SAFETY DATA SHEET

Revised: 1/7/2016

Section 1. Identification

GHS product identifier	: TT-WBC (TTWB) 20/10 Winter Boost Concentrate
Packaged as	: Case of 32-oz, 5-gallon Pail, 55-gallon Drum
Product type	: Windshield Cleaner, Winter Concentrate Additive
Identified uses	: Cleaning & De-Icing Windshields
Supplier's details	: 20/10 Products, PO Box 7609, Salem OR 97303
Emergency Telephone	: Chemtrec, 1-800-424-9300, Acct #: CCN4

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 3 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3
<u>GHS label elements</u> Hazard pictograms	
Signal word	: Danger
Hazard statements	 Highly flammable liquid and vapor. Toxic if swallowed, in contact with skin or if inhaled. Causes damage to organs. Harmful to aquatic life with long lasting effects.
Precautionary statements	
General	: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.



Section 2. Hazards identification

Prevention	: Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
Response	: IF exposed: Call a POISON CENTER or physician. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell.
Storage	: Store locked up. Store in a well-ventilated place. Keep cool.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

CAS number/other identifiers		
CAS number	:	Not applicable.
Product code	÷	

Ingredient name	%	CAS number
Methanol	60 - 100	67-56-1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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 this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necess	sary first aid measures
Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention. If necessary, call a poison center or physician.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Wash with plenty of soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Section 4. First aid measures

Ingestion : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/e	ffects, acute and delayed
Potential acute health effect	
Eye contact	: No known significant effects or critical hazards.
Inhalation	: Toxic if inhaled.
Skin contact	: Toxic in contact with skin.
Ingestion	: Toxic if swallowed.
Over-exposure signs/symp	<u>otoms</u>
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Indication of immediate med	lical attention and special treatment needed. if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet or water-based fire extinguishers.
Specific hazards arising from the chemical	: Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide

Section 5. Fire-fighting measures

Special protective actions for fire-fighters	: Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions. protec	tive equipment and emergency procedures
For non-emergency personnel	: 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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	: Avoid dispersal of spilled 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). Water polluting material. May be harmful to the environment if released in large quantities.
Methods and materials for co	ntainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Use spark-proof tools and explosion-proof equipment. Approach 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 spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures
 Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Section 7. Handling and storage

Advice on general occupational hygiene	: 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. See also Section 8 for additional information on hygiene measures. Remove contaminated clothing and protective equipment before entering eating areas.
Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in a segregated and approved area. 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. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Methanol	ACGIH TLV (United States, 6/2013). Absorbed through skin. STEL: 328 mg/m³ 15 minutes. STEL: 250 ppm 15 minutes. TWA: 262 mg/m³ 8 hours. TWA: 200 ppm 8 hours. NIOSH REL (United States, 4/2013). Absorbed through skin. STEL: 325 mg/m³ 15 minutes. STEL: 250 ppm 15 minutes. TWA: 260 mg/m³ 10 hours. TWA: 200 ppm 10 hours. OSHA PEL (United States, 2/2013). TWA: 260 mg/m³ 8 hours. TWA: 200 ppm 8 hours.

Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants belowany recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.
Individual protection meas	<u>ures</u>
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. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: 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, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection	

Section 8. Exposure controls/personal protection

Hand protection	: 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	 Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Use a properly fitted, air-purifying or supplied air 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.

Section 9. Physical and chemical properties

Appearance	
Physical state	: Liquid.
Color	: Clear blue or green.
Odor	: Ammoniacal. [Slight]
Odor threshold	: Not available.
рН	: 8.2
Melting point	: Not available.
Boiling point	: 78.889°C (174°F)
Flash point	: Open cup: 17.778°C (64°F) [Cleveland.]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 0.937 to 0.94
Solubility	: Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.



Section 10. Stability and reactivity

Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Chemical stability	: The product is stable.
Reactivity	: No specific test data related to reactivity available for this product or its ingredients.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Methanol	LC50 Inhalation Gas. LC50 Inhalation Gas. LD50 Dermal LD50 Oral	Rabbit	145000 ppm 64000 ppm 15800 mg/kg 5600 mg/kg	1 hours 4 hours - -

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Methanol	Eyes - Moderate irritant Skin - Moderate irritant Eyes - Moderate irritant	Rabbit Rabbit Rabbit		24 hours 100 mg 24 hours 20 mg 40 mg	

Sensitization

There is no data available.

