A. G. Layne, Inc.

MATERIAL SAFETY DATA SHEET

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ZR Thinner slow

Jul 10, 2012

SECTION 1) : Chemical Product and Manufacturer's Identification

Product ID : ZR Thinner slow

Product Name : ZR Thinner slow

Revision Date : 07/10/2012

Manufacturer's Name : A. G. Layne

Address : 4578 Brazil Street
Los Angeles, CA, US, 90039

Emergency Phone : 800-424-9300 **Date Printed :** 07/10/2012

Information Phone : 323-245-2345, 8am-5pm PST **Contact Name :** . .

Product uses :

SECTION 2) Hazards Identification

CARCINOGENICITY:

4-chlorobenzotrifluoride : Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: skin. Prolonged or repeated exposure may cause damage to any of the following organs/systems: kidneys, liver, thyroid. Potential skin sensitizer that may cause allergic reactions and contact dermatitis resulting in severe irritation, dryness, and cracking of the skin. Ingestion may cause any of the following: gastrointestinal irritation. Eye contact may cause any of the following: permanent eye injury. Inhalation may cause any of the following: stupor (central nervous system depression), respiratory tract irritation.

SECTION 3) Composition, Information on Ingredients

CAS	Chemical Name	% by Weight
0000098-56-6	Benzene, 1-chloro-4-(trifluoromethyl)-	25.000% - 100.000%

SECTION 4) First Aid Measures

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: REMOVE TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT.

SPLASH (EYES): FLUSH EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. IF CONDITIONS DEVELOP, SEEK IMMEDIATE MEDICAL ATTENTION.

SPLASH (SKIN): WASH AFFECTED AREAS WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. IF CONDITIONS DEVELOP, SEEK MEDICAL ATTENTION.

INGESTION: DO NOT INDUCE VOMITING. IF VOMITING OCCURS SPONTANEOUSLY, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO THE LUNGS. GET MEDICAL ATTENTION IMMEDIATELY.

SECTION 5) Fire and Explosion Hazards

EXTINGUISHING MEDIA:

Alcohol-resistant foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth maybe used for small fires only.

SPECIAL FIREFIGHTING PROCEDURES:

Wear full protective clothing and self-contained breathing apparatus. Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

All storage areas should be provided with adequate fire fighting facilities. Keep adjacent containers cool by spraying with water.

SECTION 6) Accidental Release

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

RELEASE CAN CAUSE FIRE/EXPLOSION. LIQUIDS/VAPORS MAY IGNITE. EVACUATE/LIMIT ACCESS. EQUIP RESPONDERS WITH PROPER PROTECTION. KILL ALL IGNITION SOURCES. STOP RELEASE. PREVENT FLOW TO SEWERS/PUBLIC WATERS. NOTIFY AUTHORITIES IMMEDIATELY. Avoid breathing of or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see Section 8 of this MSDS.

SECTION 7) Handling and Storage

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Avoid inhaling vapour and/or mists. Avoid contact with skin, eyes and clothing. Extinguish any naked flames. Do not smoke. Remove sources of ignition. Avoid sparks. Electrostatic charges may be generated during pumping. Must be stored in a well-ventilated area, away from sunlight, ignition sources and other sources of heat. Keep away from aerosols, flammables, oxidizing agents, corrosives and from other flammable products which are not harmful or toxic to man or to the environment.

OTHER PRECAUTIONS:

Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material. Ensure that all local regulations regarding handling and storage facilities are followed.

RESPIRATORY PROTECTION:

Respirator selection, use and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1920.134. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Select a filter suitable for organic gases and vapours [boiling point,65 C(149 F)] meeting EN371.

VENTILATION:

Use explosion-proof ventilation as required to control vapor concentrations.

SECTION 8) Exposure Controls, Personal Protection

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Inhalation: May cause irritation to nose, eyes and respiratory tract. High vapor concentrations may cause CNS depression

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Skin and eye contact: May cause irritation to both.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Skin absorption: May cause irritation.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Ingestion: May be harmful or fatal if swallowed.

HEALTH HAZARDS (ACUTE AND CHRONIC):

Acute: May cause irritation to nose, eyes and skin. May also cause CNS (central nervous system) depression which may be evidenced by giddiness, headache, dizziness and nausea; in extreme cases, unconsciousness and death may occur.

Chronic: Prolonged or repeated contact may result in dermatitis and damage to central nervous system, liver and kidneys.

