain spill if it can be done with minimal risk. Move undamaged condanger area if it can be done with minimal risk. With water, cool equipment exposed to fire if it with minimal risk.

ase Measures

all may burn but will not ignite readily. Keep all sources of ignition away from spill/release. Stay away from spill. Isolate danger area and keep unauthorized personnel out. Contain spill if it with minimal risk. Wear appropriate protective equipment, including respiratory protection, as varrant (see Section 8). Prevent spilled material from entering sewers, storm drains, other d treatment drainage systems, and natural waterways. Notify fire authorities and appropriate e, and local agencies. Cleanup under expert supervision is advised. Minimize dust generation.

torage

thoroughly after handling. Do not wear contaminated clothing or shoes. Use good personal ctice.

ntainers retain residue (liquid and/or vapor) and may be dangerous. Do not pressurize, cut, weld, er, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. xplode and cause injury or death. All containers should be disposed of in an environmentally-r and in accordance with governmental regulations. Before working on or in tanks which ave contained this material, refer to Occupational Safety and Health Administration Regulations, and other governmental and industrial references pertaining to cleaning, repairing, welding, itemplated operations.

ontainer(s) tightly closed. Use and store this material in cool, dry, well-ventilated areas away nd all sources of ignition. Store only in approved containers. Keep away from any incompatible e Section 10). Protect container(s) against physical damage.

respiratory protection is required when working with the solid material. If airborne concentrations es, generated from molten wax, are expected, a NIOSH/MSHA approved air purifying respirator mist/fume filter may be used. Protection provided by air purifying respirators is limited (see er's respirator selection guide). Use a positive-pressure-air-supplied respirator if there is an uncontrolled release, exposure levels are not known, or any other circumstances where air-spirators may not provide adequate protection. A respiratory-protection program that meets CFR 1910.34 and ANSI Z88.2 requirements must be followed whenever workplace conditions espirator's use.

ally required for solid material. The use of thermally-resistant gloves is recommended when ential for exposure to molten wax.

oved eye protection to safeguard against potential eye contact, irritation, or injury is recommended.

Equipment: A source of clean water should be available in the work area for flushing eyes npervious clothing should be worn as needed.

hemical Properties

herwise stated, values are determined at 20 Degrees C (68 Degrees F) and 760 mm Hg (1 atm).

TM D92): 400 Degrees F Minimum

osive Limits (%): No data

nperature: No data s only): No data

f white Solid

slight - characteristic (mm Hg): No data

air+1): No data 2 - 65 Deg. C er: Negligible

Approximately 0.96

: Negligible

pproximately 7 pounds per gallon

'eactivity

ty: Stable under normal conditions of storage and handling.

'oid: Avoid all possible sources of ignition (see Sections 5 and 7).

iterials: Avoid contact with strong oxidizing agents.

omposition Products: Combustion can yield major amounts of oxides of carbon and minor oxides of sulfur and nitrogen.

merization: Will not occur.

discarded as produced, is not a RCRA "listed" or "characteristic" hazardous waste. Use which call or physical change or contamination may subject it to hazardous waste regulations. Along
aracterizing all waste materials, consult state and local regulations regarding the proper disposal
rmation
Division: Not classified as hazardous
ormation
ntains no chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372:
ntains the following chemicals which are known to the State of California to cause cancer, other reproductive harm, and are subject to the requirements of California Proposition 65 fety Code Section 25249.5)
None Known
s not been identified as a carcinogen by NTP, IARC, or OSHA
Reportable Quantity:None

nformation 1

tober 10, 2012 I 2, 2009

Expressed and Implied Warranties

in this document is believed to be correct as of the date issued.

WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, REPORT OF THIS INFORMATION, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED

and product are furnished on the condition that the person receiving them shall make his own to the suitability of the product for his particular purpose and on the condition that he assume thereof.

