

Safety Data Sheet

acc. to OSHA HCS & WHMIS

Printing date 05/21/2018

Reviewed on 05/21/2018

1 Identification

- **Product identifier:** GRNPATF, CF-15000
- **Trade name:** **MC CROSSFIRE INVERCUT PLASMA TABLE FLUID**
- **Item number(s):** GRNPATF, CF-15000
- **MSDS Number:** 487
- **Application of the substance / the mixture** PLASMA ARC WATER TABLE FLUID
- **Manufacturer/Supplier:**
USA ADDRESS :

MICHIGAN ARC PRODUCTS INC
2040 AUSTIN
TROY, MI 48083
PH (248) 740-8066
FAX (248) 740-8067

CANADIAN ADDRESS :

MAP CANADA LTD
325 HEALEY RD., UNIT 1
BOLTON, ON L7E 5C1
PH (905) 951-2788
FAX (905) 951-6256

- **Information department:** (905) 951-2788
- **Emergency telephone number:**
ChemTrec (800) 424-9300 / 1-(703)-741-5970
Canada only: CANUTEC (Call collect) (613) 996-6666

2 Hazard(s) identification

- **Classification of the substance or mixture:**



GHS03 Flame over circle

Oxidizing Liquids – Category 3 H272 May intensify fire; oxidizer.



GHS07

Acute Toxicity (Oral) - Category 4 H302 Harmful if swallowed.
Eye Irritation - Category 2A H319 Causes serious eye irritation.

- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Signal word:** Warning
- **Hazard-determining components of labeling:**
sodium nitrite
- **Hazard statements:**
May intensify fire; oxidizer.
Harmful if swallowed.
Causes serious eye irritation.
- **Precautionary statements:**
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep away from clothing and other combustible materials.

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Take any precaution to avoid mixing with combustibles.

Wash thoroughly after handling.

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

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

If swallowed: Call a doctor if you feel unwell.

Rinse mouth.

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

If eye irritation persists: Get medical advice/attention.

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

· **NFPA ratings (scale 0 - 4):**



Health = 2

Fire = 0

Reactivity = 1

The substance possesses oxidizing properties.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

7632-00-0	sodium nitrite	10-30% w/w
112-34-5	2-(2-butoxyethoxy)ethanol	≥5-<10% w/w

· **Additional information:**

Exact concentrations and/or compositions are being withheld as trade secrets.

4 First-aid measures

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**

Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If eye irritation persists get medical advice/attention.

· **After swallowing:** Call a poison center/doctor if you feel unwell. Rinse mouth.

· **Most important symptoms and effects, both acute and delayed:**

No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed:**

No further relevant information available.

5 Fire-fighting measures

· **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **Special hazards arising from the substance or mixture:** No further relevant information available.

· **Protective equipment:** No special measures required.

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6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**
Wear protective clothing.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling**
- **Precautions for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s):** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with limit values that require monitoring at the workplace:**

112-34-5 2-(2-butoxyethoxy)ethanol

TLV (USA)	Long-term value: 67.5* mg/m ³ , 10* ppm *Inhalable fraction and vapor
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- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **Material of gloves:**
Nitrile rubber, NBR
Butyl rubber, BR
Neoprene gloves

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· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· Form:	Liquid
· Color:	Green
· Odor:	Ether-like
· Odor threshold:	Not determined.
· pH-value at 20 °C:	7.5
· Change in condition	
Melting point/Melting range:	-8 °C
Boiling point/Boiling range:	100 °C
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	225 °C
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure at 20 °C:	23 hPa
· Density at 20 °C:	1.12 g/cm ³
· Relative density:	Not determined.
· Vapor density:	Not determined.
· Evaporation rate:	Not determined.
· Solubility in / Miscibility with	
Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	7.2 %
VOC content:	7.22 %
	80.9 g/l / 0.67 lb/gl
· Other information	No further relevant information available.

