Read the entire SDS for a complete hazard assessment.

Section 1. Product and Company Identification

1.1 Product Identifiers

Product Name: RECCO 186 A Micro Wax Composition: Wax, Microcrystalline

Synonyms: Micro waxes, Microcrystalline/Paraffin Wax, Microsere® Wax

Chemical Family: Petroleum Hydrocarbon

CAS Number 63231-60-7

1.2 Recommended use Adhesives, Candles, Lubricants, Rubber, fuel, binders and release agents, laboratories, agrochemicals, polymer production, road and construction, coatings, and other uses.

Restrictions on use: Commercial formulation use only.

1.3 Manufacturer and Supplier/Distributor:

Manufacturer

Distributor

The International Group, Inc.

R.E. Carroll, Inc.

50 Salome Dr.

1570 North Olden Avenue

Toronto, ON, MIS2A8, CA

Trenton, NJ 08638-3204 USA

Phone: 416-293-4151

609-695-6211

Toll Free: 800-561-3696

Fax:609-695-0102

Email: irm@irmwax.com

johnb@recarroll.com

Issued by SOVEREIGN CHEMICAL COMPANY

1225 West Market St, Akron OH 44313 Phone: 330-869-0500

1.4 Emergency telephone number:

In the US: For a transport accident or leak, fire or major spill, call CHEMTREC, (800) 424-9300.

For International CHEMTREC assistance, call 1-703-527-3887 (collect calls accepted).

Section 2. Hazards Identification

2.1 Globally Harmonized System (GHS) Hazard Classification:

This SDS meets the requirements of GHS Revision 3, HCS 2012 (29 CFR 1910.1200).

GHS Classification: Not classified as dangerous under GHS.

Health Hazards:

None

Physical Hazards

None

Environmental Hazards

None

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2.2 Label Elements including Precautionary Statements:

Hazard: None

Signal Word: None

Hazard Statement: Exposure to fumes, vapors, or smoke of over-heated product can result in

irritation of eyes.

Direct contact of molten material will cause injury and burns.

Prevention: Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF exposed or concerned: Get medical advice/attention.

Storage: Store in accordance with local regional national international regulations.

Disposal: Dispose of contents/container in accordance with local regional national international

regulations.

2.3 Hazard(s) Not Otherwise Classified (HNOC): Heated product will cause thermal burns.

2.4 OTHER: HMIS Rating USA: Health: 0 Flammability: 1 Reactivity: 0 PPI: 0

Section 3. Composition/Information on Ingredients

Substance/Mixture: Substance.

Ingredient	% by Weight	CAS#	Hazard	Danger Symbol(s)
Microcrystalline Wax	100	63231-60-7	Not Applicable	None

Section 4. First-Aid Measures

General Information

If you feel unwell, seek medical advice (show label where possible). Show this safety data sheet to the doctor in attendance.

4.1 Ingestion

No specific first aid measures noted. Not acutely toxic by ingestion.

If material is ingested, DO NOT induce vomiting.

WHEN MOLTEN ONLY (molten product can cause thermal burns). Obtain medical attention immediately.

4.2 Inhalation

If fumes from heated product are inhaled: Move to fresh air.

Call a POISON CENTER or doctor/physician if you feel unwell.

WHEN MOLTEN ONLY: Obtain medical attention immediately. Exposed persons should be kept under medical observation for at least 48 hours because delayed effects may occur.

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4.3 Skin contact

Solid: No specific first aid measures noted.

WHEN MOLTEN ONLY: Molten product can cause thermal burns. Cool molten material adhering to skin as soon as possible. In serious cases, use emergency shower immediately. Immediately flush skin thoroughly with cold water for at least 15 minutes while removing contaminated clothing and shoes. Obtain medical attention to remove material adhering to skin and treatment of burns.

4.4 Eye contact

Solid: No specific first aid measures noted.

Exposure to fumes, vapors, or smoke of over-heated product can result in irritation of eyes.

Direct contact of molten material will cause injury and burns.

WHEN MOLTEN ONLY: Immediately flush eyes with water and continue washing for at least 15 minutes. If contact lens are present, DO NOT delay irrigation or attempt to remove the lens. Obtain medical attention immediately.

When handling molten product, eye shield must be worn at all times.

4.5 Acute and delayed symptoms/effects None known.

4.6 Indication of immediate medical attention and notes for physicians:

Treat contact with molten material as thermal burns.

