

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name TR-309 Rubbing Compound
Version # 01
Revision date 06-08-2010
Product use Polish.
Manufacturer/Supplier TR Industries
11022 Vulcan Street
South Gate, CA 90280-0893 US
Telephone: (562) 923-5438
Emergency CHEMTREC: (800) 424-9300
CHEMTREC International: 00 1-703-527-3887

2. Hazards Identification

Physical state Liquid.
Emergency overview DANGER!
Combustible liquid and vapor. May be ignited by heat, sparks or flames.

Causes skin and eye burns. Harmful if inhaled or swallowed. Mist or vapor irritating to eyes and respiratory tract. Cancer hazard. Prolonged exposure may cause chronic effects.
OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects
Routes of exposure Inhalation. Ingestion. Skin contact. Eye contact.
Eyes Causes eye burns. Risk of corneal damage.
Skin Causes skin burns.
Inhalation Harmful if inhaled. Irritating to respiratory system. Prolonged inhalation may be harmful. May cause cancer by inhalation.
Ingestion Harmful if swallowed. Irritating. May cause nausea, stomach pain and vomiting. Aspiration of this product may cause a pneumonia-like reaction of lung tissue.
Target organs Eyes. Skin. Respiratory system. Lungs.
Chronic effects Crystalline silica has been classified by IARC as a known human carcinogen. Repeated or prolonged breathing of high levels of crystalline silica can cause silicosis.
Potential environmental effects Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Water	7732-18-5	35 - 40
Solvent Naphtha (petroleum), Heavy Aliphatic	64742-96-7	30 - 35
Crystalline silica	14808-60-7	15 - 20
Tall Oil, Fatty Acids	61790-12-3	5 - 10
2-Aminoethanol	141-43-5	1 - 5
Pine Oil	8002-09-3	1 - 5

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Skin contact	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention, if needed.
Ingestion	Rinse mouth thoroughly. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention immediately.
Notes to physician	In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General advice	Take off contaminated clothing and shoes immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use.

5. Fire Fighting Measures

Flammable properties	The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures.
Extinguishing media	
Suitable extinguishing media	Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Protection of firefighters	
Protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. In the event of fire, cool tanks with water spray. Cool containers exposed to flames with water until well after the fire is out. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Water runoff can cause environmental damage.
Special protective equipment for fire-fighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Specific methods	In the event of fire and/or explosion do not breathe fumes.
Hazardous combustion products	Carbon monoxide. Carbon Dioxide. Nitrogen oxides (NOx). Silicon oxides.

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the MSDS for Personal Protective Equipment.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
Methods for containment	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. This material and its container must be disposed of as hazardous waste. Should not be released into the environment. Large Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Do not allow material to contaminate ground water system.
Other information	Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling	Wear personal protective equipment. Avoid breathing mist or vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged exposure. Use only with adequate ventilation. Wash thoroughly after handling. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. All equipment used when handling the product must be grounded. When using, do not eat, drink or smoke. Avoid release to the environment.
Storage	Keep away from heat, sparks and open flame. Keep containers tightly closed in a cool, well-ventilated place. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Occupational exposure limits

ACGIH

Components	Type	Value	Form
2-Aminoethanol (141-43-5)	STEL TWA	6 ppm 3 ppm	
Crystalline silica (14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.

U.S. - OSHA

Components	Type	Value	Form
2-Aminoethanol (141-43-5)	PEL	3 ppm	
Crystalline silica (14808-60-7)	TWA	6 mg/m ³ 0.3 mg/m ³ 2.4 mppcf 0.1 mg/m ³	Total dust. Respirable. Respirable.

Canada - Alberta

Components	Type	Value	Form
2-Aminoethanol (141-43-5)	STEL TWA	15 mg/m ³ 6 ppm 7.5 mg/m ³ 3 ppm	
Crystalline silica (14808-60-7)	TWA	0.025 mg/m ³	Respirable particles.

Canada - British Columbia

Components	Type	Value	Form
2-Aminoethanol (141-43-5)	STEL TWA	6 ppm 3 ppm	
Crystalline silica (14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.

Canada - Ontario

Components	Type	Value	Form
2-Aminoethanol (141-43-5)	STEL TWA	15 mg/m ³ 6 ppm 3 ppm 7.5 mg/m ³	
Crystalline silica (14808-60-7)	TWA	0.1 mg/m ³	Respirable fraction.
Solvent Naphtha (petroleum), Heavy Aliphatic (64742-96-7)	TWA	525 mg/m ³	

Canada - Quebec

Components	Type	Value	Form
2-Aminoethanol (141-43-5)	STEL TWA	15 mg/m ³ 6 ppm 7.5 mg/m ³ 3 ppm	
Crystalline silica (14808-60-7)	TWA	0.1 mg/m ³	Respirable dust.

Mexico

Components	Type	Value	Form
2-Aminoethanol (141-43-5)	STEL TWA	15 mg/m ³ 6 ppm 8 mg/m ³ 3 ppm	
Crystalline silica (14808-60-7)	TWA	0.1 mg/m ³	

Engineering controls

Use explosion-proof ventilation equipment. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Personal protective equipment

Eye / face protection

Wear approved chemical safety goggles.

