



THE INTERNATIONAL GROUP, INC.

SAFETY DATA SHEET

the StikkiWorks Co.
SAFETY DATA SHEET
StikkiWAX
March, 2015

1. Identification

Product identifier 5000 Series products (MICROSERE)

Other means of identification
SDS number 5000 Series

Recommended use Various end uses e.g. pharmaceutical excipient, personal care/cosmetics, food contact coatings, additive for wax blends, use in adhesives etc.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company Name The International Group Inc.
Address 50 Salome Dr.
Toronto
ON, M1S2A8, CA

Telephone 001-(416)-293-4151
E-mail -
Contact person -

Emergency phone number 001-(416)-293-4151
001-(800)-561-3509

CHEMTREC (North Amerca) 001-(800)-424-9300

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

This product does not meet the criteria for classification according to OSHA Hazard Communication Standard (OSHA GHS).

Label elements

Hazard symbol None.

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.

Storage Store away from incompatible materials.

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

Hazard(s) not otherwise classified (HNOC) None known.

3. Composition/information on ingredients

Substances

| Chemical name | Common name and synonyms | CAS number | % |
|----------------------|--------------------------|------------|-----|
| Microcrystalline wax | | 63231-60-7 | 100 |

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

4. First-aid measures

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| 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. |
| Skin contact | 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. |
| 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

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| Suitable extinguishing media | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). |
| Unsuitable extinguishing media | Do not use water on molten metal: Explosion hazard could result. |
| Specific hazards arising from the chemical | By heating and fire, irritating vapors/gases may be formed. During fire, gases hazardous to health 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. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Do not direct water at source of leak or safety devices as icing may occur. Use water spray to cool unopened containers. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. 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. 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. |
| General fire hazards | No unusual fire or explosion hazards noted. |

6. Accidental release measures

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| 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. 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, state and federal laws. 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. |
| 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. |

7. Handling and storage

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| 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

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| Occupational exposure limits | No exposure limits noted for ingredient(s). |
| Biological limit values | No biological exposure limits noted for the ingredient(s). |
| Appropriate engineering controls | Ensure adequate ventilation, especially in confined areas. Eye wash facilities and emergency shower must be available when handling this product. |
| Individual protection measures, such as personal protective equipment | |
| Eye/face protection | Wear approved safety goggles. Wear a face shield when working with molten material. |
| Skin protection | |
| Hand protection | Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove 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. |
| 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 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. |
| 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. 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

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| Appearance | |
| Physical state | Solid. |
| Form | Soft solid. |
| Color | White to dark amber. |
| Odor | None to slight petroleum odor. |
| Odor threshold | No data available. |
| pH | Not applicable. |
| Melting point/freezing point | 140 - 203 °F (60 - 95 °C) |
| Initial boiling point and boiling range | > 572 °F (> 300 °C) |
| Flash point | > 392.0 °F (> 200.0 °C) ASTM D-92 |
| Evaporation rate | < 0.01 (Butyl acetate = 1) |
| Flammability (solid, gas) | Will support a flame above flash point. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | No data available. |

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|-----------------------------------|----------------------------|
| Flammability limit - upper (%) | No data available. |
| Explosive limit - lower (%) | 0.9 % |
| Explosive limit - upper (%) | 7 % |
| Vapor pressure | < 0.01 mm Hg (77 °F/25 °C) |
| Vapor density | > 5 (Air = 1) |
| Relative density | 0.91 - 0.94 (77 °F/25 °C) |
| Solubility(ies) | |
| Solubility (water) | < 0.1 % (68 °F/20 °C) |
| Auto-ignition temperature | No data available. |
| Decomposition temperature | No data available. |
| Viscosity | No data available. |
| Other information | |
| Partition coefficient (oil/water) | < 0.01 |
| Percent volatile | Negligible. |

10. Stability and reactivity

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| Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| Chemical stability | Material is stable under normal conditions. |
| Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. Hazardous polymerization does not occur. |
| Conditions to avoid | Avoid temperatures exceeding the flash point. Contact with incompatible materials. |
| Incompatible materials | Strong oxidizing agents. |
| Hazardous decomposition products | Decomposition of this product can generate carbon dioxide, carbon monoxide and other products such as aldehydes and ketones depending on conditions of oxidation. |

11. Toxicological information

Information on likely routes of exposure

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| 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. |
| Skin contact | Health injuries are not known or expected under normal use. Molten material will produce thermal burns. |
| Eye contact | Health injuries are not known or expected under normal use. Molten material will produce thermal burns. |
| Ingestion | Health injuries are not known or expected under normal use. Contact with hot material can cause 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

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| 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. |
| Germ cell mutagenicity | Not classified. |
| Carcinogenicity | Not expected to be hazardous by OSHA criteria. |
| OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) | |
| Not listed. | |
| Reproductive toxicity | Not classified. |

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| Specific target organ toxicity - single exposure | Not classified. |
| 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 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. |

12. Ecological information

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| Ecotoxicity | The product is not classified as environmentally hazardous. However, this does not exclude the 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 | No data available. |
| Mobility in soil | No data available. |
| Other adverse effects | 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

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| 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). |
| 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

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

General information This product is not regulated as dangerous goods for solid and molten product shipped under 212 °F/100 °C. Hot molten product shipped over 212 °F/100 °C requires a class 9 "HOT" with statement: Elevated temperature material, liquid, N.O.S. 9, UN3257, III (WAX).

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
 Delayed Hazard - No
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations**US. Massachusetts RTK - Substance List**

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

Not Listed.

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) | Yes |
| 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 |
| 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, including date of preparation or last revision

Issue date 11-March-2015
Revision date 20-April-2015
Version # 02
HMIS® ratings Health: 0
 Flammability: 1
 Physical hazard: 0

List of abbreviations

LD50: Lethal Dose, 50%.
LC50: Lethal Concentration, 50%.
TWA: Time weighted average.
STEL: Short term exposure limit.
DOT: Department of Transportation.
IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods.
OSHA: Occupational Safety and Health Administration.
CAS: Chemical Abstracts Service.
WHMIS: Workplace Hazardous Materials Information System.
HMIS: Hazardous Materials Identification System.
NFPA: National Fire Protection Association.
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

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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