EYE PROTECTION:

Chemical splash goggles (chemical mono-goggles).

PROTECTIVE GLOVES:

Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Where hand contact with the product may occur the use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: Nitrile rubber, PVC, Viton.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Pre-existing medical conditions of the following organ(s) or organ system(s) may be aggravated by exposure to this material: Eyes, Respiratory system, Skin.

WORK/HYGIENIC PRACTICES:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate. Further national methods may be available at the National Institute of Occupational Safety and Health (NIOSH) and Occupational Safety and Health Administration (OSHA).

CARCINOGENICITY:

Toluene : Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, respiratory system, skin. Can be absorbed through the skin in harmful amounts. Recurrent overexposure may result in liver and kidney injury. High airborne levels have produced irregular heart beats in animals and occasional palpitations in humans. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. WARNING: This chemical is known to the State of California to cause birth defects or other reproductive harm.

Ethyl acetate : Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: eyes, respiratory system, skin. Tests in laboratory animals have shown effects on any of the following organs/systems: blood, kidneys, liver.

PETROLEUM NAPHTHA : Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

Aromatic hydrocarbon-A : Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

Chemical Name	ACGIH	ACGIH_carcinogen	ACGIH_Notations	ACGIH_TLV_Basis	OSHACarcinogen	OSHAtppm	OSHAtmg	OSHAsppm	OSHAsmg	ACGIHtppm	ACGIHtmg	ACGIHsppm
Benzene, 1-chloro-4-(trifluoromethyl)-	1	A4	A4; BEI	Bone dam; fluorosis	0	0	2.5	0	0	0	2.5	0

Chemical Name	ACGIHsmg
Benzene, 1-chloro-4-(trifluoromethyl)-	0

SECTION 9) Physical and Chemical Properties

Physical Properties

Density [lb prod/gal prod]	11.20
% Solids By Weight	0.00%
Density VOC [lb VOC/gal prod]	0.00
% VOC	0.00%
lb VOC/lb Solid	0.00
lb VOC/gal Solid	0.00
VOC Actual [lb VOC/gal prod]	0.00
VOC Actual [g VOC/l prod]	0.00
Specific Gravity	0.09
% Solids by Vol	0.00%
Density HAPS [lb HAPS/gal prod]	0.00
% HAPS	0.00%
lb HAPS/lb Solid	0.00
lb HAPS/gal Solid	0.00
Density VHAPS [lb VHAPS/gal prod]	0.00
% VHAPS	0.00%
lb VHAPS/lb Solid	0.00
lb VHAPS/gal Solid	0.00
VOC Regulatory [lb VOC/gal prod]	0.00
VOC Regulatory [g VOC/l prod]	0.00

HMIS	
Health :	2
Flammability :	3
Reactivity :	0
Protection :	J
Chronic :	

Appearance	Clear. Liquid. Characteristic.
Evaporation Rate	
Flash Point	1 °F
Odor Description	Characteristic
Vapor Density	Heavier Than Air
Vapor Pressure	

SECTION 10) Stability and Reactivity

STABILITY:

Stable

CONDITIONS TO AVOID:

Avoid heat, sparks and open flame.

INCOMPATIBILITY (MATERIALS TO AVOID):

TERATOGENIC EFFECTS:Toluene has been Classified as POSSIBLE for humans.

Strong oxidizing agents

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

Thermal decomposition may yield carbon dioxide and/or carbon monoxide.

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR

SECTION 11) Toxicological Information

SECTION 12) Ecological Information

Available Data:

There is no data for the product itself.

SECTION 13) Disposal Consideration

WASTE DISPOSAL METHOD:

Place in tightly closed containers and dispose of in accordance with local, state and federal regulations.

SECTION 14) Transport Information

Transport Information:

Not Available

SECTION 15) Regulatory Information

CAS	Chemical Name	% By Weight	Regulation List

SECTION 16) Other Information

General:

A.G. Layne, Inc urges each customer or recipient of this MSDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this MSDS and any hazards associated with the product. It is the Buyer's/User's responsibility to ensure that his activities comply with all Federal, State, Provincial or Local laws. The information presented here pertains only to the product as shipped. The information contained herein is based on our current knowledge of the underlying data and is intended to describe the product for the purpose of health, safety and environmental requirements only. NO warranty or guarantee is expressed or implied regarding the accuracy of this data or the results to be obtained from the use of the product.

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