1. Identification

Product Name: Beeswax

Synonyms: Beeswax

Product Use: Pharmaceutical/Cosmetic/Personal Care

Manufacturer/Supplier: Strahl & Pitsch, Inc 230 Great East Neck Rd West Babylon, NY 11704

631-587-9000

2. Hazards Identification

GHS Classification:

Health	Environmental	Physical
N/A	N/A	N/A

GHS Label:

Symbols: not applicable				
Hazard Statements	Precautionary Statements			
None	Contact with molten wax may cause thermal burns			

3. Composition / Information on Ingredients

Chemical Name Common Name

Not applicable Beeswax

CAS Number Weight %

8012-89-3(white) 100 8006-40-4 (yellow) 100

Impurities/Additives

None

(See Section 8 for Exposure Limits)

4. First Aid Measures

Eye: Eye irritation. Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get immediate medical attention.

Skin: For contact with molten material, leave material on skin and flush or immerse affected area(s), using cold water. Seek Medical Attention.

4. First Aid Measures (cont.)

Inhalation: If respiratory symptoms develop from exposure to fumes emitted by the molten material, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

Ingestion: Solid material is not acutely toxic; however, if molten material is swallowed, seek immediate medical attention.

5. <u>Fire Fighting Measures</u>

Suitable Extinguishing Media: Dry chemical, foam, sand, water fog is recommended.

Unusual Fire and Explosion Hazards: This material may burn, but will not ignite readily.

Combustion Products: N/A

National Fire Protection Association (NFPA) Ratings: This information is intended solely for the

use of individuals trained in the NFPA system.

Health: 0

Flammability: 1
Reactivity: 0

6: Accidental Release Measures:

This material may burn but will not ignite readily.

Isolate danger area and keep unauthorized personnel out.

Contain spill if it can be done with minimal risk. Wear appropriate protective equipment.

Prevent spilled material from entering sewers, storm drains, other unauthorized treatment drainage systems, and natural waterways.

Cleanup molten wax under supervision is advised.

7. Handling and Storage

Handling

Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Use good personal hygiene practice.

Storage

Store in tightly closed containers in cool, dry, well-ventilated area away from heat, sources of ignition and incompatibles such as strong oxidizers.

Store at ambient or lower temperature.

Store out of direct sunlight.

Keep containers tightly closed and upright when not in use. Protect against physical damage.

8. <u>Exposure Controls / Personal Protection</u>

Exposure Limits NONE

Personal Protective Equipment (PPE)

Eye Protection: When handling in molten form, proper eye shields are worn to prevent injury **Skin Protection:** When handling in molten form, proper resistant clothing, gloves, and shoes must be worn.

Respiratory Protection: No special precautions for normal use

9. Physical and Chemical Properties

Appearance: White or Yellow solid at room temperature

Upper Flammability Limit: N/A **Lower Flammability Limit:** N/A

Vapor Pressure: N/A Odor Threshold: N/A Vapor Density: N/A

pH: N/A

Specific Gravity: 0.96g/ml @ 20°C

Melting Point: 62 - 65°C

Solubility: Insoluble in water. Soluble in organic solvents when warmed

Boiling Point: N/A **Flashpoint:** 400°C

Flammability: Not flammable

Partition coefficient: Not determined **Auto ignition Temperature:** N/A **Decomposition temperature:** N/A

Viscosity: 8 - 12 cSt @ 100C

10. Stability and Reactivity

Reactivity: This material is stable and unlikely to react in a hazardous manner under normal conditions

of use.

Chemical Stability: Stable under normal conditions. Avoid strong oxidizing agents.

Hazardous Reactions: Avoid strong oxidizing agents.

Decomposition Products: Thermal decomposition can produce a variety of products which may

include oxides of carbon and nitrogen.

11. Toxicological Information

Signs and Symptoms of Overexposure: Nasal and throat irritation.

Acute Effects:

Eve Contact: Not expected to be an eye irritant

Skin Contact: No harmful effects from skin adsorption.

