



MATERIAL SAFETY DATA SHEET

1 CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Trade Name THINNER VD
MSDS Number 372
Supplier ITW TRANS TECH
475 N. GARY AVENUE
CAROL STREAM, IL 60188 USA

Telephone Numbers - 24 Hour Emergency Assistance
Emergency (352)323-3500

Telephone Numbers - General Assistance
Information (630)752-4000

2 COMPOSITION / INFORMATION ON INGREDIENTS

| Ingredient Name | CAS Number | Concentration | Exposure Limits / Health Hazards |
|---------------------------------|------------|---------------|--|
| N-BUTYLACETATE | 123-86-4 | 10 - 20 % | OSHA TWA: 150ppm OSHA STEL: 200ppm ACGIH TLV: 150ppm STEL: 200 ppm |
| AROMATIC HYDROCARBONES (C9-C11) | 64742-95-6 | 20 - 30 % | -OSHA TWA- 150 ppm ACGIH-STEEL: 25 ppm |
| 1-METHOXY-2-PROPANOL ACETATE | 108-65-6 | 5 - 15 % | TWA: OSHA PELs: 100 ppm ACGIH TLV: 5 ppm S STELL (OSHA/ACGIH) none known |
| XYLENES | 1330-20-7 | 0 - 5 % | OSHA PEL: 100ppm ACGIH TLV: 100ppm STEL: (OSHA/ACGIH) 150 ppm |
| CYCLOHEXANONE | 108-94-1 | 25 - 35 % | ACGIH TLV: 25ppm -OSHA TWA- 50ppm (MAK) |
| 1,2,4-TRIMETHYL BENZENE | 95-63-6 | 10 - 20 % | OSHA PEL: 25ppm ACGIH TLV: 25ppm OSHA/NIOSH IDLH TLV*: Not established. |

3 HAZARDS IDENTIFICATION

Emergency Overview

STRICT HYGIENE! AVOID ALL CONTACT! PREVENT DISPERSION OF MISTS OR DUST!

Potential Health Effects, Skin

Harmful if in contact with skin. Irritating to skin.

Potential Health Effects, Eye

Irritating to eyes. Avoid contact with eyes.

Potential Health Effects, Inhalation

Harmful by inhalation. Irritating to respiratory system. May impair fertility. May cause harm to the unborn child. In case of accident, or if you feel unwell, seek medical advise immediately. (Show the label where possible)

Potential Health Effects, Ingestion

Harmful if swallowed. May cause lung damage if swallowed.

Signs & Symptoms of Short-Term (Acute) Exposure

Keep out of the reach of children: may cause lung damage if swallowed. May cause harm to the unborn child.

Effects of Long-Term (Chronic) Exposure

Respiratory tract irritation, depression of the central nervous system.

4 FIRST AID MEASURES

Skin

In case of contact with skin immediately remove contaminated clothing. Wash immediately with soap and water. Wash clothing before re-use.

Eye

Flush with water for 15 minutes. Get medical attention.

Inhalation

After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If Breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR).

Ingestion

Rinse mouth. Give plenty of water to drink. Do NOT induce vomiting. GET IMMEDIATE MEDICAL ATTENTION. Never give fluids or induce vomiting if the victim is unconscious or having convulsions.

5 FIRE FIGHTING MEASURES

Hazardous Combustion Products

NO open flames, NO sparks, & NO smoking. Above flash point, use a closed system, ventilation, explosion-proof electrical equipment, lighting. Do NOT use compressed air for filling, discharging, or handling.

Extinguishing Media

Use dry powder, AFFF, alcohol-resistant foam, water spray, carbon dioxide.

Basic Fire Fighting Procedures

Water spray may be ineffective on fire but can protect fire-fighters and cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots). Use NIOSH approved positive-pressure self-contained breathing apparatus.

Unusual Fire & Explosion Hazards

VAPORS CAN CAUSE FLASH FIRE Isolate from oxidizers, heat, sparks, electric equipment & open flame. Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. Empty containers are very hazardous!

Flash Point > 96 °F (TCC)

Autolgnition Temperature 788 °F

Flammability Limits in Air, Lower, % by Volume 1.2

6 ACCIDENTAL RELEASE MEASURES

Emergency Action

PERSONAL PROTECTIVE MEASURES: Ventilate area. Keep unprotected personnel away. Remove all ignition sources. Filter respirator for organic vapors.

Environmental Precautions

Do NOT let this chemical enter the environment. Keep from entering storm sewers and ditches which lead to waterways.

Spill or Leak Procedure

Stop spill at source. Dike and contain. Absorb remaining liquid in sand or inert absorbent. Remove to safe place. Do Not wash away into sewer. Do Not let this chemical enter the environment.

