Material Safety Data Sheet

CIVITAS HARMONIZER ™



1. Product and company identification

Product name : CIVITAS HARMONIZER ™

Code : HARMON, HARMCA

Material uses : Turf colorant. To be used only in conjunction with Petro-Canada's Civitas ™ for turf

application.

Manufacturer : Petro-Canada Lubricants Inc.

2310 Lakeshore Road West Mississauga, Ontario

Canada L5J 1K2

In case of emergency : Suncor Energy: 403-296-3000

Canutec Transportation: 613-996-6666

Poison Control Centre: Consult local telephone directory for emergency number(s).

2. Hazards identification

Physical state : Liquid.
Odour : None.

WHMIS (Canada) :

Class D-2B: Material causing other toxic effects (Toxic).

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Emergency overview: WARNING!

CAUSES EYE AND SKIN IRRITATION.

Irritating to eyes and skin. Avoid breathing vapour or mist. Avoid contact with eyes, skin

and clothing. Wash thoroughly after handling.

Routes of entry : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may

be delayed following exposure.

Ingestion: No known significant effects or critical hazards.

Skin : Irritating to skin.

Eyes : Irritating to eyes.

Potential chronic health effects

Chronic effects : No known significant effects or critical hazards.

Carcinogenicity : Not listed as carcinogenic by OSHA, NTP or IARC.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Medical conditions : 1

aggravated by over-

exposure

: None known.

See toxicological information (Section 11)

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3. Composition/information on ingredients

NameCAS number%Phthalo green pigmentProprietary40 - 41 (w/w)Silicone copolymerProprietary9 - 10 (w/w)Ethoxylated alcoholProprietary3 - 4 (w/w)Polyarylphenol ethoxylateProprietary2 - 3 (w/w)HMIRC Registry #: 8185 Claim Granted Date: May 30, 2012

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in

4. First-aid measures

this section.

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical

attention immediately.

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin thoroughly with soap and

water or use recognised skin cleanser. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation
 Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention

immediately.

Ingestion: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical

personnel. Never give anything by mouth to an unconscious person. Get medical

attention immediately.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may

be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Notes to physician : No specific treatment. Treat symptomatically. Contact poison treatment specialist

immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Flammability of the product : May be combustible at high temperature.

Extinguishing media

Suitable: Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

Special exposure hazards : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable

training.

Products of combustion : Carbon

: Carbon oxides (CO, CO2), nitrogen oxides (NOx), halogenated compounds, metallic oxides, smoke and irritating vapours as products of incomplete combustion.

Special protective: Fire-fighters should wear appropriate protective equipment and self-contained breathing

equipment for fire-fighters apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Special remarks on fire : Low fire hazard. This material must be heated before ignition will occur. hazards

Special remarks on explosion hazards: Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

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6. Accidental release measures

Personal precautions

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and storage

Handling

: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures

: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

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8. Exposure controls/personal protection

Respiratory : Use a properly fitted, air-purit

: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: organic vapour filter

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is

necessary.

Recommended: neoprene, nitrile, polyvinyl alcohol (PVA), Viton®.

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or

dusts.

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling

this product.

Environmental exposure

controls

Hands

Eyes

Skin

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be

necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

Physical state : Liquid.

Flash point : Open cup: >93.3°C (>199.9°F) [Cleveland.] [Product does not sustain combustion.]

Auto-ignition temperature : Not available.

Flammable limits : Not available.

Colour : Green.
Odour : None.

Odour threshold : Not available.

PH : Not available.

Boiling/condensation point : Not available.

Melting/freezing point : Not available.

Relative density : 1.198 kg/L @ 15°C (59°F)

Vapour pressure : Not available.
Vapour density : Not available.
Volatility : Not available.
Evaporation rate : Not available.
Viscosity : Not available.
Pour point : Not available.
Solubility : Insoluble in water.

10. Stability and reactivity

Chemical stability: The product is stable.

Hazardous polymerisation: Under normal conditions of storage and use, hazardous polymerisation will not occur.

Materials to avoid : Reactive with oxidising agents.

Hazardous decomposition : May release COx, NOx, halogenated compounds, metallic oxides, smoke and irritating vapours when heated to decomposition.

11. Toxicological information

Acute toxicity

Product/ingredient name Result Species Dose Exposure

Ethoxylated alcohol LD50 Oral Rat - Female 2.77 g/kg

Conclusion/Summary
Chronic toxicity

Conclusion/Summary: Not available.

Irritation/Corrosion

Conclusion/Summary: Not available.

Sensitiser

Conclusion/Summary: Not available.

Carcinogenicity

Conclusion/Summary: Not available.

Mutagenicity

Conclusion/Summary: Not available.

Teratogenicity

Conclusion/Summary: Not available.

Reproductive toxicity

Conclusion/Summary: Not available.

12. Ecological information

Environmental effects: No known significant effects or critical hazards.

Not available.

Aquatic ecotoxicity

Conclusion/Summary : Not available.

Biodegradability

Conclusion/Summary: Not available.

Other adverse effects: No known significant effects or critical hazards.

13. Disposal considerations

Waste disposal

: The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

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14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
TDG Classification	None. (Not regulated.)	-	-	-		-
DOT Classification	None. (Not regulated.)	-	-	-		-

PG*: Packing group

15. Regulatory information

United States

HCS Classification : Irritating material

Canada

WHMIS (Canada) : Class D-2B: Material causing other toxic effects (Toxic).

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

International regulations

Canada inventory : All components are listed or exempted.
United States inventory : All components are listed or exempted.

(TSCA 8b)

Europe inventory: All components are listed or exempted.

International lists : Australia inventory (AICS): All components are listed or exempted.

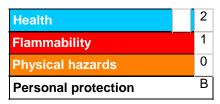
China inventory (IECSC): All components are listed or exempted.

Japan inventory: All components are listed or exempted. **Korea inventory**: All components are listed or exempted.

16. Other information

Label requirements : CAUSES EYE AND SKIN IRRITATION.

Hazardous Material Information System (U.S.A.)



National Fire Protection Association (U.S.A.)



References: Available upon request.

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Date of printing : 4/4/2014.

Date of issue : 13 June 2012

Date of previous issue : 5/6/2011.

Responsible name : Product Safety - DSR

✓ Indicates information that has changed from previously issued version.

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16. Other information

For Copy of (M)SDS

: Internet: lubricants.petro-canada.ca/msds

Lubricants:

Western Canada, telephone: 1-800-661-1199; fax: 1-800-378-4518 Ontario & Central Canada, telephone: 1-800-268-5850; fax: 1-800-201-6285 Quebec & Eastern Canada, telephone: 1-800-576-1686; fax: 1-800-201-6285

For Product Safety Information: (905) 804-4752

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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