MATERIAL SAFETY DATA SHEET

Total Solutions P.O. Box 240014 Milwaukee, WI 53224

GENERAL INFORMATION NUMBER: (414) 354-6417 CHEMTREC: (800) 424-9300



REVISION DATE: April 15, 2009 DATE OF ISSUE: April 22, 2009

I - Product Identification Aluminum Transmission & Engine Cleaner							
Aluminum I ransmission PRODUCT CODE: 0663	& Engine	e Cleaner					
CHEMICAL FORMULATION: Powder							/
NFPA HAZARD IDENTIFICATION SY HAZARD RATING: 4 - Extreme			FLAMMAI - Moderate;		: 0 - Slight;		EACTIVITY: 1 0 - Insignificant
	, 511	ingii, 2	Wiodefate,	1	biigiit,		o morginitean
	II - Haz	ardous Ingree	dients				
	V	Values reported as					
	APPROX	OSHA	ACGIH		A 40 CI		
Sodium carbonate	<u>%</u> 40.0-50.0	$\frac{\mathbf{PEL}}{5 \text{ mg/m}^3 *}$	$\frac{\mathbf{TLV}}{3 \text{ mg/ m}^3 *}$	<u>302</u> N	<u>355</u> N	<u>372</u> N	<u>CAS #</u> 497-19-8
Sodium metasilicate	10.0-20.0	$5 \text{ mg/m}^3 \text{ *}$	$3 \text{ mg/m}^3 \text{ *}$	N	N	N	6834-92-0
Sodium dichloroisocyanurate	1.0-2.0	$5 \text{ mg/m}^3 \text{ *}$	$3 \text{ mg/ m}^3 \text{ *}$	N	N	N	51580-86-0
respirable dust - 8-hr TWA ey: PEL : Permissible Exposure Limit	TI V. Three						
N/A: Not Applicable 302: CERCLA List of Hazardous	N/D: Not De Substances and	etermined Reportable Quan		ablisheo 2.4).	1	Y: Yes	N : No
N/A: Not Applicable	N/D : Not Do Substances and tremely Hazard xic Chemicals s	etermined Reportable Quan ous Substances fo	N/E: Not Est tities (40 CFR 30 or Emergency Pla Reporting (Com	ablisheo 2.4). nning ar	l nd Notifi	Y: Yes	N: No 40 CFR 355).
N/A: Not Applicable 302: CERCLA List of Hazardous 355: SARA TITLE III / List of Ex 372: SARA TITLE III / List of To	N/D : Not Do Substances and tremely Hazard xic Chemicals s	etermined Reportable Quan ous Substances fo subject to Release - Physical Dat	N/E: Not Est tities (40 CFR 30 or Emergency Pla Reporting (Com	ablished 2.4). nning an nunity l	d nd Notifi Right to	Y: Yes ication (Know) (N: No 40 CFR 355).
N/A: Not Applicable 302: CERCLA List of Hazardous 3 355: SARA TITLE III / List of Ex 372: SARA TITLE III / List of To BOILING POINT (°F): N/A	N/D : Not Do Substances and tremely Hazard xic Chemicals s	etermined Reportable Quan ous Substances fo subject to Release - Physical Dat SPEC	N/E: Not Est tities (40 CFR 30 or Emergency Pla Reporting (Com ta	ablished 2.4). nning ar nunity l	d Notifi Right to TER = 1)	Y: Yes ication (Know) (: N/A	N: No 40 CFR 355).
N/A: Not Applicable 302: CERCLA List of Hazardous 3 355: SARA TITLE III / List of Ex 372: SARA TITLE III / List of To BOILING POINT (°F): N/A VAPOR PRESSURE (mm Hg): N/A	N/D : Not Do Substances and tremely Hazard xic Chemicals s	etermined Reportable Quant ous Substances for subject to Release - Physical Dat SPEC VOC	N/E: Not Est tities (40 CFR 30 or Emergency Pla Reporting (Com ta EIFIC GRAVITY CONTENT (% 1	ablished 2.4). nning ar nunity l 7 (WAT 59 weig	1 nd Notifi Right to TER = 1) ht): <2.0	Y: Yes ication (Know) (: N/A	40 CFR 355). (40 CFR 372).
N/A: Not Applicable 302: CERCLA List of Hazardous 3 355: SARA TITLE III / List of Ex 372: SARA TITLE III / List of To BOILING POINT (°F): N/A VAPOR PRESSURE (mm Hg): N/A VAPOR DENSITY (AIR = 1): N/A	N/D : Not Do Substances and tremely Hazard xic Chemicals s	etermined Reportable Quan ous Substances for subject to Release - Physical Dat SPEC VOC EVAH	N/E: Not Est tities (40 CFR 30 or Emergency Pla Reporting (Com ta CONTENT (% PORATION RA	ablished 2.4). nning ar nunity l 7 (WAT 59 weig	1 nd Notifi Right to TER = 1) ht): <2.0	Y: Yes ication (Know) (: N/A	N: No 40 CFR 355). (40 CFR 372).
 N/A: Not Applicable 302: CERCLA List of Hazardous 355: SARA TITLE III / List of Ex 	N/D: Not Do Substances and tremely Hazard xic Chemicals s	etermined Reportable Quan ous Substances fo ubject to Release - Physical Dat SPEC VOC EVAH pH: N	N/E: Not Est tities (40 CFR 30 or Emergency Pla Reporting (Com ta CONTENT (% PORATION RA	ablished 2.4). nning ar nunity l 7 (WAT 59 weig	1 nd Notifi Right to TER = 1) ht): <2.0	Y: Yes ication (Know) (: N/A	N: No 40 CFR 355). (40 CFR 372).
 N/A: Not Applicable 302: CERCLA List of Hazardous 3 355: SARA TITLE III / List of Ex 372: SARA TITLE III / List of To BOILING POINT (°F): N/A VAPOR PRESSURE (mm Hg): N/A VAPOR DENSITY (AIR = 1): N/A SOLUBILITY IN WATER: Soluble APPEARANCE AND ODOR: Fine, white	N/D: Not Do Substances and tremely Hazard xic Chemicals s III	etermined Reportable Quant ous Substances for subject to Release - Physical Dat SPEC VOC EVAH pH: N ht chlorine odor.	N/E: Not Est tities (40 CFR 30 or Emergency Pla Reporting (Com ta CIFIC GRAVITY CONTENT (% PORATION RA	ablished 2.4). nning ar nunity l 7 (WAT 59 weig	1 nd Notifi Right to TER = 1) ht): <2.0	Y: Yes ication (Know) (: N/A	N: No 40 CFR 355). (40 CFR 372).
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V - Reactivity Data

