MATERIAL SAFETY DATA SHEET

TR-19; Epoxy Polyurethane Thinner

1. Identification of the Product and Company

Product Code & Product Name: **TR-19; Epoxy Polyurethane Thinner**

Manufacturer: Akzo Nobel Aerospace Coatings
East Water Street
Waukegan, IL 60085 US
Tel. 847 623 4200 Fax 847 625 3200

Emergency: Emergency telephone (US) CHEMTREC - 800 424 9300
Emergency telephone (Outside US) CHEMTREC - 703 527 3887
NOTE: CHEMTREC numbers to be used only in the event of emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

Product Use: Coating Revision Date: 04/22/2008

2. Composition / Information on Ingredients

Chemical Name	CAS Number	WT %	ACGIH TLV TWA	ACGIH TLV STEL	OSHA PEL C	OSHA PEL TWA
METHYL ETHYL KETONE	78-93-3	30-60	200 ppm	300 ppm	N.D.	200 ppm
1-METHOXY 2-PROPANOL ACETATE	108-65-6	15-40	N.D.	N.D.	N.D.	N.D.
TOLUENE	108-88-3	10-30	20 ppm	N.D.	300 ppm	200 ppm

3. Hazards Identification

*** Emergency Overview *** ------ clear liquid with solvent odor ------ ------ Class IB - Flammable Liquid ------

Potential Health Effects - Eye: Moderate irritation with redness and minor discomfort after direct splash to eye. Vapors may cause eye irritation with redness and minor discomfort of the eye.

Potential Health Effects - Skin: Moderately irritating with possible redness and discomfort. May cause dry skin by dissolving skin oils. Product can be absorbed through the skin, but no adverse health effects are expected with normal occupational exposure.

Potential Health Effects - Inhalation: Moderately irritating to nose, throat or breathing passages. May cause unconsciousness by depressing the central nervous system after prolonged exposure to high concentrations. May increase risk for sudden death from irregular heart rhythms caused by stressful conditions that increase the levels of adrenalin in the blood.

Potential Health Effects -Ingestion: Moderately irritating to the mouth, stomach, and digestive system. No ingestion exposure expected with normal occupational use.

Potential Health Effects - Chronic Hazards: Eye effects from chronic exposure are unknown. Frequent or prolonged skin contact may cause irritation or a rash (dermatitis). May cause slight increase in liver size without affecting the function of the liver. May cause small changes in the hearing system. Chronic inhalation may lower the count of certain types of blood cells. Chronic alcohol use can increase the potential for toxicity from the repeated exposure to the aromatic hydrocarbon in this product. May accumulate in the body with daily exposure. Chronic ingestion exposure would be unlikely due to the method of use or physical properties of this product.

The components listed in Section 2 may affect the following target organs: Central Nervous System. Eyes. Kidneys. Liver. Respiratory System. Skin.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Eye Contact

4. First Aid Measures

First Aid - Eye Contact: If this product contacts the eyes, immediately wash the eyes with large amounts of water, occasionally lifting the lower and upper lids. Get medical attention.

First Aid - Skin Contact: If this product contacts the skin, promptly wash the contaminated skin with soap & water. If this product penetrates the clothing, promptly remove the clothing and wash the skin with soap & water. If irritation persists after washing, get medical attention. Launder clothing before reuse.

First Aid - Inhalation: If a person breathes large amounts of this product, move the exposed person to fresh air at once. If breathing is difficult, get medical attention.

First Aid - Ingestion: If this product has been swallowed, get medical attention immediately.

5. Fire-Fighting Measures

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Flash Point (F): 25

LOWER EXPLOSIVE LIMIT: 1.2
UPPER EXPLOSIVE LIMIT: 11.5

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam

Unusual Fire And Explosion Hazards: Flammable Liquid. Vapors are heavier than air and may travel to a source of ignition and flash back.

Special Fire Fighting Procedures: Firefighters and others exposed to vapors or products of combustion should wear self-contained breathing apparatus.

6. Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Eliminate all ignition sources. Stop or control the spill, if this can be done without undue risk. Do not allow material to enter sewers or ground. Isolate discharged material for proper disposal. Wear appropriate personal protective equipment.

7. Handling and Storage

Handling: Grounding or bonding of containers is recommended before material transfer. Activities such as sanding, burning off etc. of paint films may generate dust and/or fumes hazardous to the skin and lungs. Work in well ventilated areas. Use local exhaust ventilation and personal skin and respiratory protective equipment as appropriate.

Storage: Store inside between 40F-100F. Storage areas should be dry and well-ventilated.

8. Exposure Controls / Personal Protection

Engineering Controls: It is recommended that work be done in an adequately ventilated area (i.e., ventilation sufficient to maintain concentrations below one half of the PEL and other relevant standards). Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination.

Respiratory Protection: Appropriate respirators must be used, and a program that follows 29 CFR 1910.134 or other applicable regulatory requirements must be followed, when workplace hazards warrant the use of a respirator. NIOSH-approved or other appropriate respirators must be used when respiratory protection is necessary.

Eye Protection: Wear appropriate goggles, face shields or other PPE, which will be effective under the circumstances if the possibility of contact exists. A program meeting 29 CFR 1910.133 or other applicable regulatory requirements must be followed when PPE is necessary.