Section 5. Fire-Fighting Measures

5.1 Flammable Properties:

Flash Point: >93.4 °C {200 °F} PMCC ASTM D93

Lower explosion limit: 0.9% (molten)
Upper explosion limit: 0.9% (molten)
Thermal decomposition: Not applicable

Fire and Explosion Hazard: Not an explosion hazard.

5.2 Extinguishing media

Suitable: Treat as an oil fire:

- dry chemical
- carbon dioxide (in case of small fires)
- water fog
- foam

Unsuitable:

Do not use water jet. Oil will float on water and can spread any fire.

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5.3 Special hazards arising from the chemical:

Unusual fire and explosion hazards: None known.

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition, which may be toxic and/or irritating.

5.4 Special protective equipment and precautions for firefighters:

Special fire-fighting procedures:

Do not direct a solid stream of water or foam into burning material; this may cause spattering and spread the fire. Cool containers exposed to heat with water spray and remove container, if no risk is involved. If a rail or tank truck is involved in a fire, ISOLATE for 800 meters (0.5 mile) in all directions. Shut off fuel to fire if it is possible to do so without hazard. If this is impossible, withdraw from the area and let the fire burn out under controlled conditions. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire. Cool containers exposed to flames with water until well after the fire is out.

Special protective equipment for firefighters: Self-contained breathing apparatus.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency procedures:

Keep unnecessary personnel away. Wear suitable protective equipment. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation

6.2 Environmental precautions

Avoid runoff to sewers or waterways. Dike area of spill to preventspreading and pump liquid to salvage tank. Waste: avoid washing intowatercourses. Use methods consistent with local regulations or incinerate.

6.3 Methods and material for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Allow material to solidify, and scrape up. Following product recovery, flush area with water.

Small Spills: Where possible allow molten material to solidify naturally. Never return spills to original containers for re-use.

Floor may be slippery; use care to avoid falling.

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6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information about personal protection equipment.

See Section 13 for disposal information.

Section 7. Handling and Storage

7.1 Precautions for safe handling:

Do not handle at temperatures >+40°C, unless wearing appropriate protective equipment. When kept in molten state, inert gas blanketing may be used to avoid material degradation. As a solid, avoid contamination by keeping in closed containers.

Do not handle until all safety precautions have been read and understood. Heat only in areas with appropriate exhaust ventilation. Do not breathe fume/mist/vapors. Avoid contact with molten material.

When using, do not eat, drink, or smoke. Observe good industrial hygiene practices.

Do not empty into drains. Avoid release to the environment.

Wash contaminated clothing before reuse.

The material is a solid at room temperature exhibiting elevated temperature softening characteristics. Above its softening point, the material liquefies and flows more readily as the temperature increases. The material may be used as a hot liquid for application purposes and requires caution in handling.

7.2 Conditions for safe storage, including all incompatibilities

VENTILATION

General (mechanical) room ventilation is expected to be satisfactory for use at room temperature

STORAGE

Keep away from heat, sparks, and flame. Do not store at temperatures > +40 ° C without proper safety review of storage equipment. Store protected from light. Keep in an area equipped with sprinklers. Store away from incompatible materials.

Section 8. Exposure Controls and Personal Protection

Consult with a Health and Safety Professional for specific selections.

8.1 Control parameter: Occupational exposure limits

EXPOSURE LIMIT VALUES: No exposure limits or biological limit values have been established for product.

Exposure limits (fumes) ACGIH (United States, 2002) TWA: 2mg/m3

NIOSH (United States, 2002) TWA: 2mg/m3

8.2 Appropriate engineering controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

8.3 Personal protective equipment:

Respiratory protection:

None expected to be needed for solid product.

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Hand protection/protective gloves: Wear oil resistant gloves.

Environmental Exposure Controls: None expected to be needed.

WHEN MOLTEN ONLY:

Hand protection: wear gloves impervious to this material and able to resist and protect employees from the elevated temperature.

Eye protection: Face shield or chemical splash goggles in case of splashing.

Skin protection: Wear protective clothing, such as long sleeves to minimize skin contact. Proper protective

splash resistant clothing, thermal gloves, splash resistant shoes, must be worn to prevent injury.

Thermal hazards: Wear appropriate thermal protective clothing, when necessary.

Respiratory protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use appositive-pressure air-supplied respirator if there is any potential for an uncontrolled release, if exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

Section 9. Physical and Chemical Properties

Physical State: Solid

Color: White to dark amber Odor: None or Mild Petroleum

Odor Threshold: N/A

Important health, safety, and environmental information

Flash Point: >93.4 °C (200 °F) Method: PMCC, ASTM 093

Flammability (solid, gaseous): Will support a flame above flash point. Danger of explosion: Product does not present an explosion hazard.

