



COMPANY IDENTITY: T C I Products Company
PRODUCT IDENTITY: QM2200V LOW VOC ADHESION PROMOTER
SDS NUMBER: QM2200V

SDS DATE: 07/22/2014
ORIGINAL: 07/22/2014

SAFETY DATA SHEET

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements of the Global Harmonizing System.

THIS SDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)

IMPORTANT: Read this SDS before handling & disposing of this product.
Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY: QM2200V LOW VOC ADHESION PROMOTER
PRODUCT USES: Adhesion Promoter

COMPANY IDENTITY: T C I Products Company
COMPANY ADDRESS: 420 E Desoto
COMPANY CITY: St. Louis, MO 63147
COMPANY PHONE: 1-314-231-3075
EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)
CANUTEC: 1-613-996-6666 (CANADA)

SECTION 2. HAZARDS IDENTIFICATION

DANGER!!

2.1 HAZARD STATEMENTS: (CAT = Hazard Category)

- (H200s) PHYSICAL: Flammable Liquids (CAT:2)
H225 HIGHLY FLAMMABLE LIQUID AND VAPOR.
- (H300s) HEALTH: Skin Corrosion/Irritation (CAT:2)
H315 CAUSES SKIN IRRITATION.
- (H300s) HEALTH: Serious Eye Damage/Eye Irritation (CAT:2)
H320 CAUSES EYE IRRITATION.
- (H300s) HEALTH: Acute Toxicity, Inhalation (CAT:4)
H332 HARMFUL IF INHALED.
- (H300s) HEALTH: Target Organ Toxicity, Single Exposure (CAT:3)
H335 MAY CAUSE RESPIRATORY IRRITATION.
- (H300s) HEALTH: Target Organ Toxicity, Single Exposure (CAT:2)
H336 MAY CAUSE DROWSINESS OR DIZZINESS.
- (H300s) HEALTH: Target Organ Toxicity, Single Exposure (CAT:2)
H371 MAY CAUSE DAMAGE TO ORGANS.
- (H300s) HEALTH, Reproductive Toxicity (CAT:2)
H361 SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD.



2.2 PRECAUTIONARY STATEMENTS:

EXPOSURE PREVENTION: STRICT HYGIENE!

AVOID EXPOSURE OF (PREGNANT) WOMEN!

P100s = General, P200s = Prevention, P300s = Response, P400s = Storage, P500s = Disposal

- P210 Keep away from heat/sparks/open flames/hot surfaces -- No Smoking.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P264 Wash with soap & water thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P302+352 IF ON SKIN: Wash with soap & water.
- P304+340 IF INHALED: Remove victim to fresh air & keep at rest in a position comfortable for breathing.
- P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present & easy to do - Continue rinsing.
- P309+311 If exposed or you feel unwell: Call a POISON CENTER or doctor/physician.
- P332+313 If skin irritation occurs: Get medical advice/attention.
- P337+313 If eye irritation persists, get medical advice/attention.
- P361 Remove/Take off immediately all contaminated clothing.
- P363 Wash contaminated clothing before reuse.
- P405 Store locked up.
- P501 Dispose of contents/container to an approved waste disposal plant.

SEE SECTIONS 8, 11 & 12 FOR TOXICOLOGICAL INFORMATION.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| MATERIAL | CAS# | EINECS# | WT % |
|-------------------------|---------------|-----------|-------|
| Chlorobenzotrifluorides | 98-56-6 | - | 30-40 |
| Toluene | 108-88-3 | 203-625-9 | 30-40 |
| Acrylic Resin | Mixture | - | 10-20 |
| n-Butyl Acetate | 123-86-4 | 204-658-1 | 5-15 |
| tert-Butyl Acetate | 540-88-5 | 208-760-7 | 0- 5 |
| Chlorinated Polyolefin | Not Available | - | 0- 5 |

TRACE COMPONENTS: Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, reproductive toxins, respiratory tract mutagens, and sensitizers). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).

SECTION 4. FIRST AID MEASURES

4.1 MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE & CHRONIC:

See Section 11 for symptoms/effects, acute & chronic.

4.2 GENERAL ADVICE:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists, refer to Section 8 for specific personal protective equipment.

4.3 EYE CONTACT:

If this product enters the eyes, check for and remove any contact lenses. Open eyes while under gently running water. Use sufficient force to open eyelids. "Roll" eyes to expose more surface. Minimum flushing is for 15 minutes. Seek immediate medical attention.

4.4 SKIN CONTACT:

If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.

4.5 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). Seek immediate medical attention.

4.6 SWALLOWING:

If swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, give two glasses of water to drink. DO NOT INDUCE VOMITING. Never induce vomiting or give liquids to someone who is unconscious, having convulsions, or unable to swallow. Seek immediate medical attention.

4.7 RESCUERS: Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take a copy of label and SDS to physician or health professional with victim.

4.8 NOTES TO PHYSICIAN:

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis should not be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (such as: Gastric lavage after endotracheal intubation).

SECTION 5. FIRE FIGHTING MEASURES

5.1 FIRE & EXPLOSION PREVENTIVE MEASURES:

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.

SECTION 5. FIRE FIGHTING MEASURES (CONTINUED)

5.2 SUITABLE (& UNSUITABLE) EXTINGUISHING MEDIA:

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

5.3 SPECIAL PROTECTIVE EQUIPMENT & PRECAUTIONS FOR FIRE FIGHTERS:

Water spray may be ineffective on fire but can protect fire-fighters & 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).

