

## Material Safety Data Sheet

Prepared according to 29 CFR 1910.1200

### 1. Chemical Product and Company Identification

American Refining Group, Inc.  
77 North Kendall Avenue  
Bradford, PA 16701 USA  
Tel: (814) 368.1200  
www.amref.com



<b>Product Name</b>	Corrosion Inhibitor – Solvent Based
<b>Product Code</b>	9001
<b>CAS Number</b>	Not applicable for mixtures
<b>Synonyms</b>	Corrosion inhibitor
<b>Generic Chemical Name</b>	Petroleum hydrocarbon
<b>Product Type</b>	Mixture
<b>Transportation Emergency Phone No.</b>	Chemtrec: 1-800-424-9300 (24 HRS)
<b>ARG Emergency Phone No.</b>	814-368-1297 (24 HRS)
<b>MSDS E-Mail</b>	msds@amref.com

### 2. Hazards Identification

<b>Appearance</b>	Light brown liquid
<b>Odor</b>	Wintergreen hydrocarbon oil
<b>Signal Word</b>	DANGER! Flammable liquid and vapor (may cause explosion) Static accumulating liquid can become electrostatically charged even in bonded and grounded equipment; Sparks may ignite liquid and vapor may cause flash fire (or explosion) Fatal if swallowed. Can enter lungs and cause damage Prolonged or repeated use may cause damage to liver and kidney by oral, dermal or inhalation exposure May cause cancer based on animal studies Prolonged or repeated skin contact with liquid may cause defatting resulting in drying, redness, and possible blistering May cause skin irritation May cause eye irritation May cause respiratory tract irritation
<b>Exposure Routes</b>	Target Organs: kidneys, liver Inhalation, ingestion, skin and/or eye contact
<b>OSHA Regulatory Status</b>	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)
<b>Precautions</b>	Keep away from heat, sparks and flame. Keep container tightly closed. Use only with adequate ventilation. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity.

**2. Hazards Identification**

<b>Inhalation</b>	Avoid breathing dust/fume/gas/mist/vapors/spray. Keep container tightly closed. Use only with adequate ventilation.
<b>Eyes</b>	Avoid contact with eyes. Wash thoroughly after handling.
<b>Skin</b>	Avoid contact with skin and clothing. Wash thoroughly after handling.
<b>Symptoms of Exposure</b>	Irritation eyes, nose, throat; dizziness; dermatitis; chemical pneumonitis (aspiration liquid); in animals: kidney damage
<b>Medical Conditions Aggravated by Exposure</b>	Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product
<b>Chronic Effects</b>	See Section 11 for complete health hazard information
<b>Environmental Effects</b>	See Section 12 for complete ecological information

**3. Composition / Information on Ingredients**

CAS No.	Component	Percent
8052-41-3	Stoddard solvent	60-70
64742-47-8	Petroleum distillates, hydrotreated light	10-20
64742-54-7	Hydrotreated heavy paraffinic distillate	5-10

Component Regulatory Information	This product may be regulated, have exposure limits or other information identified as the following: Stoddard solvent, biphenyl, mineral oil (mist) (See Section 8)
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**4. First Aid Measures**

<b>Eyes</b>	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.
<b>Skin</b>	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
<b>Inhalation</b>	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.
<b>Ingestion</b>	DO NOT INDUCE VOMITING. If conscious, rinse out mouth with water. Get medical attention immediately.
<b>Note to Physicians</b>	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been

#### 4. First Aid Measures

ingested or inhaled.

#### 5. Fire Fighting Measures

##### **Flammable Properties**

This product is a static accumulating liquid. Static accumulating liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor may cause flash fire. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Restrict flow velocity to avoid build-up of static charge. Refer to NFPA 77, API 2003, and CENELEC CLC/TR 50404 for further guidance.

##### **Extinguishing Media**

Use dry chemical, CO<sub>2</sub>, water spray (FOG) or foam

##### **Specific Hazards Arising from Chemical**

Elevated temperatures can lead to the formation of irritating fumes and vapors. Decomposition products may include the following materials: Carbon dioxide and Carbon monoxide.

##### **Protective Equipment and Precautions for Firefighters**

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

#### 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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

##### **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.

##### **Methods for Containment**

Stop leak if without risk.

##### **Methods for Cleanup**

Move containers from spill area. Approach release from upwind. Absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

#### 7. Handling and Storage

##### **Handling Procedures**

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 get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Use non-sparking tools.

##### **Shipping and Storing Procedures**

Store in accordance with local regulations. Store in a segregated and approved area. Keep in the original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials. Do not store in unlabeled containers. Store and use away from heat, sparks, open flame or any other ignition source. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before

**7. Handling and Storage**

transferring material. Empty containers that retain product residue may be hazardous. Do not reuse container.

