

1. Product Identification

Algonquin Products Company 770-578-4240 PO Box 87005 Dartmouth, MA 02748 www.algonquinproducts.com

Product Code:	1433
Product Name:	Formula 200
Product Use:	Heavy Duty Solvent Cleaner
Emergency Phone:	CHEMTREC: 800-424-9300

2. Hazard Identification

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s).



GHS Labeling:

GHS Classification:

Flammable Liquid: Category 4
Skin Irritation: Category 2
Eye Irritation: Category 2a
Aspiration Hazard: Category 2
Signal Word: Warning

Hazard Statements: H227-Combustible liquid.

H305-May be harmful if swallowed and enters airways.

H315-Causes skin irritation.

H319-Causes serious eye irritation. H335-May casue respiratory irritation.

.....

GHS Precautionary Statement(s) – Prevention

P102- Keep out of reach of children

P101- If medical advice is needed, have product container or label at hand.

P103- Read label before use.

P210-Keep away from heat/sparks/open flames/hot surfaces.

P270-Do not eat, drink or smoke when using this product.

P242-Use only non-sparking tools.

P233-Keep container tightly closed.

 ${\tt P241-Use\ explosion-proof\ electrical/ventilation/lighting/equipment}.$

P280-Wear protective gloves/protective clothing/eye protection/face protection.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

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

GHS Precautionary Statement(s) – Response

IF IN EYES - Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. Immediately call a physician if irritation persists.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call poison control/physician immediately.



IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water. Contact a physician immediately if irritation persists. Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Specific treatment (see First Aid information on product label and/or Section 4 of the SDS)

GHS Precautionary Statement(s) - Storage

Store in a secure manner.

Store in a well-ventilated place.

Keep cool.

GHS Precautionary Statement(s) - Disposal

Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations.

Potential Health Effects

INHALATION: Breathing of high vapor concentrations may cause dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness.

INGESTION: This material can directly enter the lungs, if swallowed, or if subsequently vomited. Once in the lungs it is very difficult to remove and can cause severe injury or death. May be irritating to mouth, throat, and stomach. Symptoms may include nausea, vomiting, and diarrhea.

SKIN CONTACT: This material may be irritating to skin. The degree of the injury will depend on the amount of material that gets onto the skin and the speed and thoroughness of the first aid treatment. Prolonged or repeat skin contact may cause drying of defatting of the skin. Symptoms may include pain, itching, discoloration, swelling and blistering. Not expected to be harmful to internal organs if absorbed through the skin.

EYE CONTACT: Not expected to cause prolonged or significant eye irritation.

ECOLOGICAL HAZARDS: Keep out of water supplies and sewers. This material is alkaline and may raise the pH of surface waters. This material has exhibited moderate toxicity to aquatic organisms.

PRECAUTIONARY STATEMENTS: Avoid breathing vapors or mist. Avoid contact with skin, eyes, and clothing. Keep container tightly closed. Wash thoroughly after handling/ Use only with adequate ventilation.

3. Composition / Information on Ingredients

Chemical Name:	CAS Number	% By Weight
Petroleum Distillates	64742-95-6	90-100

Unless listed immediately above, the product contains no hazardous ingredients as listed on the Massachusetts Hazardous Substance List or under §1910.1200 of Title 29 of the Code of Federal Regulations.

4. First Aid Measures

Eyes	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and
	lower eyelids. Remove contact lenses if present and easy to do. Washing eyes within several seconds is
	essential to achieve maximum effectiveness. Get medical attention if irritation persists.
Skin	Immediately flush skin with plenty of water for at least 15 minutes while removing any contaminated
	clothing and shoes. Discard contaminated clothing in a manner which limits further exposure, making sure
	to wash before reuse. Contact a physician immediately if irritation persists.
Ingestion	Do not induce vomiting. If victim is conscious and alert, give 2-4 cups of water. Never give anything by
	mouth to an unconscious person. Get medical attention immediately.
Inhalation	Remove from exposure and move to fresh air immediately and keep comfortable for breathing. If
	breathing is difficult, give oxygen. Call a doctor or poison control center if symptoms persist.



If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. Call a doctor or poison control immediately.

Notes to Physician: Treat symptomatically and supportively. Consult a doctor and/or the nearest Poison Control Centre for all exposures.

5. Fire Fighting Measures

Suitable extinguishing media:

Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form: Carbon Dioxide, Carbon Monoxide.

6. Accidental Release Measures

Protective Measures: Eliminate all sources of ignition in the vicinity of the spill or released vapor. If this material is released into the work area, evacuate the area immediately. Monitor area with combustible gas indicator. Wear appropriate personal protective equipment when cleaning up spills. Refer to Section 8. Eliminate potential sources of ignition. Handling equipment must be bonded and grounded to prevent sparking.

Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible sorbent materials or pumping. All equipment used when handling the product must be grounded. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

Reporting: U.S.A. regulations may require reporting spills of this material that could reach any surface waters. Report spills to local authorities and/or the National Response Center at (800) 424-8802 as appropriate or required.

7. Handling and Storage

Precautionary Measures: Liquid evaporates and forms vapor (fumes) that can catch fire and burn with explosive force. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches. Fire hazard is greater as liquid temperature rises above 85F.

Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations, which have the potential of generating an accumulation of electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids, National Fire Protection Association (NFPA 77), Recommended Practice on Static Electricity' (liquids, powders and dusts), and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents' (liquids).

General Storage Information: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner,



or disposed of properly. DO NOT USE OR STORE near heat, sparks or open flames. USE AND STORE ONLY IN WELL VENTILATED AREA. Keep container closed when not in use.

Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

8. Exposure Controls / Personal Protection

Chemical Name:	PEL (OSHA)	TWA (ACGIH)	TLV (ACGIH)
Petroleum Distillates	500ppm	100ppm	

VENTILATION SYSTEM: A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details. PERSONAL RESPIRATORS (NIOSH Approved): If exposure is anticipated to be greater than applicable exposure limits, wear a NIOSH approved respirator that provides adequate protection from measured concentrations of this material. Use the following elements for air-purifying respirators: Air-Purifying Respirator for Organic Vapors Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection. SKIN PROTECTION: Wear chemical resistant protective clothing, including apron, boots or safety shoes depending on the concentration and quantity of the hazardous substance handled. The chemical resistance of the protective equipment should be inquired at the equipment supplier. Suggested materials for protective gloves include: Nitrile, or Viton

EYE PROTECTION: Use chemical safety glasses and/or full face shield where splashing is possible. Maintain eye wash fountain and quick drench facilities in work area.

9. Physical and Chemical Properties

Appearance	Clear Liquid
рН	NA
Volatile (% V.O.C. by volume):	100
Flashpoint	Not Known
Freezing Point	NA
Vapor Pressure (mm Hg	Not Known
Lower Explosion Limits	Not Determined

Odor	Solvent
Specific Gravity	0.86
Solubility In Water	Not Soluble
Melting Point	Not Known
Vapor Density (Air=1):	Not Know
Evaporation Rate (BuAc=1):	Slower Than Water
Upper Explosion Limits	Not Determined

10. Stability & Reactivity

Stability: Stable under ordinary ambient and anticipated storage and handling conditions of temperature and pressure.

Hazardous Decompostion Products: Carbon Oxides.

Hazardous Polymerization: Will not occur.

Incompatibilities: May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, strong acids etc.

(Continued On Next Page) Page 4 of 6



Conditions to avoid: heat, sparks, fire, and oxidizing agents.

11. Toxicological Information

The severity of the tissue damage is a function of its concentration, the length of tissue contact time, and local tissue conditions. After exposure there may be a time delay before irritation and other effects occur. This material is a strong irritant and is corrosive to the skin, eyes, and mucous membranes. This material may cause severe burns and permanent damage to any tissue with which it comes into contact. Inhalation will cause severe irritation, possible burns with pulmonary edema, which may lead to pneumonitis. Skin contact with this material may cause severe irritation and corrosion of tissue. Repeated exposure may cause dermatitis. Eye contact can cause severe irritation, corrosion with possible corneal damage and blindness. Ingestion may cause irritation, corrosion/ulceration, nausea, and vomiting

Chemical Name:		Species	Dose
Petroleum Distillates	LD50 Oral	Rat	5000mg/kg
Petroleum Distillates	LD50 Dermal	Rabbit	3000mg/kg

12. Ecological Information

Environmental Fate: Not established Environmental Toxicity: Not available

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Large amounts should be given to a licensed disposal agency. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local regulations.

14. Transportation Information

Transportation Hazard Class	Comubstible
Placard Required	None
DOT Classifiation (Domestic Land)	NA 1992 Compustible Liquid N.O.S. (Contains Petroleum Hydrocarbons)

DOT Classifiation (Domestic, Land)	NA 1993, Combustible Liquid N.O.S., (Contains Petroleum Hydrocarbons)	
	Combustible, PGIII Emergency Response Guide No: 154	

15. Regulatory Information

Not Known Not Known.

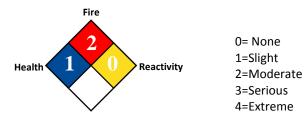
16. Regulatory Information



DISCLAIMER:

See the product label for proper use directions.

HMIS (U.S.A.):



IMPORTANT: The information presented herein, while not guaranteed, was prepared by technical personnel and is true and accurate to the best of our knowledge. NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, OR WARRANTY OR GUARANTY OF ANY OTHER KIND, EXPRESS OR IMPLIED, IS MADE REGARDING PERFORMANCE, SAFETY, SUITABILITY, STABILITY OR OTHERWISE. This information is not intended to be all-inclusive as to the manner and conditions of use, handling, storage, disposal and other factors that may involve other or additional legal, environmental, safety or performance considerations, and the manufacturer assumes on liability whatsoever for the use of or reliance upon this information. While our technical personnel will be happy to respond to questions, safe handling and use of the product remains the responsibility of the customer. No suggestions for use are intended as, and nothing herein shall be construed as, a recommendation to infringe any existing patents or to violate any Federal, State, local or foreign laws.

OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Safety Data Sheet available to your employees and customers.

(Continued On Next Page) Page 6 of 6