Carcinogenicity

Classification

Product/ingredient name	OSHA	IARC	NTP	ACGIH	EPA	NIOSH
Methanol	-	-	-	-	-	None.

Specific target organ toxicity (single exposure)

Name		Route of exposur	Target organs
Methanol	Category 1		central nervous system (CNS) and gastrointestinal tract

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

There is no data available.



formation on the likely	ological information
nformation on the likely outes of exposure	: Dermal contact. Eye contact. Ingestion.
otential acute health effect	t <mark>s</mark>
Eye contact	: No known significant effects or critical hazards.
Inhalation	: Toxic if inhaled.
Skin contact	: Toxic in contact with skin.
Ingestion	: Toxic if swallowed.
wmptoms related to the ph	vsical. chemical and toxicological characteristics
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
elayed and immediate effe	ects and also chronic effects from short and long term exposure
Short term exposure	
Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.
Long term exposure	
Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.
Potential chronic health eff	<u>fects</u>
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
	: No known significant effects or critical hazards.
Teratogenicity	
Teratogenicity Developmental effects	: No known significant effects or critical hazards.



Section 12. Ecological information

<u>Toxicity</u>

Product/ingredient name	Result	Species	Exposure
Methanol	Acute EC50 16.912 mg/L Marine water Acute EC50 10000000 µg/l Fresh water	Algae - Ulva pertusa Daphnia - Daphnia magna	96 hours 48 hours
	Acute LC50 2500000 µg/l Marine water Acute LC50 100 mg/L Fresh water	Crustaceans - Crangon crangon - Adult Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	48 hours 96 hours
	Chronic NOEC 9.96 mg/L Marine water	Algae - Ulva pertusa	96 hours

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Methanol	-0.77	<10	low

Mobility in soil

Soil/water partition : Not available. coefficient (Koc)

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

Section 13. Disposal considerations

Disposal methods	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. 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 empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
United States BCDA Tex	ie bezerdeue weete "II" Liet

United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS #		Referenc e number
Methanol	67-56-1	Listed	U154

Section 14. Transport information

	DOT Classification	IMDG	ΙΑΤΑ
UN number	UN1230	UN1230	UN1230
UN proper shipping name	Methanol (solution)	Methanol (solution)	Methanol (solution)
Transport hazard class(es)	3 (6.1)	3 (6.1)	3 (6.1)
Packing group	Ш	11	11
Environmental hazards	No.	No.	No.
Additional information	Reportable quantity 7142.9 lbs / 3242.9 kg [912.81 gal /3455. 4 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. Limited Quantity Exemption	Limited Quantity Exemption	Limited Quantity Exemption

AERG : 131

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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

Section 15. Regulatory information

U.S. Federal regulations	: TSCA 8(a) CDR Exempt/Partial exemption: Not determined United States inventory (TSCA 8b): All components are listed or exempted.
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Listed
Clean Air Act Section 602 Class I Substances	: Not listed
Clean Air Act Section 602 Class II Substances	: Not listed
DEA List I Chemicals (Precursor Chemicals)	: Not listed
DEA List II Chemicals (Essential Chemicals)	: Not listed
SARA 302/304	



Section 15. Regulatory information

Composition/information on ingredients

No products were found.

SARA 304 RQ

: Not applicable.

SARA 311/312

Classification

: Fire hazard

Immediate (acute) health hazard

Composition/information on ingredients

Name	%	hazar	Sudden release of pressure			Delayed (chronic) health hazard
Methanol	60 - 100	Yes.	No.	No.	Yes.	No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Methanol	67-56-1	60 - 100
Supplier notification	Methanol	67-56-1	60 - 100

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts: The following components are listed: MethanolNew York: The following components are listed: MethanolNew Jersey: The following components are listed: MethanolPennsylvania: The following components are listed: Methanol

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Methanol	No.	Yes.	No.	23000 µg/day (ingestion) 47000 µg/day (inhalation)

Section 16. Other information

History

Date of issue mm/dd/yyyy	: 04/30/2014
Version	: 1
Revised Section(s)	: Not applicable.
Prepared by	: KMK Regulatory Services Inc.



Section 16. Other information

Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships
	MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations
Notice to reader	

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.