5.4 SPECIFIC HAZARDS OF CHEMICAL & HAZARDOUS COMBUSTION PRODUCTS:

HIGHLY FLAMMABLE!! VAPORS CAN CAUSE FLASH FIRE

Isolate from oxidizers, heat, sparks, electric equipment & open flame.

Closed containers may explode if exposed to extreme heat.

Applying to hot surfaces requires special precautions.

Empty container very hazardous! Continue all label precautions!

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 SPILL AND LEAK RESPONSE AND ENVIRONMENTAL PRECAUTIONS:

Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond with trained personnel. **ELIMINATE** all ignition sources (no smoking, flares, sparks, or flames in immediate area).

6.2 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, EMERGENCY PROCEDURES:

The proper personal protective equipment for incidental releases (such as: 1 Liter of the product released in a well-ventilated area), use impermeable gloves, they should be Level B: **triple-gloves (rubber gloves and nitrile gloves over latex gloves), chemical resistant suit and boots, hard-hat, and Self-Contained Breathing Apparatus** specific for the material handled, goggles, face shield, and appropriate body protection. In the event of a large release, use impermeable gloves, specific for the material handled, chemically resistant suit and boots, and hard hat. Self-Contained Breathing Apparatus or respirator may be required where engineering controls are not adequate or conditions for potential exposure exist. When respirators are required, select NIOSH/MSHA approved based on actual or potential airborne concentrations in accordance with latest OSHA and/or ANSI recommendations.

6.3 ENVIRONMENTAL PRECAUTIONS:

Stop spill at source. Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Close or cap valves and/or block or plug hole in leaking container and transfer to another container. Keep from entering storm sewers and ditches which lead to waterways, and if necessary, call the local fire or police department for immediate emergency assistance.

6.4 METHODS AND MATERIAL FOR CONTAINMENT & CLEAN-UP:

Absorb spilled liquid with polypads or other suitable absorbent materials. If necessary, neutralize using suitable buffering material, (acid with soda ash or base with phosphoric acid), and test area with litmus paper to confirm neutralization. Clean up with non-combustible absorbent (such as: sand, soil, and so on). Shovel up and place all spill residue in suitable containers. Dispose of at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal (see Section 13 - Disposal Considerations).

SECTION 7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Isolate from oxidizers, heat, sparks, electric equipment & open flame.

Use only with adequate ventilation. Avoid breathing of vapor or spray mist.

Do not get in eyes, on skin or clothing. Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to 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! Drinking alcohol shortly before, during or after use can cause unwanted effects.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Keep in fireproof surroundings. Keep separated from strong oxidants, strong acids, strong bases. Keep cool. Do not store above 49 C/120 F. Contact with hot surfaces can produce toxic gases. Keep container tightly closed & upright when not in use to prevent leakage.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 EXPOSURE LIMITS:

| MATERIAL | CAS# | EINECS# | TWA (OSHA) | TLV (ACGIH) |
|-------------------------|---------------|-----------|------------|-------------|
| Chlorobenzotrifluorides | 98-56-6 | - | None Known | None Known |
| Toluene | 108-88-3 | 203-625-9 | 200 ppm | 50 ppm A4 |
| Resin | Mixture | - | None Known | None Known |
| n-Butyl Acetate | 123-86-4 | 204-658-1 | 150 ppm | 150 ppm |
| Light Aromatic Naphtha | *64742-95-6 | - | 100 ppm | 25 ppm |
| 1,2,4-Trimethylbenzene | 95-63-6 | 202-436-9 | 25 ppm | 25 ppm |
| Chlorinated Polyolefin | Not Available | - | None Known | None Known |
| Xylenes | 1330-20-7 | 215-535-7 | 100 ppm | 100 ppm |

| MATERIAL | CAS# | EINECS# | CEILING | STEL (OSHA/ACGIH) | HAP |
|-----------------|----------|-----------|------------|-------------------|-----|
| Toluene | 108-88-3 | 203-625-9 | None Known | None Known | Yes |
| n-Butyl Acetate | 123-86-4 | 204-658-1 | None Known | 200 ppm | No |

In addition, using manufacturers' data, based on EPA Method 311, the following EPA Hazardous Air Pollutants may be present in trace amounts (less than 0.1%): Benzene, Mixed Xylenes, Ethylbenzene

8.2 APPROPRIATE ENGINEERING CONTROLS:

RESPIRATORY EXPOSURE CONTROLS

Airborne concentrations should be kept to lowest levels possible. If vapor, dust or mist is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air-supplied respirator authorized in 29 CFR 1910.134, European Standard EN 149, or applicable State regulations, after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown. Maintain airborne contaminant concentrations below exposure limits. If adequate ventilation is not available or there is potential for airborne exposure above the exposure limits, a respirator may be worn up to the respirator exposure limitations, check with respirator equipment manufacturer's recommendations/limitations. For particulates, a particulate respirator (NIOSH Type N95 or better filters) may be worn. If oil particles (such as: lubricants, cutting fluids, glycerin, and so on) are present, use a NIOSH Type R or P filter. For a higher level of protection, use positive pressure supplied air respiration protection or Self-Contained Breathing Apparatus or if oxygen levels are below 19.5% or are unknown.