Inhalation: Vapors emitted from molten wax are expected to have slight degree of irritation

Ingestion: No harmful effects are expected.

Acute Toxicity Values

CIR Review of Natural Waxes published in 2005. FDA: GRAS (Generally Recognized As Safe)

Title 21 CFR 184.1973

12. <u>Ecological Information</u>

Bioaccumulation is not expected. This product is readily biodegradable.

13. <u>Disposal Considerations</u>

Recover if possible complying with the local and national regulations currently in force.

14. <u>Transport Information</u>

U.S. Department of Transportation (DOT)

Proper Shipping Name: N/A

Hazard Class: N/A

UN/NA Number: Not Classified as dangerous in the meaning of transport regulations

Packing Group: N/A

International Maritime Organization (IMDG)

Not a marine pollutant

15. Regulatory Information

U.S. Federal Regulations

Toxic Substances Control Act (TSCA): All components of this product are included on the TSCA inventory.

Clean Water Act (CWA): Not hazardous. Clean Air Act (CAA): Not Hazardous

Superfund Amendments and Reauthorization Act (SARA) Title III Information:

This product contains no toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372)

State Regulations:

California: This product contains no chemicals(s) known to the State of California to cause cancer, birth defects or reproductive harm.

International Regulations:

Canadian Environmental Protection Act: All of the components of this product are included on the Canadian Domestic Substances list (DSL).

Canadian Workplace Hazardous Materials Information System (WHMIS):

This product has not been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

European Inventory of Existing Chemicals (EINECS): All of the components of this product are included on EINECS.

EU Classification: None

EU Risk (R) and Safety (S) Phrases: None

16. Other Information:

This SDS applies to Strahl & Pitsch Item Codes attached to the end of this document

Revision: New SDS May 26, 2015

Disclaimer: The information contained herein is accurate to the best of our knowledge. My Company makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.

YELLOW BEESWAX KOSHER

STRAHL & PITSCH INC. 230 Great East Neck Road West Babylon, NY 11704

DR-100 Yellow Beeswax, N.F. DR-100 CAKES Yellow Beeswax Cakes DR-100F Yellow Beeswax, N.F. DR-100P Yellow Beeswax, NF - Prills DR-101 White Beeswax, N.F. Slabs DR-101 CAKES WHITE BEESWAX, NF CAKES **DR-101 XWC** Extra White Beeswax Cakes, NF **DR-101 XWS** Extra White Beeswax Slabs DR-101A White Beeswax, NF DR-101CA WHITE BEESWAX NF DR-101P White Beeswax, NF Prills DR-104 White Beeswax DR-104R WHITE BEESWAX DR-104Y Yellow Beeswax Slabs DR-201 White Synthetic Beeswax DR-247 White Synthetic Beeswax DR-266 YELLOW BEESWAX DR-275W White Beeswax DR-275Y Yellow Beeswax EM-103 Yellow Beeswax EM-103 W White Beeswax - Cakes EM-103 W SLABS WHITE BEESWAX - SLABS EM-103Y CAKES Yellow Beeswax - Cakes EM-104 WHITE BEESWAX SLABS EM-105 COMMERCIAL YELLOW BEESWAX EM-105 CAKES Yellow Beeswax Cakes EM-165B YELLOW BEESWAX SUBSTITUTE EM-204 WHITE BEESWAX SUBSTITUTE EM-28 White Synthetic Beeswax **EM-28Y** Yellow Synthetic Beeswax SP-11 YELLOW BEESWAX SP-11P YELLOW BEESWAX PASTILLES SP-132 WHITE BEESWAX SP-132P White Beeswax Pastilles SP-139WP White Beeswax SP-139Y YELLOW BEESWAX SP-139Y P YELLOW BEESWAX PASTILLES SP-139Y-CAKES YELLOW BEESWAX CAKES SP-412 White Beeswax SP-420 YELLOW BEESWAX SP-420-CAKES YELLOW BEESWAX CAKES