7 HANDLING & STORAGE

Handling

Isolate from oxidizers, heat, sparks, electric equipment and open flame. Use only with adequate ventilation. Avoid breathing vapor or spray mist. Avoid contact with skin and eyes. Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse. Avoid free fall of liquid. Ground containers when transferring. Do not flame cut, saw, drill, braze, or weld. Empty container very hazardous! Continue all label precautions! To minimize static discharge when transferring, ensure electrical continuity by bonding and grounding all equipment. Use an inlet line diameter of at least 3.5 inches (8.9 centimeters) with a maximum flow rate of 1 meter/second.

Storage

Keep in fireproof surroundings. Keep separated from strong oxidants, strong acids, strong bases. Keep cool. Keep dry. do not store above 49 C/120 F. Keep container tightly closed & upright when not in use to prevent leakage.

Ventilation

Local Exhaust: Necessary Mechanical (General): Acceptable
Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Provide readily accessible eye wash stations & safety showers. Wash at end of each work shift & before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated. destroy contaminated leather articles. Launder or discard contaminated clothing.

Eye Protection: Personal Protection Equipments (PPE)

Chemical goggles or safety glasses.

Skin Protection: Personal Protection Equipments (PPE)

Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.

Respiratory Protection: Personal Protection Equipments (PPE)

A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

9 PHYSICAL & CHEMICAL PROPERTIES

Odor and Appearance

Liquid, Water-white, Ketone odor

| | |
|----------------------------|--|
| Boiling Point | 256 - 342 °f |
| Specific Gravity | 0.907 (water=1) |
| Melting Point | N.A. |
| Percent Volatile | 100 % by volume: Weight/Gallon 7.56 lbs/gal. |
| Vapor Pressure | 4 (mm of Hg) @ 20 C |
| Evaporation Rate | 0.397 (n-butyl acetate=1) |
| Vapor Density | 3.9 (air=1) |
| Solubility In Water | moderate |
| PH Value | Not applicable |

10 STABILITY & REACTIVITY

Stability/Incompatibility

Stable under normal conditions.

Conditions to avoid: Isolate from oxidizers, heat, sparks, electric equipment & open flame.

Materials to Avoid: Reacts violently with strong oxidants, strong acids, strong bases, causing fire & explosion hazard. Attacks many plastics and rubber coatings. On combustion forms irritating and toxic gases including carbon monoxide, reacts violently with strong oxidants, strong acids, strong bases, causing fire & explosion hazard. Attacks many plastics, rubber, coatings.

Hazardous Reactions/Decomposition Products

Carbon Monoxide, Carbon Dioxide from burning.

Hazardous Polymerization

Will not occur

11 TOXICOLOGICAL INFORMATION

Routes of Exposure

Eyes, skin contact or by inhalation.

EYE & SKIN CONTACT: Primary irritation to skin, defatting, dermatitis. Absorption thru skin increases exposure. Primary irritation to eyes, redness, tearing, blurred vision. Liquid can cause eye irritation. Wash thoroughly after handling.

INHALATION: Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression. Vapor harmful. Breathing vapor can cause irritation. Acute overexposure can cause harm to kidneys, blood, nerves, liver, lungs. Use of alcoholic beverages enhances the harmful effect.

SWALLOWING: Harmful or fatal if swallowed. Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea. The symptoms of chemical pneumonitis may not show up for a few days.

Pre-existing Conditions Aggravated by Exposure

CONDITIONS AGGRAVATED: Chronic overexposure can cause harm to kidneys, blood, nerves, liver, lungs. Persons with severe skin, liver or kidney problems should avoid use.

CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS: Lung tumor have been reported in laboratory mice. Leukemia has been reported in humans from Benzene. This product contains less than 25 ppm of Benzene. Not considered hazardous in such low concentrations. Absorption thru skin may be harmful. Studies with laboratory animals indicate this product can cause damage to fetus & reproductive system. Depending on degree of exposure, periodic medical examination is indicated.

MAMMALIAN TOXICITY INFORMATION:

Cyclohexanone, CAS#108-94-1, EINECS# 203-631-1, LOWEST KNOWN LD50 (Oral) 1620.0 mg/kg (Rats)

Cyclohexanone, CAS#108-94-1, EINECS#203-631-1, LOWEST KNOWN LD50 (SKIN) 1000.0 mg/kg (Rabbits)

Pre-existing Conditions Aggravated by Exposure

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12 ECOLOGICAL INFORMATION

EcoToxicological Information

If the product contaminates lakes, rivers or sewer systems, inform appropriate authorities in accordance with local regulations.

Environmental Effects

This material is a mobile liquid. This product is partially biodegradable. This product does not accumulate of bio magnify in the environment.