EMERGENCY OR PLANNED ENTRY INTO UNKNOWN CONCENTRATIONS OR IDLH CONDITIONS

Positive pressure, full-face piece Self-Contained Breathing Apparatus; or positive pressure, full-face piece Self-Contained Breathing Apparatus with an auxiliary positive pressure Self-Contained Breathing Apparatus.

VENTILATION

LOCAL EXHAUST: Necessary MECHANICAL (GENERAL): Necessary
 SPECIAL: None OTHER: None
 Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

8.3 INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION:

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, chemical splash goggles should be worn, when a higher degree of protection is necessary, use splash goggles or safety glasses. Face-shields are recommended when the operation can generate splashes, sprays or mists.

HAND PROTECTION:

Use gloves chemically resistant to this material. Preferred examples: Butyl rubber, Chlorinated Polyethylene, Polyethylene, Ethyl vinyl alcohol laminate ("EVAL"), Polyvinyl alcohol ("PVA"). Examples of acceptable glove barrier materials include: Natural rubber ("latex"), Neoprene, Nitrile/butadiene rubber ("nitrile") or ("NBR"), Polyvinyl chloride ("PVC") or "vinyl", Viton. Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONTINUED)

BODY PROTECTION:

Use body protection appropriate for task. Cover-all, rubber aprons, or chemical protective clothing made from impervious materials are generally acceptable, depending on the task.

WORK & HYGIENIC PRACTICES:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using toilet facilities and at the end of the working period. Provide readily accessible eye wash stations & safety showers. Remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

| | |
|--|---|
| APPEARANCE: | Liquid, Water-White |
| ODOR: | Ketone |
| ODOR THRESHOLD: | Not Available |
| pH (Neutrality): | Not Available |
| MELTING POINT/FREEZING POINT: | Not Available |
| BOILING RANGE (IBP,50%,Dry Point): | 82 97 140* C / 181 208 284* F (*=End Point) |
| FLASH POINT (TEST METHOD): | -2 C / 28 F (TCC) (Lowest Component) |
| EVAPORATION RATE (n-Butyl Acetate=1): | Not Applicable |
| FLAMMABILITY CLASSIFICATION: | Class I B |
| LOWER FLAMMABLE LIMIT IN AIR (% by vol): | 1.2 |
| UPPER FLAMMABLE LIMIT IN AIR (% by vol): | Not Available |
| VAPOR PRESSURE (mm of Hg)@20 C | 23.2 |
| VAPOR DENSITY (air=1): | 4.2 |
| GRAVITY @ 68/68 F / 20/20 C: | |
| DENSITY: | 1.036 |
| SPECIFIC GRAVITY (Water=1): | 1.038 |
| POUNDS/GALLON: | 8.646 |
| WATER SOLUBILITY: | Moderate |
| PARTITION COEFFICIENT (n-Octane/Water): | Not Available |
| AUTO IGNITION TEMPERATURE: | 421 C / 790 F |
| DECOMPOSITION TEMPERATURE: | Not Available |
| TOTAL VOC'S (TVOC)*: | 81.9 Vol% / 856.0 g/L / 7.1 Lbs/Gal |
| NONEXEMPT VOC'S (CVOC)*: | 46.8 Vol% / 400.0 g/L / 3.3 Lbs/Gal |
| HAZARDOUS AIR POLLUTANTS (HAPS): | 19.0 Wt% / 198.4 g/L / 1.6 Lbs/Gal |
| NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C) | 0.0 |
| VISCOSITY @ 20 C (ASTM D445): | Not Available |

* Using CARB (California Air Resources Board Rules).

SECTION 10. STABILITY & REACTIVITY

10.1 REACTIVITY & CHEMICAL STABILITY:

Stable under normal conditions, no hazardous reactions when kept from incompatibles.

10.2 POSSIBILITY OF HAZARDOUS REACTIONS & CONDITIONS TO AVOID:

Isolate from oxidizers, heat, sparks, electric equipment & open flame.

10.3 INCOMPATIBLE MATERIALS:

Reacts violently with strong oxidants, strong acids, strong bases, causing fire & explosion hazard. Attacks many plastics, rubber, coatings.

10.4 HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide, Carbon Dioxide,
Hydrogen Chloride, Phosgene from burning.

10.5 HAZARDOUS POLYMERIZATION:

Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 ACUTE HAZARDS

11.11 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.

11.12 INHALATION:

Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression which can cause death. Vapor harmful. Concentrated vapor in confined areas may be fatal. Acute overexposure can cause harm to affected organs by routes of entry. Use of alcoholic beverages enhances the harmful effect.

11.13 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.

11.2 SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Pre-existing disorders of any target organs mentioned in this Document can be aggravated by over-exposure by routes of entry to components of this product. Persons with these disorders should avoid use of this product.

11.3 CHRONIC HAZARDS

11.31 CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:

Pregnant women should avoid use. May cause birth defects. Leukemia been reported in humans from Benzene. This product contains less than 56 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. Depending on degree of exposure, periodic medical examination is indicated.