STABILITY: Stable

INCOMPATIBILITY: Acidic and reducing material. **CONDITIONS TO AVOID:** None HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce oxides of carbon and chlorine gas. HAZARDOUS POLYMERIZATION: Will not occur. **CONDITIONS TO AVOID: None**

VI - Health Hazard Data

EYE CONTACT: X **ROUTES OF ENTRY** INHALATION: X **SKIN CONTACT: X INGESTION: X** INGREDIENTS THAT ARE CONSIDERED BY OSHA, NTP, IARC TO BE SUSPECTED HUMAN CARCINOGENS: None. EFFECTS OF OVEREXPOSURE

IF IN EYES: Mild to moderate irritation, redness tearing.

IF ON SKIN: Irritation, with prolonged or repeated exposure. May aggravate existing skin conditions.

IF SWALLOWED: Nausea, cramps, and diarrhea.

IF INHALED: Irritation to upper respiratory tract.

EMERGENCY AND FIRST AID PROCEDURES

IF IN EYES: Flush eyes and under eyelids with plenty of cool water, for at least 15 minutes and obtain medical attention.

IF ON SKIN: Flush with water for at least 15 minutes. Remove contaminated clothing and launder before re-use. If irritation persists, obtain medical attention.

IF SWALLOWED: Contact physician or poison control center immediately. Rinse mouth with water. Give affected person 1 to 2 glasses of water. Do not induce vomiting unless instructed by a physician or poison control center. Never give anything to an unconscious person.

IF INHALED: Remove person to fresh air. Call physician immediately.

VII - Spill or Leak Protection

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Ventilate area. Contain spill. Scoop up material for reuse or place in a labeled vented container for disposal.

WASTE DISPOSAL METHOD: Consult local environmental authorities.

VIII - Special Protection Information

RESPIRATORY PROTECTION: Use with adequate ventilation. Do not breathe dusts. LOCAL: Recommended

VENTILATION

PROTECTIVE GLOVES: Chemical resistant.

EYE PROTECTION: Chemical goggles or safety glasses.

OTHER PROTECTIVE EQUIPMENT: Emergency eye wash station.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Store in a cool, dry place, away from acids. Keep container tightly closed when not in use.

OTHER PRECAUTIONS: Keep out of reach of children.

IX - Transportation Information (ground transportation only)

DOT ID NUMBER: UN 3262

DOT PROPER SHIPPING NAME: Corrosive solid, basic, inorganic, n.o.s. (sodium metasilicate, anhydrous)

DOT CLASS: 8

DOT PACKING GROUP: III

The shipping information listed above applies only to non-bulk (< 119 gallons) containers of this product. This product may have more than one proper shipping name depending on packaging, product properties, & mode of shipment. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may apply.

REVISION DATE: April 15, 2009

Prepared by: Technical Dept.

DATE OF ISSUE: April 22, 2009

MECHANICAL: Not required

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