Aquatic Toxicity

The most sensitive known aquatic group to any component of this product is: Fish are adversely affected by components of this product. The substance is toxic to aquatic organisms. Bio accumulation of this chemical may occur in aquatic animals.

13 DISPOSAL CONSIDERATIONS

Waste Disposal

Processing, use or contamination may change the waste management options. Recycle/dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If in doubt, contact appropriate agencies.

14 TRANSPORT INFORMATION

Bill Of Lading (DOT)

IATA/ICAO: UN1263, Paint Related Material (Contains: Cyclohexanone, Xylene), 3, PG-III

IMO/IMDG: UN1263, Paint Related Material (Contains: Cyclohexanone, Xylene), 3, PG-III

Emergency Response Guidebook Number: 128, 12324 LB/5601 KG of this product in 1 container exceeds the "RQ" of Xylenes.

Department of Transportation (DOT) Requirements:

General Transportation Information for Bulk Shipments

| | | | |
|----------------------|------------------------|------------|------|
| Proper Shipping Name | Paint Related Material | | |
| Hazard Class | 3 | UN/NA Code | 1263 |
| Packaging Group | Class III | | |
| Labels Required | Flammable Liquid | | |

15 REGULATORY INFORMATION

Federal Regulations

EPA REGULATION: SARA SECTION 311/312 HAZARDS: Acute Health, Chronic Health, Fire

All components of this product are on the TSCA list. SARA Title III Section 313 Supplier Notification: This product contains the indicated ,*. toxic chemicals subject to the reporting requirements of Section 313 of the Emergency of the Planning & Community Right-To-Know Act of 1986 & of 40 CFR 372. This information must be included in all MSDSs that are copied and distributed for this material.

Cyclohexanone, CAS# 108-94-1, EINECS#203-631-1, WT% 25-35, REG.SECTION 311,312,RCRA, RQ(LBS) 5000

n-Butyl Acetate, CAS# 123-86-4, EINECS# 204-658-1, WT%10-20, (REG.SECTION) 311,3123, RQ(LBS) 5000

*2-Ethoxyethyl Acetate, CAS# 111-15-9, EINECS# 203-839-2, WT% 5-15, (REG.SECTION) 311,312,313,RCRA, RQ(LBS) None

*Xylenes, CAS#1330-20-7, EINECS# 215-535-7, WT%0-5, (REG.SECTION) 311,312,313,RCRA), RQ(LBS) 100 12324 LB/5601 KG OF THIS PRODUCT IN 1 CONTAINER EXCEEDS THE "RQ" OF XYLENES. Any release equal to or exceeding the RQ must be reported to the National Response Center (800-424-8802) and appropriate state and local regulatory agencies as described in 40 CFR 302.6 and 40 CFR 355/40 respectively. Failure to report may result in substantial civil and criminal penalties. state & local regulations may be more restrictive than federal regulations.

State Regulations

California's Proposition 65: This product contains the following chemical known to the State of California to cause reproductive toxicity: Ethylene Glycol Ethyl Ether Acetate.

International Regulations

The components of this product are listed on the chemical inventories of the following countries: Australia (AICS), Canada (DSL,NDSL), China (IECSC), Europe (EINECS, ELINCS), Japan (METI/CSCL, MHLW/ISHL), South Korea (KECI), New Zealand (NZIoC), Philippines (PICCS), Switzerland(SWISS), Taiwan (NECSI), USA (TSCA)

CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) B2: Flammable Liquid. D2B: Irritating to eyes, respiratory tract, and skin.

NFPA Ratings

| | | | |
|--------|--------------|------------|-----------------|
| Health | Flammability | Reactivity | Special Hazards |
|--------|--------------|------------|-----------------|

HMIS Ratings

| | | | |
|----------|----------------|--------------|-------------------------|
| Health 2 | Flammability 3 | Reactivity 0 | Personal Prot. Equip. C |
|----------|----------------|--------------|-------------------------|

Following ingredients of this product are listed in SARA313

| SARA Listed Ingredient Name | CAS Number | Maximum % |
|-----------------------------|------------|-----------|
| XYLENES | 1330-20-7 | 5.0 |
| 2-ETHOXYETHYL ACETATE | 111-15-9 | 15.0 |

Following ingredients of this product are listed in SARA313

| SARA Listed Ingredient Name | CAS Number | Maximum % |
|-----------------------------|------------|-----------|
| N-BUTYLACETATE | 123-86-4 | 20.0 |
| CYCLOHEXANONE | 108-94-1 | 35.0 |

Listed on the following Regulatory List(s)

SARA 313

16 OTHER INFORMATION

Disclaimer

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of ITW Trans Tech. The data on this sheet applies only to the specific material designated herein. ITW Trans Tech. assumes no legal responsibility for use of reliance upon this data.

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Completed By ,