ECOCITY

A SAFER ALTERNATIVE TO ALCOHOL- AND GLYCOL-BASED FLUIDS FOR WINTER MUNICIPAL OPERATIONS

Paving, cutting and compaction work performed in winter conditions presents unique challenges. When water freezes and conventional solutions become incompatible with occupational health and safety requirements or high-temperature applications, operations can be slowed or even brought to a halt.

EcoCity helps keep operations moving with a safe, high-performance solution compatible with applications involving surface temperatures of up to 170°C (338°F).

Conventional solution	ECOCITY
Alcohols and glycols	Potassium Formate
OHS risks	No harmful vapours
High-temperature constraints	Compatible up to 170°C (338°F)
High environmental impact	Biodegradable
Corrosive	Non corrosive

Already adopted by multiple municipalities for their winter paving and cutting operations.

APPLICATION

Designed for:

- Concrete cutting
- Asphalt cutting
- Compaction rollers
- Vibratory plate compactors
- Winter paving
- Municipal road work
- Infrastructure rehabilitation
- Job sites where water is incompatible with operations

OHS COMPLIANCE

Meets modern occupational health and safety requirements:

✔️ Methanol-free
✔️ Ethanol-free
✔️ Isopropanol-free
✔️ Glycol-free
✔️ Compatible with applications involving surface temperatures up to 170°C (338°F)
✔️ No harmful vapours requiring respiratory protection

Technical documentation available upon request.

KEY BENEFITS

OPERATIONAL PERFORMANCE
Maintains fluidity at low temperatures to ensure efficient flow through equipment, piping and spray systems.

COMPATIBLE WITH HIGH-TEMPERATURE APPLICATIONS
Designed for operations involving hot surfaces and demanding work environments.

LOW-RISK FORMULATION
Chloride-free formulation designed to reduce risks associated with harmful vapours, flammable products and fluids that are incompatible with municipal operations.

EQUIPMENT AND INFRASTRUCTURE PROTECTION
Non-corrosive solution that helps reduce the impact on equipment, metal components and infrastructure.

IMPROVED ENVIRONMENTAL PROFILE
Biodegradable, chloride-free solution designed to reduce the impact on wastewater systems and the environment.

RELIABLE LOCAL SUPPLY
Manufactured in Canada using CO_2 and renewable electricity, ensuring a stable and reliable supply.

ELECTRO CARBON

Saint-Mathieu-de-Beloeil, Québec, Canada
www.electrocarbon.ca | info@electrocarbon.ca

ECOCITY

EcoCity enables municipalities and contractors to continue winter operations when water, alcohols and glycols are no longer compatible with occupational health and safety requirements or high-temperature applications.

MUNICIPALITIES ARE CHANGING THE WAY THEY OPERATE

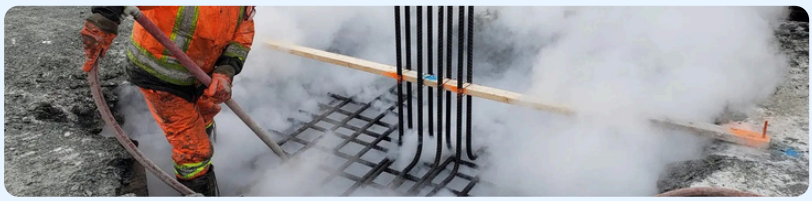
Alcohols and glycols traditionally used in winter operations can produce vapours when exposed to hot surfaces, creating occupational health and safety concerns. They may also be incompatible with certain paving and cutting operations and can complicate environmental management.

OPERATIONAL BENEFITS

- Maintains fluidity at low temperatures
- Low viscosity for improved flow and spray performance
- Compatible with existing equipment
- Compatible with high-temperature applications
- Helps reduce the corrosive impact on equipment and infrastructure







TECHNOLOGY & PRODUCTION

EcoCity is produced using a proprietary electrochemical process that converts captured CO_2 into potassium formate using renewable electricity.

➜ Reduced production-related emissions
➜ Stable and controlled production
➜ Manufactured in Canada

A SOLUTION DESIGNED FOR DEMANDING MUNICIPAL ENVIRONMENTS

PRODUCT PROPERTIES

- Aqueous potassium formate solution
- Density (20°C): 1.16–1.18
- pH: 8.0–9.0
- Homogeneous solution with no precipitate
- Biodegradable, chloride-free formulation

* Technical documentation and performance data available upon request.

APPLICATIONS & STORAGE

Compatible with municipal spraying and liquid application equipment.

Available in:

- Tanker trucks
- IBC totes

Can be stored in:

- Stainless steel tanks
- Alkali-resistant plastic tanks
- Synthetic resin-coated steel tanks

ENVIRONMENTAL PROFILE

- Reduced impact on wastewater systems
- Lower BOD and COD levels compared with conventional solutions
- Supports municipal environmental objectives

PROVEN AND TRUSTED TECHNOLOGY

2025 Clean16 — exceptional contributors to the clean economy / contributeurs exceptionnels à l'économie propre

Recipient of Canada's 2025 Clean50 & Clean16 Award

Lauréat — Les Prix EUREKA! — 2025

2025 EUREKA Innovation Award Laureate

mitacs

Startup Company of the Year 2021 Winner

ENVIROLYS

Entrepreneur Award Winner

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