1. IDENTIFICATION

Product identifier
Product Code  F044-0900
Product Name  ADHESION PROMOTER

Other means of identification
Common Name  SERIES 44-0900

Recommended use of the chemical and restrictions on use
Recommended Use  industrial paint.
Uses advised against  Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet
Manufacturer Address  Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372

Emergency telephone number
Company Phone Number  Tnemec Regulatory Dept: 816-474-3400
24 Hour Emergency Phone Number  800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification
OSHA Regulatory Status  This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin sensitization  Category 1

Label elements

EMERGENCY OVERVIEW

WARNING
Hazard statements  May cause an allergic skin reaction

Appearance  light yellow  Physical state  liquid  Odor  amine

Precautionary Statements
Prevention
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves

Response
Get medical advice/attention if you feel unwell
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse

Storage
Keep away from children

Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information
Harmful to aquatic life with long lasting effects
SEE SAFETY DATA SHEET
Acute Toxicity 7.07085 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLYETHYLENEIMINE</td>
<td>25987-06-8</td>
<td>1 - 10%</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

Inhalation Remove to fresh air. Oxygen or artificial respiration if needed.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Self-protection of the first aider Use personal protective equipment. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Carbon dioxide (CO2). Foam. Dry chemical.

Unsuitable extinguishing media  Water.
Specific hazards arising from the chemical
Thermal decomposition can lead to release of irritating gases and vapours in the event of fire and/or explosion do not breathe fumes.

**Hazardous combustion products**
Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Nitrogen oxides (NOx).

Protective equipment and precautions for firefighters
Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

**Personal precautions**
Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all sources of ignition.

**Environmental Precautions**

**Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

**Methods and material for containment and cleaning up**

**Methods for containment**
Remove all sources of ignition. Spills may be collected with inert, absorbent material for proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer absorbent material to suitable containers for proper disposal.

**Methods for cleaning up**
If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

7. HANDLING AND STORAGE

**Precautions for safe handling**

**Handling**
Close container after each use. Avoid contact with eyes, skin and clothing. Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.

**Conditions for safe storage, including any incompatibilities**

**Storage**
Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

**Incompatible products**
No information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure guidelines**

**Appropriate engineering controls**
Engineering measures

Sufficient ventilation, in volume and pattern, should be provided through both local and general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH’s Threshold Limit Values (TLV). Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

**Eye/face protection**
Safety glasses with side-shields if splashes are likely to occur, wear face-shield.

**Skin and body protection**
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Respiratory protection**
Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application. Follow respirator manufacturer’s directions for respirator use.

**General hygiene considerations**
Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>light yellow</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>amine</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
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<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
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</tr>
<tr>
<td>Flash point</td>
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<tr>
<td>Evaporation rate</td>
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<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
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<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
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<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
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</tr>
<tr>
<td>Lower flammability limit</td>
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</tr>
<tr>
<td>Vapor pressure</td>
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<td></td>
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<tr>
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<tr>
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<tr>
<td>Solubility in other solvents</td>
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<tr>
<td>Partition coefficient: n-octanol/water</td>
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<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td></td>
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<tr>
<td>Decomposition temperature</td>
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<tr>
<td>Kinematic viscosity</td>
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<tr>
<td>Dynamic viscosity</td>
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Other Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>8.41862 lbs/gal</td>
</tr>
<tr>
<td>Volatile organic compounds (VOC) content</td>
<td>.000 lbs/gal</td>
</tr>
<tr>
<td>Total volatiles weight percent</td>
<td>92.9290 %</td>
</tr>
<tr>
<td>Total volatiles volume percent</td>
<td>93.9178 %</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY
Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to avoid
Heat, flames and sparks.

Incompatible materials
No information available

Hazardous decomposition products
Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation
Vapors may irritate throat and respiratory system.

Eye contact
May cause temporary eye irritation.

Skin contact
Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Ingestion
Harmful if swallowed.

Information on toxicological effects

Symptoms
Skin disorders.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity
Avoid repeated exposure.

Sensitization
May cause sensitization of susceptible persons.

Mutagenicity
No information available.

Carcinogenicity
There are no known carcinogenic chemicals in this product.

Reproductive effects
No information available.

STOT - single exposure
No information available

STOT - repeated exposure
No information available

Aspiration hazard
No information available.

Acute Toxicity
7.07085 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Harmful to aquatic life with long lasting effects

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability
No information available.

Bioaccumulation
No information available.
Mobility in Environmental Media

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods

Keep container tightly closed. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name

paint, water base freezable

IATA

Proper Shipping Name

Not regulated

Additional information

Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA

Complies

DSL/NDSL

Complies

EINECS/ELINCS

Does not comply

ENCS

Complies

IECSC

Does not comply

KECL

Does not comply

PICCS

Does not comply

AICS

Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.
### SARA 311/312 Hazardous Categorization

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Yes/No</th>
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<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>Yes</td>
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<tr>
<td>Chronic Health Hazard</td>
<td>Yes</td>
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<tr>
<td>Fire Hazard</td>
<td>No</td>
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<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>No</td>
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<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

### CERCLA

**United States of America**

- **California Prop. 65**
  - This product does not contain any Proposition 65 chemicals

- **California SCAQMD Rule 443**
  - Does Not Contain Photochemically Reactive Solvent

### State Right-to-Know

#### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical hazard</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
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<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS (Hazardous Material Information System)</th>
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<tbody>
<tr>
<td>Prepared By</td>
<td>Tnemec Regulatory Dept: 816-474-3400</td>
</tr>
<tr>
<td>Revision Date</td>
<td>30-Mar-2015</td>
</tr>
<tr>
<td>Revision Summary</td>
<td>9 4 5 7 8 10 11 14 15</td>
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### Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of 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 health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of MSDS