**8. Exposure Controls / Personal Protection**

**Component Exposure Limits**

**Stoddard Solvent**

<b>ACGIH TLV:</b>	TWA: 100 ppm	TWA: N/A mg/m <sup>3</sup>	STEL: N/A ppm	STEL: N/A mg/m <sup>3</sup>
<b>OSHA PEL:</b>	TWA: 500 ppm	TWA 2900 mg/m <sup>3</sup>	STEL: N/A ppm	STEL: N/A mg/m <sup>3</sup>
<b>NIOSH REL:</b>	TWA: N/A ppm	TWA 350 mg/m <sup>3</sup>	STEL: N/A ppm	STEL: N/A mg/m <sup>3</sup>
<b>NIOSH Ceiling:</b>	1800 mg/m <sup>3</sup> [15 minute]			

N/A signifies not available

**Mineral Oil (mist)**

<b>ACGIH TLV:</b>	TWA: N/A ppm	TWA: 5 mg/m <sup>3</sup>	STEL: N/A ppm	STEL: 10 mg/m <sup>3</sup>
<b>OSHA PEL:</b>	TWA: N/A ppm	TWA 5 mg/m <sup>3</sup>	STEL: N/A ppm	STEL: N/A mg/m <sup>3</sup>
<b>NIOSH REL:</b>	TWA: N/A ppm	TWA 5 mg/m <sup>3</sup>	STEL: N/A ppm	STEL: 10 mg/m <sup>3</sup>

**Biphenyl**

<b>ACGIH TLV:</b>	TWA: .2 ppm	TWA: N/A mg/m <sup>3</sup>	STEL: N/A ppm	STEL: N/A mg/m <sup>3</sup>
<b>OSHA PEL:</b>	TWA: .2 ppm	TWA 1 mg/m <sup>3</sup>	STEL: N/A ppm	STEL: N/A mg/m <sup>3</sup>
<b>NIOSH REL:</b>	TWA: N/A ppm	TWA N/A mg/m <sup>3</sup>	STEL: N/A ppm	STEL: N/A mg/m <sup>3</sup>

**Engineering Controls**

This product is a static accumulating liquid. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Material should be handled in enclosed vessels and equipment. Use only in adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Eye/Face Protection**

Chemical goggles or face shield.

**Skin Protection**

Chemical resistant, impervious gloves complying with an approved standard should be worn at all times. Coveralls, apron, and boots as necessary to minimize contact.

**Respiratory Protection**

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicated this is necessary. Respirator selection must be based on known or anticipated exposure levels.

**General Hygiene**

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.

**9. Physical and Chemical Properties**

<b>Appearance</b>	Light brown	<b>Vapor Pressure (mm Hg at 20°C)</b>	Not available
<b>Odor</b>	Wintergreen hydrocarbon oil	<b>Water Soluble</b>	No

**9. Physical and Chemical Properties**

<b>Physical State</b>	Liquid	<b>Specific Gravity (g/cc)</b>	.791
<b>Flash Point (°F)</b>	105	<b>Density (lbs/gal)</b>	6.6
<b>Boiling Point (°F)</b>	>310	<b>pH</b>	Not available

**10. Chemical Stability & Reactivity Information**

<b>Stability</b>	Stable under normal conditions. If heated, product’s static accumulation will rise and could cause flash fire.
<b>Polymerization</b>	No polymerization
<b>Incompatibility</b>	Strong acids and oxidizing materials
<b>Conditions to Avoid</b>	High temperatures, sparks, flames
<b>Hazardous Decomposition Products</b>	Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.

**11. Toxicological Information**

<b>Acute Exposure</b>	
<b>Respiratory Irritation</b>	Aspiration hazard. If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract. Based on data from components or similar materials.
<b>Eye Irritation</b>	May cause eye irritation. Vapors formed from heating may cause eye irritation.
<b>Skin Irritation</b>	Can cause skin irritation. Prolonged or repeated direct exposure to the skin results in symptoms of irritation and redness, dermatitis or oil acne.
<b>Sensitization</b>	Not expected to cause skin or respiratory sensitization.