SP-420K

STRAHL & PITSCH INC. 230 Great East Neck Road West Babylon, NY 11704

YELLOW BEESWAX PASTILLES, N.F.	SP-420P
YELLOW BEESWAX NF PASTILLES	SP-420P NF
YELLOW BEESWAX PASTILLES KOSHER	SP-420P-K
WHITE BEESWAX, N.F.	SP-422
WHITE BEESWAX NF	SP-422 NF
WHITE BEESWAX, NF CAKES	SP-422-CAKES
WHITE BEESWAX KOSHER	SP-422-K
WHITE BEESWAX PASTILLES N.F.	SP-422P
WHITE BEESWAX PASTILLES KOSHER N.F.	SP-422P-K
WHITE BEESWAX	SP-424
WHITE BEESWAX PASTILLES, N.F.	SP-424P
WHITE BEESWAX PAST. N.F KOSHER	SP-424PK
White Beeswax	SP-425
White Beeswax Pastilles	SP-425P
Yellow Beeswax	SP-425Y
Yellow Beeswax Pound Cakes	SP-425Y CAKES
Yellow Beeswax Pastilles	SP-425YP
WHITE BEESWAX	SP-426
WHITE BEESWAX PASTILLES	SP-426P
WHITE BEESWAX	SP-44
WHITE BEESWAX PASTILLES	SP-44P
YELLOW BEESWAX	SP-45
WHITE BEESWAX	SP-450A
WHITE BEESWAX PASTILLES	SP-452P
WHITE BEESWAX	SP-453
WHITE BEESWAX PASTILLES	SP-453P
YELLOW BEESWAX IN CAKES	SP-45-CAKES
YELLOW BEESWAX PASTILLES	SP-45P
WHITE BEESWAX	SP-52
REFINED YELLOW BEESWAX	SP-6
White Beeswax, NF pesticide free	SP-66PW
Yellow Beeswax NF, Pesticide Free	SP-66PY
YELLOW BEESWAX NF CAKES	SP-6-CAKES
Yellow Beeswax NF Granules	SP-6G
YELLOW BEESWAX PASTILLES, N.F.	SP-6P

acc. to OSHA HCS

Printing date 02/19/2014

Reviewed on 02/19/2014

1: Identification

1.1 Product identifier

Trade name: Microcare DMP

1.2 Relevant identified uses of the substance or mixture and uses advised against

· Application of the substance / the mixture Additive for the cosmetic industry.

1.3 Details of the supplier of the safety data sheet

Supplier:

Thor Specialties, Inc. 50 Waterview Drive Shelton, CT 06484

USA

Phone: +1 203-516-6980 Fax: +1 203-954-0005

Competent person responsible for the Material Safety Data Sheet:

Regulatory Affairs Department: Lynn P. Tordo, E-Mail: Itordo@thorsp.com

1.4 Emergency telephone number:

Emergency phone number (worldwide 24 hrs service): +49 6 21 60-4 33 33

USA: In case of emergency call CHEMTREC 24 Hours at 800/424-9300 or international: +1-703-

527-3887

2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



Eye Irrit. 2 H319 Causes serious eye irritation.

Classification system:

The health and environmental hazards of this preparation have been assessed by the conventional method described in annex II and III of the Dangerous Preparations Directive 1999/45 EC.

- · 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008

The product is labeled according to the CLP regulation.

Hazard pictograms



GHS07

· Signal word Warning

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P280 Wear protective gloves / eye protection.

P264 Wash thoroughly after handling.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P362 Take off contaminated clothing.