Skin protection

Wear chemical-resistant gloves, footwear and protective clothing appropriate for risk of exposure. Contact glove manufacturer for specific information.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

General hygiene considerations

Provide eyewash station and safety shower. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Color	Not available.
Odor	Not available.
Odor threshold	Not available.
Physical state	Liquid.
Form	Not available.
pH	Not available.
Melting point	Not available.
Freezing point	Not available.
Boiling point	Not available.
Flash point	> 140 °F (> 60 °C) (Estimated)
Evaporation rate	Not available.
Flammability	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	Not available.
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong oxidizing agents. Strong acids. Strong bases. Amines.
Hazardous decomposition products	Nitrogen oxides (NOx). Silicon oxides.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information**Toxicological data****Components**

2-Aminoethanol (141-43-5)

Test Results

Acute Dermal LD50 Rabbit: 1025 mg/kg
Acute Oral LD50 Guinea pig: 620 mg/kg
Acute Oral LD50 Mouse: 700 mg/kg
Acute Oral LD50 Rat: 1715 mg/kg
Acute Oral LD50 Rat: 10.2 g/kg
Acute Other LD50 Mouse: 50 mg/kg
Acute Other LD50 Rat: 67 mg/kg

Acute effects Causes burns.**Local effects** Causes skin and eye burns. Harmful by inhalation and if swallowed. Irritating to respiratory system.

Sensitization	May cause allergic skin disorders in sensitive individuals.
Chronic effects	Prolonged inhalation may be harmful. Prolonged or repeated exposure may cause lung injury.
Carcinogenicity	Cancer hazard. Prolonged breathing of high levels of crystalline silica can cause silicosis. Also, airborne crystalline silica is possibly carcinogenic to humans.
ACGIH Carcinogens	
Crystalline silica (CAS 14808-60-7)	A2 Suspected human carcinogen.
IARC Monographs. Overall Evaluation of Carcinogenicity	
Crystalline silica (CAS 14808-60-7)	1 Carcinogenic to humans.
US NTP Report on Carcinogens: Known carcinogen	
Crystalline silica (CAS 14808-60-7)	Known carcinogen.
Epidemiology	Not available.
Mutagenicity	Not available.
Neurological effects	Not available.
Reproductive effects	Not available.
Teratogenicity	Not available.
Further information	Symptoms may be delayed.

12. Ecological Information

Ecotoxicological data

Components	Test Results
2-Aminoethanol (141-43-5)	LC50 Rainbow trout,donaldson trout (Oncorhynchus mykiss): 114 - 196 mg/l 96 hours
Ecotoxicity	Contains a substance which causes risk of hazardous effects to the environment.
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Aquatic toxicity	Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
Persistence and degradability	Not available.
Bioaccumulation / Accumulation	No data available.
Partition coefficient (n-octanol/water)	Not available.
Mobility in environmental media	No data available.

13. Disposal Considerations

Disposal instructions	Dispose in accordance with all applicable regulations. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies.
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14. Transport Information

DOT

Basic shipping requirements:

UN number	NA1993
Proper shipping name	Combustible liquid, n.o.s. (Solvent Naphtha (petroleum), Heavy Aliphatic)
Hazard class	Combustible Liquid
Packing group	III
Labels required	Combustible Liquid

Additional information:

Special provisions	B1, B52, IB3, T4, TP1, TP29
Packaging exceptions	150
Packaging non bulk	203
Packaging bulk	242
ERG number	128

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

TDG

Not regulated as dangerous goods.



DOT

15. Regulatory Information**US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

CERCLA (Superfund) reportable quantity (lbs)

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazard categories**

Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - Yes
 Pressure Hazard - No
 Reactivity Hazard - No

Section 302 extremely hazardous substance

No

Section 311 hazardous chemical

No

Drug Enforcement Agency (DEA)

Not controlled

Canadian regulations

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

WHMIS status

Controlled

WHMIS classification

B3 - Flammable/Combustible
 D2A - Other Toxic Effects-VERY TOXIC
 D2B - Other Toxic Effects-TOXIC
 E - Corrosive

WHMIS labeling**Inventory status****Country(s) or region****Inventory name****On inventory (yes/no)***

Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Hazardous Substances (Director's): Listed substance

2-Aminoethanol (CAS 141-43-5) Listed.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Crystalline silica (CAS 14808-60-7) Listed.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Crystalline silica (CAS 14808-60-7) Listed: October 1, 1988 Carcinogenic.

US - Massachusetts RTK - Substance: Listed substance

2-Aminoethanol (CAS 141-43-5) Listed.

Crystalline silica (CAS 14808-60-7) Listed.

US - New Jersey RTK - Substances: Listed substance

2-Aminoethanol (CAS 141-43-5) Listed.

Crystalline silica (CAS 14808-60-7) Listed.

Pine Oil (CAS 8002-09-3) Listed.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

2-Aminoethanol (CAS 141-43-5) Listed.

Crystalline silica (CAS 14808-60-7) Listed.

16. Other Information

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings
 Health: 3*
 Flammability: 2
 Physical hazard: 0

NFPA ratings
 Health: 3
 Flammability: 2
 Instability: 0

Disclaimer The information in the sheet was written based on the best knowledge and experience currently available.

Issue date 06-08-2010