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10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions:**
Reacts with ammonia
Reacts with cyanides
Reacts with amines.
Reacts with acids.
Reacts with reducing agents.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Nitrogen oxides

11 Toxicological information

- **Information on toxicological effects:**
- **Acute toxicity**

- **LD/LC50 values that are relevant for classification:**

7632-00-0 sodium nitrite		
Oral	LD50	85 mg/kg (rat)

- **Specific symptoms in biological assay:** No further relevant information available.
- **Primary irritant effect**
- **on the skin:** No irritant effect.
- **on the eye:** Strong caustic effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Toxic
Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

12 Ecological information

- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Behavior in environmental systems**
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Additional ecological information**
- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

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- **Other adverse effects:** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Uncleaned packagings**
- **Recommendation:**
Place in a sealed container and label as waste. Place in a safe area, and comply with all federal, state, provincial and local regulations for disposal.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- | | |
|---|--|
| <ul style="list-style-type: none"> · UN-Number · DOT, TDG, IMDG, IATA | UN3219 |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT · TDG · IMDG, IATA | Nitrites, inorganic, aqueous solution, n.o.s.
3219 Nitrites, inorganic, aqueous solution, n.o.s.
(Sodium nitrite)
NITRITES, INORGANIC, AQUEOUS SOLUTION, N.O.S. |
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT |  |
| <ul style="list-style-type: none"> · Class · Label · TDG, IMDG, IATA | 5.1 Oxidizing substances
5.1 |
| <ul style="list-style-type: none"> · Class · Label |  |
| <ul style="list-style-type: none"> · Class · Label | 5.1 Oxidizing substances
5.1 |
| <ul style="list-style-type: none"> · Packing group · DOT, TDG, IMDG, IATA | III |
| <ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: | No |
| <ul style="list-style-type: none"> · Special precautions for user: · EMS Number: · Segregation groups | Warning: Oxidizing substances
F-A,S-Q
Nitrites and their mixtures |

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<ul style="list-style-type: none"> · Stowage Category · Segregation Code 	<p>B</p> <p>SG38 Stow "separated from" ammonium compounds. SG49 Stow "separated from" cyanides SG62 Stow "separated from" sulphur</p>
<ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: 	Not applicable.
<ul style="list-style-type: none"> · Transport/Additional information: · DOT · Quantity limitations 	<p>On passenger aircraft/rail: 2.5 L On cargo aircraft only: 30 L</p>
<ul style="list-style-type: none"> · TDG · Excepted quantities (EQ) 	<p>Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml</p>
<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) 	<p>5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml</p>
<ul style="list-style-type: none"> · UN "Model Regulation": 	UN 3219 NITRITES, INORGANIC, AQUEOUS SOLUTION, N.O.S. (SODIUM NITRITE), 5.1, III

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

7632-00-0	sodium nitrite
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112-34-5	2-(2-butoxyethoxy)ethanol
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- **TSCA (Toxic Substances Control Act):**

All ingredients are listed or exempted

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

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- **Canadian substance listings**

- **Canadian Domestic Substances List (DSL/NDSL):**

All ingredients are listed.

- **Canadian Ingredient Disclosure list (limit 0.1%):**

None of the ingredients is listed.

- **Canadian Ingredient Disclosure list (limit 1%):**

7632-00-0	sodium nitrite
112-34-5	2-(2-butoxyethoxy)ethanol

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS03 GHS07

- **Signal word** Warning

- **Hazard-determining components of labeling:**

sodium nitrite

- **Hazard statements**

May intensify fire; oxidizer.

Harmful if swallowed.

Causes serious eye irritation.

- **Precautionary statements**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep away from clothing and other combustible materials.

Take any precaution to avoid mixing with combustibles.

Wash thoroughly after handling.

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

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

If swallowed: Call a doctor if you feel unwell.

Rinse mouth.

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

If eye irritation persists: Get medical advice/attention.

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

16 Other information

This MSDS format meets ANSI Z400.1-1998, OSHA 1910.1200 and WHMIS requirements. M.A.P. Canada Ltd. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Product use and conditions of use are beyond the control of M.A.P. Canada Ltd.. Warranty of materials is limited to test results of product performance as detailed in certificates of compliance. Interpretation of test results is the responsibility of end-user. No other warranties, expressed or implied, are made. M.A.P. Canada Ltd. is an ISO 9001:2000 registered company.

- **Department issuing SDS:** Product safety department

- **Contact:** Stephen Nowicki

- **Date of preparation / last revision** 05/21/2018 / -

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· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

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