(Contd. on page 2)

(Contd. of page 1)



Safety Data Sheet

acc. to OSHA HCS

Printing date 02/19/2014

Reviewed on 02/19/2014

Trade name: Microcare DMP

· Classification system:

NFPA ratings (scale 0 - 4)



Health = 1 Fire = 1 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 2 Fire = 1 Reactivity = 0

3: Composition/information on ingredients

· 3.2 Mixtures

Description: Preservative for cosmetics based on parabenes and diazolidinyl urea.

Dangerous components:		
CAS: 78491-02-8 RTECS: YS 2717000 Reg.nr.: 01-2119980740-34	1-[1,3-bis(hydroxymethyl)-2,5-dioxoimidazolidin-4-yl]-1,3-bis(hydroxymethyl)urea X I R36	25 - 50%
CAS: 99-76-3 Reg.nr.: 01-2119463264-40	© Eye Irrit. 2, H319 methyl 4-hydroxybenzoate Aguatic Chronic 3, H412	10 - 25%

4: First-aid measures

- 4.1 Description of first aid measures
- · If inhaled:

Move person to fresh air.

Supply fresh air; consult doctor in case of symptoms.

- If on skin or clothing: IF ON SKIN: Wash with plenty of soap and water.
- If in eves:

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

If eye irritation persists: Get medical advice/attention.

· If swallowed:

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

Seek medical treatment.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are described in Section 2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed

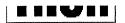
No further relevant information available.

5: Fire-fighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents: Water spray jet, extinguishing powder, CO2, foam.
- For safety reasons unsuitable extinguishing agents: None
- 5.2 Special hazards arising from the substance or mixture

In case of fire, toxic incineration products may be released such as:

(Contd. on page 3)



acc. to OSHA HCS

Printing date 02/19/2014 Reviewed on 02/19/2014

Trade name: Microcare DMP

(Contd. of page 2)

Nitrogen oxides (NOx) Carbon monoxide (CO)

5.3 Advice for firefighters

Protective equipment: Wear protective clothing and self-contained respiratory protective device.

6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

6.2 Environmental precautions:

Prevent from spreading (e. g. by enclosing with a ring of chemical absorbent).

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow product to enter waters without treatment in a (biological) water treatment plant.

6.3 Methods and material for containment and cleaning up:

Collect large amounts in suitable container. Cover the rest with absorbent, mix intensively and collect mechanically.

Suitable binder: multi-purpose absorbent.

Dispose of contaminated binding material in accordance with local, state and federal regulations.

6.4 Reference to other sections None

7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Load carefully, avoid splashes.

Risks to the safety and health of workers may not only be created by work involving chemicals but, inter alia by work equipment and the fitting-out of work-places. Those risks shall be identified and evaluated.

- Information about protection against explosions and fires: No special measures required.
- 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: None
- Further information about storage conditions: Keep receptacle tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

8: Exposure controls/personal protection

8.1 Control parameters

Components with limit values that require monitoring at the workplace:

57-55-6 1,2-propylene glycol

WEEL 10 mg/m³

- · Additional information: The lists that were valid during the creation were used as basis.
- 8.2 Exposure controls
- Personal protective equipment:
- General protective and hygienic measures:

Avoid contact with the eyes and skin.

Wash hands thoroughly before breaks and at the end of work.

(Contd. on page 4)



acc. to OSHA HCS

Printing date 02/19/2014 Reviewed on 02/19/2014

Trade name: Microcare DMP

(Contd. of page 3)

Provide skin protection plan.

· Breathing equipment:

When there is potential for airborne exposures in excess of applicable limits, wear NIOSH/MSHA approved respiratory protection.

OV/N95 or OV/P100; organic vapors/prefilter (NIOSH Approval No. TC-84A-0699). (DIN/EN 141)

Protection of hands:



Chemical protective gloves according to DIN EN 374 with CE-labelling.

Before use check protective gloves for any damages like holes, cuts or tears.

Do not wear protective gloves longer than necessary.