11.32 TARGET ORGANS: May cause damage to target organs, based on animal data.

11.33 IRRITANCY: Irritating to contaminated tissue.

11.34 SENSITIZATION: No component is known as a sensitizer.

11.35 MUTAGENICITY: No known reports of mutagenic effects in humans.

11.36 EMBRYOTOXICITY: No known reports of embryotoxic effects in humans.

11.37 TERATOGENICITY: No known reports of teratogenic effects in humans.

11.38 REPRODUCTIVE TOXICITY: No known reports of reproductive effects in humans.

A MUTAGEN is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate across generational lines. An EMBRYOTOXIN is a chemical which causes damage to a developing embryo (such as: within the first 8 weeks of pregnancy in humans), but the damage does not propagate across generational lines. A TERATOGEN is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A REPRODUCTIVE TOXIN is any substance which interferes in any way with the reproductive process.

11.4 MAMMALIAN TOXICITY INFORMATION

| MATERIAL | CAS# | EINECS# | LOWEST KNOWN LETHAL DOSE DATA |
|-----------------|----------|-----------|--|
| Toluene | 108-88-3 | 203-625-9 | LOWEST KNOWN LD50 (ORAL) 3000.0 mg/kg (Rats) |
| n-Butyl Acetate | 123-86-4 | - | LOWEST KNOWN LC50 (VAPORS) 2000 ppm (Rats) |
| Toluene | 108-88-3 | 203-625-9 | LOWEST KNOWN LD50 (SKIN) 4000.0 mg/kg (Rabbits) |

SECTION 12. ECOLOGICAL INFORMATION

12.1 ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

12.2 EFFECT OF MATERIAL ON PLANTS AND ANIMALS:

This product may be harmful or fatal to plant and animal life if released into the environment. Refer to Section 11 (Toxicological Information) for further data on the effects of this product's components on test animals.

12.3 EFFECT OF MATERIAL ON AQUATIC LIFE:

The most sensitive known aquatic group to any component of this product is: Fish exposed to 5120 ppm or mg/L are adversely affected by components of this product. Keep out of sewers and natural water supplies. The substance is toxic to aquatic organisms.

12.4 MOBILITY IN SOIL

Mobility of this material has not been determined.

12.5 DEGRADABILITY

This product is partially biodegradable.

12.6 ACCUMULATION

Bioaccumulation of this product has not been determined.

SECTION 13. DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers and liners may retain some product residues. Vapor from some product residues may create a highly flammable or explosive atmosphere inside the container. **DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE USED CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY BURST AND CAUSE INJURY OR DEATH.** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Processing, use or contamination may change the waste disposal requirements. Do not dispose of on land, in surface waters, or in storm drains. Waste should be recycled or disposed of in accordance with regulations. Large amounts should be collected for reuse or consigned to licensed hazardous waste haulers for disposal. **ALL DISPOSAL MUST BE IN ACCORDANCE WITH ALL FEDERAL, STATE, PROVINCIAL, AND LOCAL REGULATIONS. IF IN DOUBT, CONTACT PROPER AGENCIES. EPA CHARACTERISTIC: D001, D035**

SECTION 14. TRANSPORT INFORMATION

IF > 5268 LB / 2394 KG OF THIS PRODUCT IS IN 1 CONTAINER, IT EXCEEDS THE RQ OF TOLUENE. "RQ" MUST BE PUT BEFORE THE DOT SHIPPING NAME.

MARINE POLLUTANT: No
DOT/TDG SHIP NAME: UN1993, Flammable Liquids, n.o.s.
(Contains: Chlorobenzotrifluorides, Toluene), 3, PG-II
DRUM LABEL: (FLAMMABLE LIQUID)
IATA / ICAO: UN1993, Flammable Liquids, n.o.s.
(Contains: Chlorobenzotrifluorides, Toluene), 3, PG-II
IMO / IMDG: UN1993, Flammable Liquids, n.o.s.
(Contains: Chlorobenzotrifluorides, Toluene), 3, PG-II
EMERGENCY RESPONSE GUIDEBOOK NUMBER: 128

SECTION 15. REGULATORY INFORMATION

15.1 EPA REGULATION:

SARA SECTION 311/312 HAZARDS: Acute 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 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.

SECTION 15. REGULATORY INFORMATION (CONTINUED)

| SARA TITLE III INGREDIENTS | CAS# | EINECS# | WT% | (REG.SECTION) | RQ(LBS) |
|----------------------------|----------|-----------|-------|--------------------|---------|
| *Toluene | 108-88-3 | 203-625-9 | 10-20 | (311,312,313,RCRA) | 1000 |
| n-Butyl Acetate | 123-86-4 | 204-658-1 | 5-15 | (311,312) | 5000 |

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.

15.2 STATE REGULATIONS:

CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT (PROPOSITION 65):
This product contains the following chemical known to the State of California to cause reproductive toxicity: Toluene

15.3 INTERNATIONAL REGULATIONS

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

15.4 CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

B2: Flammable Liquid.
D2B: Irritating to skin / eyes.

This product was classified using the hazard criteria of the Controlled Products Regulations (CPR). This Document contains all information required by the CPR.

SECTION 16. OTHER INFORMATION

16.1 HAZARD RATINGS:

HEALTH (NFPA): 2, HEALTH (HMIS): 2, FLAMMABILITY: 3, PHYSICAL HAZARD: 1
(Personal Protection Rating to be supplied by user based on use conditions.)
This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

16.2 EMPLOYEE TRAINING

See Section 2 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

16.3 SDS DATE: 07/22/2014

NOTICE

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

Unless updated, the Safety Data Sheet is valid until 07/22/2017.