Self igniting Product will not self ignite Upper explosion limits: 7.0% (molten) Lower explosion limits: 0.9% (molten) Vapor Pressure: <0.1 kPa at 20 ° C Evaporation rate (Butyl acetate < 1): <0.01

Vapor Density (air=1) >5 Density at 20 C: 1.3 g/cm³

Relative Density at 25 C: 0.91-0.94 Density: at 100 °C >0.80 g/cm3

Bulk Density: Not available Solubility in Water: Insoluble

Solubility in organic solvents: Soluble

Kinematic viscosity: 13-18 mm2/s at 100 °C

Boiling Point: > 230 °C

pH: N/A

Specific gravity (H20=1) <1

Partitioning coefficient log POW: >6 (estimated) This product is soluble in oil.

Percent volatiles Nil

Autoignition Temperature: No Data

Melting Point: 54 - 102 ° C

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Section 10. Stability and Reactivity

- 10.1 Chemical stability: Stable under normal temperature conditions and recommended use.
- 10.2 Possibility of hazardous reactions: No hazardous reactions if stored and handled as prescribed.
- 10.3 Conditions to avoid: Normal handling Keep out of direct sunlight.
- 10.4 Incompatible materials: Strong oxidizing agents.

10.5 Hazardous decomposition products:

Decomposition products depend upon temperature, air supply and the presence of other materials. Processing may release fumes and other decomposition products. Fumes can be irritating.

10.6 Hazardous Polymerization: Will not polymerize.

Section 11. Toxicological Information

11.1 Information on the likely routes of exposure: Inhalation, ingestion, skin and eye contact.

11.2 Information on toxicological effects:

Acute toxicity:

None known at normal temperature.

Skin corrosion/irritation:

None known. Not classified as an irritant.

Serious eye damage/irritation:

None known. Not classified as an irritant.

Inhalation:

None known. When heated, irritating vapors may be formed.

Wax fumes have been reported to be irritating to the respiratory tract, especially to previously sensitized persons.

Respiratory sensitization:

None known. Not classified as a respiratory sensitizer.

Skin sensitization:

None known. Not classified as a dermal sensitizer.

Repeated dose toxicity

None known.

11.3 Carcinogenicity: Mutagenicity: Reproductive Toxicity Teratogenicity:

Not classified as a human carcinogen by ACGIH, NTP, or OSHA.

Not known to be a mutagen, teratogen, or reproductive hazard.

Specific target organ toxicity - single exposure: Not classified.

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Specific target organ toxicity - repeated exposure: Not classified.

Aspiration hazard Solid product: Not likely, due to the form of the product.

Aspiration of large amounts of liquid material is not reported to cause lipid pneumonia.

Chronic effects

Not expected to be hazardous by OSHA criteria.

Exposure to vapors, fumes, or smoke from molten material handled in confined areas can produce irritation of respiratory tracts and possible physical discomfort to sensitive individuals.

In rats, chronic ingestion of paraffins has shown accumulation in target organs (liver, spleen) with associated nonspecific immune response.

Further information: None.

Section 12. Ecological Information

This product is stable in water, and can be mechanically separated from water. The water may be suitable for disposal in a biological wastewater treatment plant.

- 12.1 Mobility: No information available.
- 12.2 Aquatic and terrestrial eco toxicity: This material is not expected to be toxic to aquatic life.
- 12.3 Persistence and degradability: Insignificant degradability.
- **12.4 Bioaccumulative potential:** Low bioaccumulation expected.
- 12.5 Other adverse effects: No other relevant information available.

Section 13. Disposal Considerations

13.1 Disposal methods:

Uncontaminated discarded product is not a hazardous waste under RCRA. Do not dump into any sewers, on the ground or into any body of water. All disposal practices must comply with all federal, state, and local laws and regulations. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

13.2 Container disposal:

Empty container retains product residue. Observe all hazard precautions. Do not distribute, make available, furnish or reuse empty container except for storage and shipment of original product. Remove all product residues. Puncture or otherwise destroy empty container and dispose of in a facility permitted for nonhazardous waste.

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Section 14. Transport Information

- 14.1 When transported at or <100 ° C: This product is not regulated
- 14.2 UN number: Not regulated.
- 14.3 UN proper shipping name: Not regulated
- 14.4 U.S. DOT transport hazard class: Not regulated.
- 14.5 Packing group (if applicable): Not regulated.
- 14.6 Marine Pollutant (Yes/No): No
- 14.7 Special precaution: No information available.