**Component Analysis – LD50 / LC50**

**Acute Toxicity Estimate (ATE) Values for Product:**

<b>Inhalation LC50 Rat</b>	>21 mg/L 1 HR
<b>Oral LD50 Rat</b>	>6000 mg/kg
<b>Dermal LD50 Rabbit</b>	>2000 mg/kg

\*5% of the mixtures LC50 inhalation value is unknown

**Chronic Exposure**

<b>Target Organ Effects</b>	Repeated-dose dermal, oral, and inhalation studies in rats using similar substances to petroleum distillates, hydrotreated light revealed an internal organ effect (i.e., liver enlargement, spleen weight decrease, adrenal enlargement, thymus weight decrease).
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Oral NOAEL (No Observed Adverse Effect Level): .1g/kg/day (90 days)  
 Dermal LOEL (Lowest Observed Effect Level): .05 g/kg/day (28 days)  
 Inhalation LOEL: .15 g/L (12 days)

<b>Carcinogenicity</b>	Repeated-dose dermal studies in rats using similar substances to petroleum distillates, hydrotreated light revealed positive results of carcinogenicity.
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<b>Mutagenicity</b>	This product contains petroleum distillates, hydrotreated light. A study based on similar materials resulted positive in an in vitro Ames test done with the
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**Reproductive Toxicity** Syrian Hamster Embryo and in an in vivo mutagenicity test done with the mammalian bone marrow erythrocyte micronucleus. This product contains petroleum distillates, hydrotreated light. Rats given high, repeated daily doses of this component by oral intubation experienced adverse reproductive effects. Based on available data, this category of petroleum streams are unlikely to induce reproductive toxicity. The relevance of these effects to humans is uncertain.

**Teratogenicity** This product contains petroleum distillates, hydrotreated light. Rats given high, repeated daily doses of this component by oral intubation experienced adverse teratogenic effects. Based on available data, this category of petroleum streams are unlikely to induce teratogenic toxicity. The relevance of these effects to humans is uncertain.

**12. Ecological Information**

**Component Analysis- Ecotoxicity – Aquatic Life**

<b>Duration/Test/Species</b>	<b>Concentration/Conditions</b>
96 Hr LC50 Pimephales promelas	N/A mg/L


<b>Degradability</b>	Not determined
<b>Bioaccumulation</b>	Not determined
<b>Soil Mobility</b>	Not determined

**13. Disposal Considerations**

**Disposal Instructions**

The generation of waste should be avoided or minimized wherever possible. Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

**14. Transportation Information**

<b>14. Transportation Information</b>					
<b>Emergency Response Guide No.</b>		128		<i>North American Emergency Response Guide Book</i>	
	NA Number	Shipping Name (technical name)	Hazard Class	Packing Group	Labels/Placard*
<b>U.S. DOT Bulk (over 119 gallons)</b>	1993	Combustible liquid N.O.S. (stoddard solvent)	combustible liquid	III	 <p>Bulk container must be labeled on two</p>

					opposing sides
<b>U.S. DOT Non-Bulk (under 119 gallons)</b>	1993	Combustible liquid N.O.S. (stoddard solvent)	combustible liquid	III	Exempted from labeling and placarding unless shipped via Air or Vessel

**\*Truck/Rail car must be placarded if quantity exceeds 1,000 pounds**

**15. Regulatory Information**

**SARA Extremely Hazardous Substances (Sections 302 & 304)**

This product does not contain greater than 1% of any “extremely hazardous substances” listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

**SARA Section 313**

This product does not contain greater than 1.0% of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

**SARA Section 311 & 312 Classifications**

**Acute Hazard** No  
**Chronic Hazard** Yes  
**Fire Hazard** Yes  
**Reactivity Hazard** Yes

**CERCLA**

This product does not contain any “hazardous substances” listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

**California Prop 65**

This product contains chemical(s) known to the state of California to cause cancer and/or birth defects.

**Clean Water Act / Oil Pollution Act**

This product may be subject to regulation by Section 311 of the Clean Water Act and the Oil Pollution Act. Releases of the product into or leading to surface waters must be reported to the National Response Center at 1-800-424-8802.

**Global Chemical Inventories**

<b>Inventory</b>	<b>Component</b>
	<b>All components</b>
US TSCA	Present
EU	Present
Japan	Not available
Australia	Present
New Zealand	Present
Canada	Present
Switzerland	Not available
Korea	Present
Philippines	Present
China	Present
Taiwan	Not available

**16. Other Information**

**US NFPA Ratings**

Health	Fire	Instability
2	2	1

**HMIS Ratings**

Health	Fire	Physical Hazards
2*	2	1

**Precautionary Labels**

**Signal Word**

**DANGER!**

Flammable liquid and vapor (may cause explosion)

Static accumulating liquid can become electrostatically charged even in bonded and grounded equipment; Sparks may ignite liquid and vapor may cause flash fire (or explosion)

Fatal if swallowed. Can enter lungs and cause damage

Prolonged or repeated use may cause damage to liver and kidney by oral, dermal or inhalation exposure

May cause cancer based on animal studies

Prolonged or repeated skin contact with liquid may cause defatting resulting in drying, redness, and possible blistering

May cause skin irritation

May cause eye irritation

May cause respiratory tract irritation

Target Organs: kidneys, liver

1/23/2012

**Preparation/Revision Date**

**Revision Reason**

Outdated

**Prepared By:**

Jenna Prechtel, Product Compliance Coordinator

*The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.*

**End of MSDS**