COMPANY IDENTITY: T C I Products Company
PRODUCT IDENTITY: QM2200V LOW VOC ADHESION PROMOTER
SDS NUMBER: QM2200V

SDS DATE: 07/22/2014
ORIGINAL: 07/22/2014

SAFETY DATA SHEET

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements of the Global Harmonizing System.

THIS SDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)

IMPORTANT: Read this SDS before handling & disposing of this product. Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY: QM2200V LOW VOC ADHESION PROMOTER
PRODUCT USES: Adhesion Promoter

COMPANY IDENTITY: T C I Products Company
COMPANY ADDRESS: 420 E Desoto
COMPANY CITY: St. Louis, MO 63147
COMPANY PHONE: 1-314-231-3075
EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)
CANUTEC: 1-613-996-6666 (CANADA)

SECTION 2. HAZARDS IDENTIFICATION

DANGER!!

2.1 HAZARD STATEMENTS: (CAT = Hazard Category)

- (H200s) PHYSICAL: Flammable Liquids (CAT:2)
H225 HIGHLY FLAMMABLE LIQUID AND VAPOR.
(H300s) HEALTH: Skin Corrosion/Irritation (CAT:2)
H315 CAUSES SKIN IRRITATION.
(H300s) HEALTH: Serious Eye Damage/Eye Irritation (CAT:2)
H320 CAUSES EYE IRRITATION.
(H300s) HEALTH: Acute Toxicity, Inhalation (CAT:4)
H332 HARMFUL IF INHALED.
(H300s) HEALTH: Target Organ Toxicity, Single Exposure (CAT:3)
H335 MAY CAUSE RESPIRATORY IRRITATION.
H336 MAY CAUSE DROWSINESS OR DIZZINESS.
(H300s) HEALTH: Target Organ Toxicity, Single Exposure (CAT:2)
H371 MAY CAUSE DAMAGE TO ORGANS.
(H300s) HEALTH, Reproductive Toxicity (CAT:2)
H361 SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD.



2.2 PRECAUTIONARY STATEMENTS:

EXPOSURE PREVENTION: STRICT HYGIENE!

AVOID EXPOSURE OF (PREGNANT) WOMEN!

P100s = General, P200s = Prevention, P300s = Response, P400s = Storage, P500s = Disposal

- P210 Keep away from heat/sparks/open flames/hot surfaces -- No Smoking.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P264 Wash with soap & water thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+352 IF ON SKIN: Wash with soap & water.
P304+340 IF INHALED: Remove victim to fresh air & keep at rest in a position comfortable for breathing.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present & easy to do - Continue rinsing.
P309+311 If exposed or you feel unwell: Call a POISON CENTER or doctor/physician.
P332+313 If skin irritation occurs: Get medical advice/attention.
P337+313 If eye irritation persists, get medical advice/attention.
P361 Remove/Take off immediately all contaminated clothing.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/container to an approved waste disposal plant.

SEE SECTIONS 8, 11 & 12 FOR TOXICOLOGICAL INFORMATION.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| MATERIAL | CAS# | EINECS# | WT % |
|-------------------------|---------------|-----------|-------|
| Chlorobenzotrifluorides | 98-56-6 | - | 30-40 |
| Toluene | 108-88-3 | 203-625-9 | 30-40 |
| Acrylic Resin | Mixture | - | 10-20 |
| n-Butyl Acetate | 123-86-4 | 204-658-1 | 5-15 |
| tert-Butyl Acetate | 540-88-5 | 208-760-7 | 0- 5 |
| Chlorinated Polyolefin | Not Available | - | 0- 5 |

TRACE COMPONENTS: Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, reproductive toxins, respiratory tract mutagens, and sensitizers). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).

SECTION 4. FIRST AID MEASURES

4.1 MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE & CHRONIC:

See Section 11 for symptoms/effects, acute & chronic.

4.2 GENERAL ADVICE:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists, refer to Section 8 for specific personal protective equipment.

4.3 EYE CONTACT:

If this product enters the eyes, check for and remove any contact lenses. Open eyes while under gently running water. Use sufficient force to open eyelids. "Roll" eyes to expose more surface. Minimum flushing is for 15 minutes. Seek immediate medical attention.

4.4 SKIN CONTACT:

If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.

4.5 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). Seek immediate medical attention.

4.6 SWALLOWING:

If swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, give two glasses of water to drink. DO NOT INDUCE VOMITING. Never induce vomiting or give liquids to someone who is unconscious, having convulsions, or unable to swallow. Seek immediate medical attention.

4.7 RESCUERS: Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take a copy of label and SDS to physician or health professional with victim.

4.8 NOTES TO PHYSICIAN:

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis should not be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (such as: Gastric lavage after endotracheal intubation).

SECTION 5. FIRE FIGHTING MEASURES

5.1 FIRE & EXPLOSION PREVENTIVE MEASURES:

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.

SECTION 5. FIRE FIGHTING MEASURES (CONTINUED)

5.2 SUITABLE (& UNSUITABLE) EXTINGUISHING MEDIA:

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

5.3 SPECIAL PROTECTIVE EQUIPMENT & PRECAUTIONS FOR FIRE FIGHTERS:

Water spray may be ineffective on fire but can protect fire-fighters & 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).

5.4 SPECIFIC HAZARDS OF CHEMICAL & HAZARDOUS COMBUSTION PRODUCTS:

HIGHLY FLAMMABLE!! VAPORS CAN CAUSE FLASH FIRE

Isolate from oxidizers, heat, sparks, electric equipment & open flame.