- Material of gloves Nitrile rubber, NBR
- Penetration time of glove material

Thickness: 0.4 mm; break-through time: 480 min; material: Nitrile; permeation: level 6

Not suitable are gloves made of the following materials:

Gloves for mechanical protection do not provide protection against chemicals.

Eye protection:



Safety glasses with side protection.

Body protection:



Protective work clothing

Recommended as part of a comprehensive chemical safety program.

9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- General Information
- Appearance:

Form:

Color: Colorless to pale yellow

Clear

Liquid

Odor: Characteristic

· Odour threshold: Not relevant for safety

pH-value: Not determined

· Change in condition

Melting point/Melting range:
Boiling point/Boiling range:

*Flash point:

Not determined
185 °C (365 °F)
104 °C (219 °F)

Ignition temperature: > 200 °C (> 392 °F)

Danger of explosion: Product is not explosive. However, formation of explosive air/

vapor mixtures are possible.

(Contd. on page 5)



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Printing date 02/19/2014 Reviewed on 02/19/2014

Trade name: Microcare DMP

(Contd. of page 4)

Explosion limits:

Lower: 2.4 Vol % **Upper:** 12.6 Vol %

Vapor pressure at 20 °C (68 °F): 1 hPa (1 mm Hg)

Density at 20 °C (68 °F): 1.165 - 1.190 g/cm³ (9.722 - 9.931 lbs/gal)

· Solubility in / Miscibility with

Water: Fully miscible.

• 9.2 Other information No further relevant information available.

· Organic Volatiles: 67.0% (calculated)

10: Stability and reactivity

10.1 Reactivity

Up to now, no dangers resulting from a reactivity of the mixture have been identified.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- Minimum shelf life: 12 months from production date.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products:

None expected during normal storage, handling and use.

11: Toxicological information

- · 11.1 Information on toxicological effects
- Acute toxicity:

LD/LC5	LD/LC50 values that are relevant for classification:		
Oral	ATE mix	2000-5000 mg/kg (calculated)	
Dermal	ATE mix	> 5000 mg/kg (calculated)	

- · Primary irritant effect:
- · Target Organism skin: No irritant effect.
- Target Organism eye:

Irritating effect (assessment according annex VI 67/548/EEC).

Causes serious eye irritation (Assessment outlined in Annex I, CLP 1272/2008/EC).

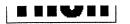
- · Sensitization: No sensitizing effects known.
- Additional toxicological information:
- Carcinogenic categories
- IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

NTP (National Toxicology Program)

None of the ingredients is listed.

USA



acc. to OSHA HCS

Printing date 02/19/2014

Reviewed on 02/19/2014

Trade name: Microcare DMP

(Contd. of page 5)

12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability
- Degree of elimination: The product ingredients can be readily eliminated in the sewage system.
- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- Ecotoxical effects:
- · Remark: Depending on concentration, toxic effects on activated sludge organisms are possible.
- Additional ecological information:
- · AOX-indication:

The product does not contain substances, which can influence the AOX of waste water.

General notes:

Sewages that contain this product may not be released into the aquatic environment without preliminary treatments (biological purification plant).

- 12.5 Results of PBT and vPvB assessment
- · PBT: This mixture does not contain substances that meet the PBT-criteria of REACH, annex XIII.
- · vPvB: This mixture does not contain substances that meet the vPvB-criteria of REACH, annex XIII.
- · 12.6 Other adverse effects Any other adverse effects on the environment are not expected.

13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation:

Dispose in accordance with label and applicable Federal (RCRA), state and local regulations.

- Uncleaned packagings:
- Recommendation: In accordance with label and federal and local regulations.

14: Transport information

- · 14.1 UN-Number
- DOT, ADR, IMDG, IATA

None

- 14.2 UN proper shipping name
- DOT, ADR, IMDG, IATA

None

- · 14.3 Transport hazard class(es)
- DOT, ADR, IMDG, IATA
- · Class

None

- 14.4 Packing group
- DOT, ADR, IMDG, IATA

- None
- 14.5 Environmental hazards:
- Marine pollutant:

- No
- 14.6 Special precautions for user
- Not applicable.
- 14.7 Transport in bulk according to Annex II
- of MARPOL73/78 and the IBC Code
- Not applicable.
- · Transport/Additional information:
- Not classified as dangerous for transport.

