SAFETY DATA SHEET



1. Identification

Product identifier 8500 - 8800 Series Products (Astorstat®)

Other means of identification

SDS number 8500 - 8800 Series (921277) Canada English

Synonyms See page 8

Various end uses e.g. pharmaceutical excipient, personal care/cosmetics, food contact coatings, Recommended use

additive for wax blends, use in adhesives etc.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company name The International Group Inc.

50 Salome Dr. Address

> Toronto ON, M1S2A8

Country Canada 416-293-4151 Telephone

E-mail Contact person

Emergency phone number 416-293-4151

2. Hazard(s) identification

Not classified. Physical hazards Health hazards Not classified. Not classified. **Environmental hazards**

Label elements

None. Hazard symbol Signal word None.

Hazard statement The product does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Store away from incompatible materials. Storage

Disposal Dispose of waste and residues in accordance with local authority requirements.

Other hazards None known.

Supplemental information None.

3. Composition/information on ingredients

Substances

% Chemical name Common name and **CAS** number synonyms Polyethylene Wax 9002-88-4 100

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in Composition comments

percent by volume.

4. First-aid measures

Inhalation Solid: No specific first aid measures noted. If fumes from heated product are inhaled: Move to

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

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Solid: No specific first aid measures noted. If burned by contact with hot material, cool molten material adhering to skin as quickly as possible with water, and see a physician for removal of

adhering material and treatment of burn.

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 handling of molten product eye shield must be worn at all times. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Should an accident occur, flush eyes with generous amounts of water for at least 15 minutes. Administer prompt first aid measures. Get medical attention if irritation develops and persists.

Ingestion

Solid: No specific first aid measures noted. Not acutely toxic by ingestion. If material is ingested, do not induce vomiting. Contact with hot product may cause severe burns. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

Eye and skin contact: When heated, contact with molten product can cause injury and burns.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. In case of shortness of breath, give oxygen. Symptoms may be delayed.

General information

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

5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing media

Water spray. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. By heating and fire, irritating vapors/gases may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water until well after the fire is out. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes.

General fire hazards

May form combustible dust concentrations in air.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Wear appropriate personal protective equipment. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Handle as a thermoplastic. With molten spills, allow the material to solidify and cool. Keep material out of sewers and watercourses by diking or impounding. Recover and place into appropriate containers for recycling or disposal, according to prevailing local, regional and national laws.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Allow molten material to cool and solidify before disposal. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Where possible allow molten material to solidify naturally. Scrape up.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water.

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7. Handling and storage

Precautions for safe handling

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.

Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS). 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.

8. Exposure controls/personal protection

Occupational exposure limits

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Material	Туре	Value	Form
Polyethylene Wax (CAS 9002-88-4)	TWA	3 mg/m3	Respirable particles
,		10 mg/m3	Total particulate.
Canada. British Columbia OELs.	(Occupational Exposure Limit	s for Chemical Substances, C	Occupational Health and
Canada. British Columbia OELs. Safety Regulation 296/97, as ame Material	ended)		Occupational Health and Form
Safety Regulation 296/97, as ame Material		Value	Form
Safety Regulation 296/97, as ame	ended) Type		•

Canada.	Ontario	OFIs	(Control	of F	ynosure	to B	leainolois	or Ch	emical A	(etnen
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Material	Туре	Value	Form
Polyethylene Wax (CAS 9002-88-4)	TWA	3 mg/m3	Respirable particles.
,		10 mg/m3	Inhalable

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Material	Туре	Value	Form	
Polyethylene Wax (CAS	TWA	10 mg/m3	Total dust.	
9002-88-4)				

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Provide easy access to water supply and eye wash facilities.

Individual protection measures, such as personal protective equipment

Eve/face protection	Wear approved safety goggles.	Wear a face shield when	working with molten material.
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Skin protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove Hand protection

supplier.

Other The material may be utilized in molten form. Proper protective splash resistant clothing, thermal gloves, splash resistant shoes, and eye shields must be worn to prevent injury. Use molten

material in well ventilated areas. When working in confined areas, use of appropriate respiratory

gear is recommended.

If engineering controls do not maintain airborne concentrations below recommended exposure Respiratory protection limits (where applicable) or to an acceptable level (in countries where exposure limits have not

been established), an approved respirator must be worn. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

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General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Solid. Physical state

Form Slabs, prills, pastilles or granules

White. Color Odor None.

Odor threshold No data available. Not applicable. pН

Melting point/freezing point 152.6 - 249.8 °F (67 - 121 °C)

Initial boiling point and boiling

range

> 572 °F (> 300 °C)

> 302.0 °F (> 150.0 °C) ASTM D-93 Flash point

Evaporation rate < 0.01 (Butyl acetate = 1)

Will support a flame above flash point. Flammability (solid, gas)

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

No data available.

Flammability limit - upper

(%)

No data available.

Vapor pressure < 0.01 mm Hg (77 °F/25 °C)

> 5 (Air = 1)Vapor density

Relative density 0.92 - 0.96 (H20=1)

77 °F (25 °C) Relative density temperature

Solubility(ies)

Solubility (water) < 0.1 % (20 °C) No data available. Partition coefficient

(n-octanol/water)

No data available. Auto-ignition temperature No data available. **Decomposition temperature** No data available. Viscosity

Other information

Explosive properties Not explosive. **Oxidizing properties** Not oxidizing. Partition coefficient

(oil/water)

< 0.01

Percent volatile

Negligible.