Closed containers may explode if exposed to extreme heat.

Applying to hot surfaces requires special precautions.

Empty container very hazardous! Continue all label precautions!

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 SPILL AND LEAK RESPONSE AND ENVIRONMENTAL PRECAUTIONS:

Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond with trained personnel. **ELIMINATE** all ignition sources (no smoking, flares, sparks, or flames in immediate area).

6.2 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, EMERGENCY PROCEDURES:

The proper personal protective equipment for incidental releases (such as: 1 Liter of the product released in a well-ventilated area), use impermeable gloves, they should be Level B: **triple-gloves (rubber gloves and nitrile gloves over latex gloves), chemical resistant suit and boots, hard-hat, and Self-Contained Breathing Apparatus** specific for the material handled, goggles, face shield, and appropriate body protection. In the event of a large release, use impermeable gloves, specific for the material handled, chemically resistant suit and boots, and hard hat. Self-Contained Breathing Apparatus or respirator may be required where engineering controls are not adequate or conditions for potential exposure exist. When respirators are required, select NIOSH/MSHA approved based on actual or potential airborne concentrations in accordance with latest OSHA and/or ANSI recommendations.

6.3 ENVIRONMENTAL PRECAUTIONS:

Stop spill at source. Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Close or cap valves and/or block or plug hole in leaking container and transfer to another container. Keep from entering storm sewers and ditches which lead to waterways, and if necessary, call the local fire or police department for immediate emergency assistance.

6.4 METHODS AND MATERIAL FOR CONTAINMENT & CLEAN-UP:

Absorb spilled liquid with polypads or other suitable absorbent materials. If necessary, neutralize using suitable buffering material, (acid with soda ash or base with phosphoric acid), and test area with litmus paper to confirm neutralization. Clean up with non-combustible absorbent (such as: sand, soil, and so on). Shovel up and place all spill residue in suitable containers. Dispose of at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal (see Section 13 - Disposal Considerations).

SECTION 7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Isolate from oxidizers, heat, sparks, electric equipment & open flame.

Use only with adequate ventilation. Avoid breathing of vapor or spray mist.

Do not get in eyes, on skin or clothing. Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to 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! Drinking alcohol shortly before, during or after use can cause unwanted effects.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Keep in fireproof surroundings. Keep separated from strong oxidants, strong acids, strong bases. Keep cool. Do not store above 49 C/120 F. Contact with hot surfaces can produce toxic gases. Keep container tightly closed & upright when not in use to prevent leakage.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 EXPOSURE LIMITS:

| MATERIAL | CAS# | EINECS# | TWA (OSHA) | TLV (ACGIH) |
|-------------------------|---------------|-----------|------------|-------------|
| Chlorobenzotrifluorides | 98-56-6 | - | None Known | None Known |
| Toluene | 108-88-3 | 203-625-9 | 200 ppm | 50 ppm A4 |
| Resin | Mixture | - | None Known | None Known |
| n-Butyl Acetate | 123-86-4 | 204-658-1 | 150 ppm | 150 ppm |
| Light Aromatic Naphtha | *64742-95-6 | - | 100 ppm | 25 ppm |
| 1,2,4-Trimethylbenzene | 95-63-6 | 202-436-9 | 25 ppm | 25 ppm |
| Chlorinated Polyolefin | Not Available | - | None Known | None Known |
| Xylenes | 1330-20-7 | 215-535-7 | 100 ppm | 100 ppm |

| MATERIAL | CAS# | EINECS# | CEILING | STEL (OSHA/ACGIH) | HAP |
|-----------------|----------|-----------|------------|-------------------|-----|
| Toluene | 108-88-3 | 203-625-9 | None Known | None Known | Yes |
| n-Butyl Acetate | 123-86-4 | 204-658-1 | None Known | 200 ppm | No |

In addition, using manufacturers' data, based on EPA Method 311, the following EPA Hazardous Air Pollutants may be present in trace amounts (less than 0.1%): Benzene, Mixed Xylenes, Ethylbenzene

8.2 APPROPRIATE ENGINEERING CONTROLS:

RESPIRATORY EXPOSURE CONTROLS

Airborne concentrations should be kept to lowest levels possible. If vapor, dust or mist is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air-supplied respirator authorized in 29 CFR 1910.134, European Standard EN 149, or applicable State regulations, after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown. Maintain airborne contaminant concentrations below exposure limits. If adequate ventilation is not available or there is potential for airborne exposure above the exposure limits, a respirator may be worn up to the respirator exposure limitations, check with respirator equipment manufacturer's recommendations/limitations. For particulates, a particulate respirator (NIOSH Type N95 or better filters) may be worn. If oil particles (such as: lubricants, cutting fluids, glycerin, and so on) are present, use a NIOSH Type R or P filter. For a higher level of protection, use positive pressure supplied air respiration protection or Self-Contained Breathing Apparatus or if oxygen levels are below 19.5% or are unknown.

EMERGENCY OR PLANNED ENTRY INTO UNKNOWN CONCENTRATIONS OR IDLH CONDITIONS

Positive pressure, full-face piece Self-Contained Breathing Apparatus; or positive pressure, full-face piece Self-Contained Breathing Apparatus with an auxiliary positive pressure Self-Contained Breathing Apparatus.