UN "Model Regulation":



acc. to OSHA HCS

Printing date 02/19/2014

Reviewed on 02/19/2014

Trade name: Microcare DMP

(Contd. of page 6)

15: Regulatory information:

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

SARA:

Section 302 (extremely hazardous substances):

None of the ingredient is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients are listed at a concentration above the "de minimus" level.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · California Proposition 65: None of the ingredients are listed.
- · Canadian Domestic Substances List (DSL): All ingredients are listed.
- Carcinogenic categories:

ACGIH:

None of the ingredients is listed.

NIOSH (National Institute for Occupational Safety and Health):

None of the ingredients is listed.

OSHA (Occupational Safety & Health Administration):

None of the ingredients is listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Further information under the regulations of use can be taken from the Product Data Sheet and label.

Contact for technical information: Personal Care: info@ThorSp.com

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

* Data compared to the previous version altered.



Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 11/14/2007 Revision date: 06/14/2013 Supersedes: 10/12/2009

Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance

Substance name : Sodium Tetraborate Decahydrate

 CAS No
 : 1303-96-4

 Product code
 : LC22955

 Formula
 : Na2B4O7·10H2O

Synonyms : Borax

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : For laboratory and manufacturing use only.

1.3. Details of the supplier of the safety data sheet

LabChem Inc

Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court

16063 Zelienople, PA - USA T 412-826-5230 - F 724-473-0647 <u>info@labchem.com</u> - <u>www.labchem.com</u>

1.4, Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 or 011-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Repr. 1B H360

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)



GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H360 - May damage fertility or the unborn child Precautionary statements (GHS-US) : P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P280 - Wear protective gloves, eye protection

P308+P313 - IF exposed or concerned: Get medical advice/attention

P405 - Store locked up

P501 - Dispose of contents/container to comply with local, state and federal regulations

2.3. Other hazards

Other hazards not contributing to the

classification

: None.

2.4. Unknown acute toxicity (GHS US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	GHS-US classification
Sodium Tetraborate Decahydrate	(CAS No) 1303-96-4	100	Repr. 1B, H360
(Main constituent)		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	

Full text of H-phrases: see section 16

3.2. Mixture

Not applicable

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SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical

advice/attention.

First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by

warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : May damage fertility or the unborn child.

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Slight irritation.

Symptoms/injuries after eye contact : May cause slight irritation.

Symptoms/injuries after ingestion : Irritation of the gastric/intestinal mucosa.

Symptoms/injuries upon intravenous

administration

: Not available.

4.3. Indication of any immediate medical attention and special treatment needed

Obtain medical assistance.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not flammable. Explosion hazard : Not applicable.

Reactivity : None.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Avoid (reject) fire-fighting water to enter environment.

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use chemically protective clothing.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store aways from

other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of

vapour. Do not handle until all safety precautions have been read and understood. Obtain

special instructions before use.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Do no eat, drink or

smoke when using this product.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : incompatible

materials. Keep container closed when not in use.

Incompatible products : Oxidizing agent. Strong acids.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sodium Tetraborate Decahydrate (1303-96-4)				
USA ACGIH	ACGIH TWA (mg/m³)	2 mg/m³		
USA ACGIH	ACGIH STEL (mg/m³)	6 mg/m³		

8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity

of any potential exposure.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Skin and body protection : In case of dust production: dustproof clothing

Respiratory protection : Wear appropriate mask

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : White powder or lumps.

Molecular mass : 381.37 g/mol Colour : white.
Odour : Odourless.