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Material is stable under normal conditions. Chemical stability

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use. Hazardous polymerization does not

occur.

Avoid temperatures exceeding the flash point. Contact with incompatible materials. Conditions to avoid

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

Decomposition of this product can generate carbon dioxide, carbon monoxide and other products

such as aldehyldes and ketones depending on conditions of oxidation. products

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11. Toxicological information

Information on likely routes of exposure

Inhalation Not relevant at normal room temperatures. When heated, irritating vapors may be formed. Wax

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

Health injuries are not known or expected under normal use. Molten material will produce thermal Skin contact

Eye contact Health injuries are not known or expected under normal use. Molten material will produce thermal

burns.

Health injuries are not known or expected under normal use. Contact with hot material can cause Ingestion

thermal burns which may result in permanent damage.

Symptoms related to the physical, chemical and toxicological characteristics Eye and skin contact: Contact with molten material may cause thermal burns.

Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.

Skin corrosion/irritation Thermal burn hazard - contact with hot material may cause thermal burns.

Serious eye damage/eye

irritation

Not classified. Direct contact of molten product to the eyes will cause thermal burns and eye injury.

Respiratory or skin sensitization

Respiratory sensitization Not classified.

Skin sensitization This product is not expected to cause skin sensitization.

Not classified. Germ cell mutagenicity

Not expected to cause cancer. Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Polyethylene Wax (CAS 9002-88-4) 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity Not classified.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

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

Not expected to be hazardous by OSHA criteria. Not expected to be hazardous. Exposure to Chronic effects

vapors, fumes, or smoke from molten material handled in confined areas can produce irritation of

respiratory tracts, and possible physical discomfort to sensitive individuals.

Further information None.

12. Ecological information

The product is not classified as environmentally hazardous. However, this does not exclude the **Ecotoxicity**

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

The product is insoluble in water.

No data available on bioaccumulation.

Other adverse effects

Mobility in soil

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

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Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

TDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to

Not applicable.

Annex II of MARPOL 73/78 and

the IBC Code

General information

This product is not regulated as dangerous goods for solid. Shipped hot molten product requires a class 9 "HOT" with statement: Elevated temperature material, liquid, N.O.S. 9, UN3257, III

(Polyolefinic blend).

15. Regulatory information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

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Country(s) or region Inventory name On inventory (yes/no)*

United States & Puerto Rico

Toxic Substances Control Act (TSCA) Inventory Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information

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Further information The classification for health and environmental hazards is derived by a combination of calculation

methods and test data, if available.

List of abbreviations TWA: Time weighted average.

> STEL: Short term exposure limit. PEL: Permissible Exposure Limit.

References ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

IARC Monographs. Overall Evaluation of Carcinogenicity

HSDB® - Hazardous Substances Data Bank

Registry of Toxic Effects of Chemical Substances (RTECS)

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compliance with all health, safety and environmental regulations.

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PRODUCT NUMBER	PRODUCT NUMBER	PRODUCT NUMBER	PRODUCT NUMBER
8501A	8540A	8603B	8676E
8502A	8540B	8603C	8676F
8504A	8540C	8604A	8677A
8505A	8541A	8605A	8680A
8505B	8541B	8607A	8688A
8505C	8542A	8607B	8690A
8505D	8542B	8612A	8691A
8507A	8542C	8613A	8692A
8507B	8543A	8614A	8693A
8507C	8544A	8615A	8695A
8508A	8550A	8616A	8697A
8508B	8551A	8617A	8702A
8509A	8552A	8618A	8703A
8510A	8552B	8622A	8704A
8510B	8552C	8623A	8704B
8510C	8552D	8624A	8705A
8510D	8553A	8625A	8705B
8511A	8553B	8626A	8706A
8512A 8513A	8553C 8554A	8626B 8627A	8706B 8707A
8513B	8554B	8628A	8707A 8708A
8514A	8554C	8629A	8711A
8514B	8555A	8630A	8711A
8515A	8557A	8630B	8728A
8516A	8558A	8630C	8729A
8516B	8559A	8631A	8731A
8516C	8560A	8647A	8733A
8517A	8561A	8647B	8734A
8518A	8561B	8648A	8735A
8519A	8561C	8649A	8738A
8519B	8562A	8650A	8738B
8520A	8563A	8650B	8741B
8520B	8563B	8651A	8743A
8520C	8563C	8651B	8743B
8522A	8564A	8652A	8744A
8522B	8567A	8652C	8745A
8522C	8568A	8653A	8745B
8522D	8569A	8654A	8747A
8523A	8570A	8655A	8748A
8523B 8525A	8571A 8573A	8655B 8655C	8758A 8760A
8526A	8574A	8660A	8761A
8526B	8575B	8661B	8762A
8527A	8577A	8665A	8763A
8529A	8578A	8666A	R-6134A
8529B	8579A	8667A	R-6147A
8530A	8582A	8667B	R-6199A
8531A	8586A	8668A	R-6217A
8532A	8587A	8668B	R-6217B
8533A	8589A	8668C	R-6349A
8534A	8589B	8669A	R-6376A
8535A	8590A	8669B	R-6401A
8535B	8591A	8670A	R-6484A
8535C	8592A	8671A	
8536A	8593A	8671B	
8536B	8594A	8674A	
8536C	8595A	8676A	
8537A	8596A	8676B	
8538A	8597A	8676C	
8539A	8603A	8676D	l

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