Other Protective Equipment: Use impermeable gloves and protective clothing as necessary to prevent skin contact.

Hygienic Practices: Do not eat, drink, chew tobacco or gum, or apply cosmetics while working with this product. Wash hands before performing any of these activities.

9. Physical and Chemical Properties

Theoretical Values

Boiling Range (F):	175 - 302	VOC (g/l)(less water & exempt):	866
Freeze Point (F):	N.D.	VOC (lb/gal)(less water & exempt):	7.2
Specific Gravity:	0.9	% Solids By Weight:	0
Appearance:	clear	% Solids By Volume:	0
Physical State:	liquid	Density (lb/gal):	7.2
Odor:	solvent	Flashpoint (F):	25

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10. Stability and Reactivity

Conditions To Avoid: Avoid contact with heat, open flame, sparks, or ignition sources.

Hazardous Polymerization: Will not occur.

Stability: Stable.

11. Toxicological Information

Chemical Name	LD50	LC50	IARC	NTP	OSHA
METHYL ETHYL KETONE	Oral Rat: 2.9 g/kg	Inhalation Rat: 23500 mg/m3/8H			
1-METHOXY 2-PROPANOL ACETATE	Oral Rat: 8532 mg/kg	N.D.			
TOLUENE	Oral Rate: 5000 mg/kg	Inhalation Rat: 8000 ppm/4H			

12. Ecological Information

Akzo Nobel has not conducted specific studies on the eco toxicity or environmental fate of this product. Commonly available data on certain ingredients indicate that acute or chronic effects could result from uncontrolled releases to soil, ground water, storm waters, or air. Appropriate measures should be taken to prevent uncontrolled releases. Prompt containment and clean up should be performed if releases do occur.

13. Disposal Considerations

Legal disposition of wastes is the responsibility of the owner/generator of the waste. Applicable federal, state, and/or local regulations must be followed during treatment, storage, or disposal of waste containing this product. Do not dispose of in an uncontrolled manner.

14. Transport Information

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DOT Proper Shipping Name:	Paint Related Material	IATA Proper Shipping Name:	Paint Related Material	IMO Proper Shipping Name:	Paint Related Material
DOT Hazard Class:	3	IATA Hazard Class:	3	IMO Hazard Class:	3
DOT UN Number:	UN 1263	IATA UN Number:	UN1263	IMO UN Number:	UN1263
DOT Packing Group:	II	IATA Packing Group:	II	IMO Packing Group:	II
Label Codes:	3	IATA Hazard Subclass:	N/A	IMO Subsidiary Risk:	N/A
Resp. Guide Page:	128			Marine Pollutant:	No

Chemical Name	CAS Number	CERCLA RQ
METHYL ETHYL KETONE	78-93-3	5000 LBS
TOLUENE	108-88-3	1000 LBS

15. Regulatory Information

U.S. FEDERAL REGULATIONS: As follows -

CERCLA - SARA Hazard Category: This product is considered, under applicable definitions, to meet the following categories: IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA Section 313: This product contains the following substances subject to the reporting requirements of Section 313 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and 40 CFR 372:

Chemical Name	313 Category	CAS Number	WT %
TOLUENE		108-88-3	20.1

Clean Air Act: This product contains the following chemical substances listed as Hazardous Air Pollutants (HAPs) under the Clean Air Act of 1990:

Chemical Name	HAP Category	CAS Number	WT %
TOLUENE		108-88-3	20.1

Toxic Substances Control Act: All the components of this product comply with applicable requirements of the US EPA TSCA inventory.
Contains the following chemical(s) subject to the reporting requirements of TSCA 12b if exported from the US.
None Known.

U.S. STATE REGULATIONS: As follows -

California Proposition 65: WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

INTERNATIONAL REGULATIONS: As follows -

Canadian WHMIS Class: B2, D2

Canadian DSL - All the components of this product are listed or are exempt from listing.
European EINECS - All the components of this product are listed or are exempt from listing.
Korean Inventory - All the components of this product are listed or are exempt from listing.
Australian AICS - All the components of this product are listed or are exempt from listing.

16. Other Information

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National Paint & Coatings Association (NPCA) Hazardous Material Identification System (HMIS):

Health: 2 Flammability: 3 Reactivity: 0 Personal Protection: See Section 8

Legend: N.A. - Not Applicable, N.D. - Not Determined

FOR PROFESSIONAL USE ONLY
IMPORTANT NOTE The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

Head Office
Akzo Nobel Aerospace Coatings, East Water Street, Waukegan, IL 60085. www.anac.com

Revision Date: 04/22/2008

NPCA Label Statements

WARNING! Flammable liquid and vapor. Vapor harmful. Harmful if swallowed.

NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Causes eye irritation. Causes skin irritation. Causes nose and throat irritation. Causes lung irritation. Vapor harmful. May affect the brain or nervous system causing dizziness, headache or nausea.

First Aid: In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get medical attention immediately; for skin, wash thoroughly with soap and water. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately. If swallowed, do not induce vomiting. Get medical attention immediately.

Vapors may cause flash fire. Keep away from heat, sparks and flame. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves & ovens, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Use only with adequate ventilation. Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes, skin and clothing. Do not breathe vapors. Wash thoroughly after handling. FOR INDUSTRIAL USE ONLY.

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.