VENTILATION

LOCAL EXHAUST: Necessary
 SPECIAL: None
 MECHANICAL (GENERAL): Necessary
 OTHER: None
 Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

8.3 INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION:

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, chemical splash goggles should be worn, when a higher degree of protection is necessary, use splash goggles or safety glasses. Face-shields are recommended when the operation can generate splashes, sprays or mists.

HAND PROTECTION:

Use gloves chemically resistant to this material. Preferred examples: Butyl rubber, Chlorinated Polyethylene, Polyethylene, Ethyl vinyl alcohol laminate ("EVAL"), Polyvinyl alcohol ("PVA"). Examples of acceptable glove barrier materials include: Natural rubber ("latex"), Neoprene, Nitrile/butadiene rubber ("nitrile") or ("NBR"), Polyvinyl chloride ("PVC") or "vinyl", Viton. Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONTINUED)

BODY PROTECTION:

Use body protection appropriate for task. Cover-all, rubber aprons, or chemical protective clothing made from impervious materials are generally acceptable, depending on the task.

WORK & HYGIENIC PRACTICES:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using toilet facilities and at the end of the working period. Provide readily accessible eye wash stations & safety showers. Remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

| | |
|--|---|
| APPEARANCE: | Liquid, Water-White |
| ODOR: | Ketone |
| ODOR THRESHOLD: | Not Available |
| pH (Neutrality): | Not Available |
| MELTING POINT/FREEZING POINT: | Not Available |
| BOILING RANGE (IBP,50%,Dry Point): | 82 97 140* C / 181 208 284* F (*=End Point) |
| FLASH POINT (TEST METHOD): | -2 C / 28 F (TCC) (Lowest Component) |
| EVAPORATION RATE (n-Butyl Acetate=1): | Not Applicable |
| FLAMMABILITY CLASSIFICATION: | Class I B |
| LOWER FLAMMABLE LIMIT IN AIR (% by vol): | 1.2 |
| UPPER FLAMMABLE LIMIT IN AIR (% by vol): | Not Available |
| VAPOR PRESSURE (mm of Hg)@20 C | 23.2 |
| VAPOR DENSITY (air=1): | 4.2 |
| GRAVITY @ 68/68 F / 20/20 C: | |
| DENSITY: | 1.036 |
| SPECIFIC GRAVITY (Water=1): | 1.038 |
| POUNDS/GALLON: | 8.646 |
| WATER SOLUBILITY: | Moderate |
| PARTITION COEFFICIENT (n-Octane/Water): | Not Available |
| AUTO IGNITION TEMPERATURE: | 421 C / 790 F |
| DECOMPOSITION TEMPERATURE: | Not Available |
| TOTAL VOC'S (TVOC)*: | 81.9 Vol% / 856.0 g/L / 7.1 Lbs/Gal |
| NONEXEMPT VOC'S (CVOC)*: | 46.8 Vol% / 400.0 g/L / 3.3 Lbs/Gal |
| HAZARDOUS AIR POLLUTANTS (HAPS): | 19.0 Wt% / 198.4 g/L / 1.6 Lbs/Gal |
| NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C) | 0.0 |
| VISCOSITY @ 20 C (ASTM D445): | Not Available |

* Using CARB (California Air Resources Board Rules).

SECTION 10. STABILITY & REACTIVITY

10.1 REACTIVITY & CHEMICAL STABILITY:

Stable under normal conditions, no hazardous reactions when kept from incompatibles.

10.2 POSSIBILITY OF HAZARDOUS REACTIONS & CONDITIONS TO AVOID:

Isolate from oxidizers, heat, sparks, electric equipment & open flame.

10.3 INCOMPATIBLE MATERIALS:

Reacts violently with strong oxidants, strong acids, strong bases, causing fire & explosion hazard. Attacks many plastics, rubber, coatings.

10.4 HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide, Carbon Dioxide,
Hydrogen Chloride, Phosgene from burning.

10.5 HAZARDOUS POLYMERIZATION:

Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 ACUTE HAZARDS

11.11 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.

11.12 INHALATION:

Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression which can cause death. Vapor harmful. Concentrated vapor in confined areas may be fatal.
Acute overexposure can cause harm to affected organs by routes of entry.
Use of alcoholic beverages enhances the harmful effect.

11.13 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.

11.2 SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Pre-existing disorders of any target organs mentioned in this Document can be aggravated by over-exposure by routes of entry to components of this product.
Persons with these disorders should avoid use of this product.

11.3 CHRONIC HAZARDS

11.31 CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:

Pregnant women should avoid use. May cause birth defects.
Leukemia been reported in humans from Benzene.
This product contains less than 56 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.
Depending on degree of exposure, periodic medical examination is indicated.

11.32 TARGET ORGANS: May cause damage to target organs, based on animal data.

11.33 IRRITANCY: Irritating to contaminated tissue.

11.34 SENSITIZATION: No component is known as a sensitizer.

11.35 MUTAGENICITY: No known reports of mutagenic effects in humans.

11.36 EMBRYOTOXICITY: No known reports of embryotoxic effects in humans.

11.37 TERATOGENICITY: No known reports of teratogenic effects in humans.

11.38 REPRODUCTIVE TOXICITY: No known reports of reproductive effects in humans.

A MUTAGEN is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate across generational lines. An EMBRYOTOXIN is a chemical which causes damage to a developing embryo (such as: within the first 8 weeks of pregnancy in humans), but the damage does not propagate across generational lines. A TERATOGEN is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A REPRODUCTIVE TOXIN is any substance which interferes in any way with the reproductive process.