Odour threshold : No data available pH : 9.5 5% at 25°C Relative evaporation rate (butylacetate=1) : No data available

Melting point : 75 °C

Freezing point : No data available

Boiling point : 320 °C

No data available Flash point No data available Self ignition temperature No data available Decomposition temperature No data available Flammability (solid, gas) No data available Vapour pressure Relative vapour density at 20 °C No data available No data available Relative density 1.73 g/cm³ Density

Soluble in water. Soluble in glycerol.

Water: 6.25 g/100ml

Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : Not applicable.
Oxidising properties : No data available.
Explosive limits : No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1.

None.

10.2. Chemical stability

Not established.

Possibility of hazardous reactions 10.3.

Not established.

Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

Incompatible materials

Strong acids. Strong bases.

Hazardous decomposition products

fume. Sodium oxide. boron.

Serious eye damage/irritation

SECTION 11: Toxicological information

Information on toxicological effects

: Not classified Acute toxicity

Acute toxicity	. Not oldownou	
Sodium Tetraborate Decahydrate (\	303-96-4	9 9 9
LD50 oral rat	2660 mg/kg	***************************************
LD50 dermal rabbit	10000 mg/kg	
LD50 dermal rabbit	10000 mg/kg	

Not classified Skin corrosion/irritation

pH: 9.5 5% at 25°C Not classified

pH: 9.5 5% at 25°C Not classified Respiratory or skin sensitisation

Not classifiedBased on available data, the classification criteria are not met Germ cell mutagenicity

Not classified Carcinogenicity

May damage fertility or the unborn child. Based on available data, the classification criteria are Reproductive toxicity

not met

Not classified Specific target organ toxicity (single exposure)

Specific target organ toxicity (repeated

exposure)

Not classifiedBased on available data, the classification criteria are not met

: Not classifiedBased on available data, the classification criteria are not met Aspiration hazard

Potential Adverse human health effects and

symptoms

Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation

Symptoms/injuries after skin contact Slight irritation.

Symptoms/injuries after eye contact

Symptoms/injuries after ingestion

May cause slight irritation.

May cause respiratory irritation.

Irritation of the gastric/intestinal mucosa.

Symptoms/injuries upon intravenous

administration

Not available.

SECTION 12: Ecological information

12.1. Toxicity

Sodium Tetraborate Decahydrate (1303-96-4)	
EC50 Daphnia 1	1085 mg/l

Persistence and degradability 12.2.

Sodium Tetraborate Decahydrate (1303-96-4)	
Persistence and degradability	Not established.

Bioaccumulative potential

12.5. Bloaccultulative potential	
Sodium Tetraborate Decahydrate (1303-96-4)	
Bioaccumulative potential	Not established.

Mobility in soil

No additional information available

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12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to comply with local, state and federal regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Additional information

Other information : No supplementary information available.

Overland transport

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Sodium Tetraborate Decahydrate (1303-96-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Sodium Tetraborate Decahydrate (1303-96-4)		
Listed on the Canadian DSL (Domestic Sustances List) inventory.		
	WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Repr. 1B H360FD

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

Repr.Cat.2; R60 Repr.Cat.2; R61

Full text of R-phrases: see section 16

15.2.2. National regulations

Sodium Tetraborate Decahydrate (1303-96-4)

Listed on the Canadian Ingredient Disclosure List

15.3. US State regulations

No additional information available

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SECTION 16: Other information

Indication of changes : Revision - See : *.

Other information : None.

Full text of H-phrases: see section 16:

Repr. 1	В	Reproductive toxicity, Category 1B
H360		May damage fertility or the unborn child

NFPA health hazard : 2 - Intense or continued exposure could cause temporary

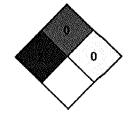
incapacitation or possible residual injury unless prompt

medical attention is given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions,

and are not reactive with water.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard
Physical : 0 Minimal Hazard

Personal Protection : E

SDS US (GHS HazCom 2012)

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