When transported above >100 °C:

UN No.: UN3257 ELEVATED TEMPERAURE LIQUIDS, N.O.S. (9), 111, Class: 9 (M9)

Packaging Group: 111, Hazard No.: 99, Label: 9 Technical Description: Microcrystalline Wax

Freight Description Road: 65 Petroleum Oil, N.0.1.B.N.

IMDG/ICAO

This product is not regulated by IMDG/ICAO. FORBIDDEN BY AIR @>= 100°C

TDG-CANADA

This product is not regulated by TDG.

Section 15. Regulatory Information

U.S. Regulations

15.1 USA TSCA: Listed on the TSCA Inventory.

15.2 SARA Section 311/312 Hazard Categories:

Acute Hazard: No Chronic Hazard: No Fire Hazard: No Reactive Hazard: No

Sudden Pressure Release: No

15.3 CERCLA Hazardous Substance SARA Section 304 Release Reporting:

Component(s)

Reportable Quantity

None

15.4 SARA Section 302 Extremely Hazardous Substances:

Component(s)/

CAS Number

Concentration

Min Max

None

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15.5 SARA Section 313 Toxic Chemicals:

Component(s)/

Reporting

Concentration

CAS Number

Threshold

Min Max

None

15.6 California Proposition 65:

This product is not known to contain chemical(s) known to the State of California to cause cancer or reproductive harm.

15.7 Pennsylvania Worker and Community Right To Know Act:

Hazardous Substances: None

15.8 New Jersey Worker and Community Right To Know Act:

MicrocrystallineWax

100

63231-60-7 NJRTKTS# None

Hazardous Substances: None

15.9 International Regulations:

EC/GHS classification

According to EC/GHS regulations, this product is not classified or labeled.

WHMIS Classification: This product is not a WHMIS controlled product.

Chemical Inventory

Canada: The ingredients of this product are on the DSL.

Europe: The ingredients of this product are on the EINECS inventory.

United States: The ingredients of this product are on the TSCA inventory.

Australia: The ingredients of this product are on the AICS inventory. Japan: The ingredients of this product are on the ENCS inventory.

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Section 16. Other Information

16.1 NFPA and HMIS Hazard Ratings:

We assigned NFPA and HMIS ratings to this product based on the hazards of its ingredient(s). Because the customer is most aware of the application of the product, the customer must ensure that the proper personal protective equipment (PPE) is provided consistent with information contained in the product SDS. This information is intended solely for the use of individuals trained in the particular hazard rating system.

Key: 0 = least, 1 = slight, 2 = moderate, 3 = high, 4 = extreme

NFPA (National Fire Protection Association) - Classification

Health

0 least

Flammability

1 slight

Instability or Reactivity

0 minimal

HMIS® [Hazardous Materials Identification System (Paint & Coating)] - Classification

Health

0 least

Flammability

1 slight

Reactivity

0 minimal

NFPA and HMIS® rating involve data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this SDS must be considered. This information is supplied solely for the use of individuals trained in the particular hazard rating system.

16.2 Revision information:

Date of the previous revision: New SDS

Date of this revision: 06/17/2015 (Version 1.0)

Revision summary: Revised GHS/OSHA compliant SDS

16.3 Training advice: Provide adequate information, instruction and training for operators.

16.4 Key or legend to abbreviations and acronyms used in the safety data sheet:

ACGIH American Conference of Governmental Industrial Hygienists

BEI Biological Exposure Index LC50 Median Lethal Concentration

LD50 Median Lethal Dose

NOAEL No observed adverse effect level NOEC No Observed Effect Concentration

NOEL No Observed Effect Level

OECD Organization for Economic Co-operation and Development OPPTS Office of Prevention, Pesticides, and Toxic Substances

OEL Occupational Exposure Limit
PEL Permissible Exposure Limit

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ppm

parts per million

STEL

Short Term Exposure Limit

TLV

Threshold Limit Value

TWA

Time Weighted Average

Action Level

An exposure value set by OSHA that is lower than the PEL that will trigger the need for activities

such as exposure monitoring and medical surveillance.

This Safety Data Sheet conforms to US GHS (Revision 3) Hazcom 2012

The opinions expressed herein are those of qualified experts within R.E. Carroll, Inc. We believe that the information contained herein is current as of tedate of this Safety Data Sheet. Since the use of this information and of these opinions and the conditions of use of this product are not within the control of R.E. Carroll, Inc., it is the user's obligation to determine the conditions of safe use of the products.

END OF SDS

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