11.4 MAMMALIAN TOXICITY INFORMATION

| MATERIAL | CAS# | EINECS# | LOWEST KNOWN LETHAL DOSE DATA |
|-----------------|----------|-----------|--|
| Toluene | 108-88-3 | 203-625-9 | LOWEST KNOWN LD50 (ORAL) 3000.0 mg/kg (Rats) |
| n-Butyl Acetate | 123-86-4 | - | LOWEST KNOWN LC50 (VAPORS) 2000 ppm (Rats) |
| Toluene | 108-88-3 | 203-625-9 | LOWEST KNOWN LD50 (SKIN) 4000.0 mg/kg (Rabbits) |

SECTION 12. ECOLOGICAL INFORMATION

12.1 ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

12.2 EFFECT OF MATERIAL ON PLANTS AND ANIMALS:

This product may be harmful or fatal to plant and animal life if released into the environment. Refer to Section 11 (Toxicological Information) for further data on the effects of this product's components on test animals.

12.3 EFFECT OF MATERIAL ON AQUATIC LIFE:

The most sensitive known aquatic group to any component of this product is: Fish exposed to 5120 ppm or mg/L are adversely affected by components of this product. Keep out of sewers and natural water supplies. The substance is toxic to aquatic organisms.

12.4 MOBILITY IN SOIL

Mobility of this material has not been determined.

12.5 DEGRADABILITY

This product is partially biodegradable.

12.6 ACCUMULATION

Bioaccumulation of this product has not been determined.

SECTION 13. DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers and liners may retain some product residues. Vapor from some product residues may create a highly flammable or explosive atmosphere inside the container. **DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE USED CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY BURST AND CAUSE INJURY OR DEATH.** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Processing, use or contamination may change the waste disposal requirements. Do not dispose of on land, in surface waters, or in storm drains. Waste should be recycled or disposed of in accordance with regulations. Large amounts should be collected for reuse or consigned to licensed hazardous waste haulers for disposal. **ALL DISPOSAL MUST BE IN ACCORDANCE WITH ALL FEDERAL, STATE, PROVINCIAL, AND LOCAL REGULATIONS. IF IN DOUBT, CONTACT PROPER AGENCIES. EPA CHARACTERISTIC: D001, D035**

SECTION 14. TRANSPORT INFORMATION

IF > 5268 LB / 2394 KG OF THIS PRODUCT IS IN 1 CONTAINER, IT EXCEEDS THE RQ OF TOLUENE. "RQ" MUST BE PUT BEFORE THE DOT SHIPPING NAME.

MARINE POLLUTANT: No
DOT/TDG SHIP NAME: UN1993, Flammable Liquids, n.o.s.
(Contains: Chlorobenzotrifluorides, Toluene), 3, PG-II
DRUM LABEL: (FLAMMABLE LIQUID)
IATA / ICAO: UN1993, Flammable Liquids, n.o.s.
(Contains: Chlorobenzotrifluorides, Toluene), 3, PG-II
IMO / IMDG: UN1993, Flammable Liquids, n.o.s.
(Contains: Chlorobenzotrifluorides, Toluene), 3, PG-II
EMERGENCY RESPONSE GUIDEBOOK NUMBER: 128

SECTION 15. REGULATORY INFORMATION

15.1 EPA REGULATION:

SARA SECTION 311/312 HAZARDS: Acute 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 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.

SECTION 15. REGULATORY INFORMATION (CONTINUED)

| SARA TITLE III INGREDIENTS | CAS# | EINECS# | WT% | (REG.SECTION) | RQ(LBS) |
|----------------------------|----------|-----------|-------|--------------------|---------|
| *Toluene | 108-88-3 | 203-625-9 | 10-20 | (311,312,313,RCRA) | 1000 |
| n-Butyl Acetate | 123-86-4 | 204-658-1 | 5-15 | (311,312) | 5000 |

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.

15.2 STATE REGULATIONS:

CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT (PROPOSITION 65):

This product contains the following chemical known to the State of California to cause reproductive toxicity: Toluene

15.3 INTERNATIONAL REGULATIONS

The identified components of this product are listed on the chemical inventories of the following countries:

Australia (AICS), Canada (DSL or NDSL), China (IECSC), Europe (EINECS, ELINCS), Japan (METI/CSSL, MHLW/ISHL), South Korea (KECI), New Zealand (NZIoC), Philippines (PICCS), Switzerland (SWISS), Taiwan (NECSI), USA (TSCA).

15.4 CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

B2: Flammable Liquid.
D2B: Irritating to skin / eyes.

This product was classified using the hazard criteria of the Controlled Products Regulations (CPR). This Document contains all information required by the CPR.

SECTION 16. OTHER INFORMATION

16.1 HAZARD RATINGS:

HEALTH (NFPA): 2, HEALTH (HMIS): 2, FLAMMABILITY: 3, PHYSICAL HAZARD: 1
(Personal Protection Rating to be supplied by user based on use conditions.)
This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

16.2 EMPLOYEE TRAINING

See Section 2 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

16.3 SDS DATE: 07/22/2014

NOTICE

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency.

Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

Unless updated, the Safety Data Sheet is valid until 07/22/2017.