Material Safety Data Sheet

Date of printing : 2/13/2015. **Date of issue** : 2/13/2015

1. Product and company identification

Prepared for

ATTN:

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(336) 841-5111
In case of emergency (Health or Spills):
CHEMTREC (US and Canada) (800) 424-9300

Product no. : **441-2135**
Container Code(s) : **441-2135-D1CG, 441-2135-D55OA1, 441-2135-D5PRS**
Product - Class : **441-2135 CHEMLACK T/C**
Customer Part Number :
Customer ShipTo ID : **0000108963**

2. Hazards identification

Physical state : Liquid.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview : DANGER!

EXTREMELY FLAMMABLE LIQUID AND VAPOR. FLAMMABLE. VAPOR MAY CAUSE FLASH FIRE. CAUSES SEVERE SKIN IRRITATION. HARMFUL IF INHALED OR SWALLOWED. CAUSES RESPIRATORY TRACT AND EYE IRRITATION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER, BASED ON ANIMAL DATA. POSSIBLE BIRTH DEFECT HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE BIRTH DEFECTS, BASED ON ANIMAL DATA.

Keep away from heat, sparks and flame. Do not breathe vapor or mist. Do not ingest. Do not get in eyes. Avoid contact with skin and clothing. Avoid exposure during pregnancy. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Routes of entry : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Inhalation : Toxic by inhalation. Irritating to respiratory system.

Other effects of inhalation may include: blood effects, CNS effects, confusion, cough, depression, diarrhea, dizziness, drowsiness, excitation, fatigue, headache, incoordination, irregular heartbeat, narcosis, nausea, pulmonary edema, vomiting, weakness,

Ingestion : Harmful if swallowed.

2. Hazards identification

Other effects of ingestion may include : cardiovascular effects, CNS effects, diarrhea, dizziness, drowsiness, fatigue, gastric disturbances, gastroenteritis, headache, high blood sugar, irritation, kidney damage, liver damage, nausea, vomiting, weakness,

Skin : Harmful in contact with skin. Severely irritating to the skin.
Other effects of skin contact may include: dehydration, dermatitis, discoloration,
Effects due to absorption through skin may include: blood effects, CNS effects, depression, diarrhea, dizziness, drowsiness, fatigue, headache, incoordination, kidney damage, narcosis, nausea, vomiting, weakness,

Eyes : Irritating to eyes.

Other effects of eye contact may include : burning, eye damage, redness, swelling, tearing,

Potential chronic health effects

Carcinogenicity : Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : Contains material which may cause birth defects, based on animal data.

Target organs : Contains material which may cause damage to the following organs: blood, kidneys, the reproductive system, liver, heart, brain, upper respiratory tract, skin, eyes, central nervous system (CNS), ears.

Medical conditions aggravated by over-exposure : pulmonary conditions, skin disorders, liver conditions, kidney conditions, respiratory conditions, neurological disorders, cardiovascular diseases, reproductive system disorders, hearing disorders,

NOTICE: Reports have associated repeated and prolonged OVEREXPOSURE to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents of this package may be harmful or fatal.

See toxicological information (Section 11)

3. Composition/information on ingredients

Name	CAS number	% by weight	Vapor pressure	Exposure limits
isobutyl acetate	110-19-0		1.7 kPa (12.5 mm Hg) [room temperature]	**ACGIH TLV (United States).** TWA: 150 ppm 8 hours. **OSHA PEL (United States).** TWA: 150 ppm 8 hours.
toluene	108-88-3		Not available.	**ACGIH TLV (United States).** TWA: 20 ppm 8 hours. **OSHA PEL (United States).** CEIL: 500 ppm TWA: 200 ppm 8 hours. STEL: 300 ppm 15 minutes.
xylene, mixed isomers	1330-20-7		0.68 kPa (5.1 mm Hg) [room temperature]	**ACGIH TLV (United States).** TWA: 100 ppm 8 hours. STEL: 150 ppm 15 minutes. **OSHA PEL (United States).** TWA: 100 ppm 8 hours.
nitrocellulose	9004-70-0		Not available.	
butyl acetate	123-86-4		1.3 kPa (10 mm Hg) [room temperature]	**ACGIH TLV (United States).** TWA: 150 ppm 8 hours. STEL: 200 ppm 15 minutes. **OSHA PEL (United States).** TWA: 150 ppm 8 hours.
proprietary	-		Not available.	
n-butanol	71-36-3		0.73 kPa (5.5 mm Hg) [room	**ACGIH TLV (United States).** TWA: 20 ppm 8 hours.

3. Composition/information on ingredients

		temperature]	**OSHA PEL (United States).** TWA: 100 ppm 8 hours.
propan-2-ol	67-63-0	4.4 kPa (33 mm Hg) [room temperature]	**ACGIH TLV (United States).** TWA: 200 ppm 8 hours. STEL: 400 ppm 15 minutes. **OSHA PEL (United States).** TWA: 400 ppm 8 hours.
isobutyl isobutyrate	97-85-8	0.43 kPa (3.2 mm Hg) [room temperature]	
propan-2-one	67-64-1	24.7 kPa (185 mm Hg) [room temperature]	**ACGIH TLV (United States).** TWA: 500 ppm 8 hours. STEL: 750 ppm 15 minutes. **OSHA PEL (United States).** TWA: 1000 ppm 8 hours.
2-methoxy-1-methylethyl acetate	108-65-6	0.49 kPa (3.7 mm Hg) [room temperature]	
ethyl benzene	100-41-4	0.95 kPa (7.1 mm Hg) [room temperature]	**ACGIH TLV (United States).** TWA: 20 ppm 8 hours. STEL: 125 ppm 15 minutes. **OSHA PEL (United States).** TWA: 100 ppm 8 hours.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately if symptoms occur.

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately if symptoms occur.

Inhalation : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately if symptoms occur.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

5. Fire-fighting measures

Flammability of the product : Extremely flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
DANGER - Rags, steel wool or waste soaked with this product may spontaneously catch fire if improperly discarded. Immediately after use, place rags, steel wool or waste in a sealed water-filled metal container. Waste should be understood to include contaminated articles, including spray booth filters and strippings.

Flash point : Closed cup: -20℃ (-4℉)

5. Fire-fighting measures

Flammable limits : Lower: 1%
Upper: 13%

Extinguishing media

Suitable : Use dry chemical, CO_2, water spray (fog) or foam.

Not suitable : Do not use water jet.

Special exposure hazards : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
halogenated compounds

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

UNUSUAL FIRE HAZARDS: During emergency conditions, overexposure to products of combustion may cause a health hazard; symptoms may not be immediately apparent. Obtain medical attention.

Special remarks on fire hazards : Not available.

Special remarks on explosion hazards : Not available.

6. Accidental release measures

Personal precautions : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods for cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

7. Handling and storage

Handling : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Avoid exposure during pregnancy. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Do not enter confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage : Store in accordance with local regulations. Store in approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Engineering measures : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection Selection of personal protective equipment (PPE) is to be established by the employer performing a PPE hazard assessment. In the U.S.A, OSHA requires completion of a documented PPE hazard assessment as described in 29 CFR 1910.132.

Respiratory : Use properly fitted respiratory protection complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flatting should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

Hands : 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.

Eyes : 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, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

8. Exposure controls/personal protection

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other protection : Not available.

9. Physical and chemical properties

Physical state : Liquid.

Burning time : Not applicable.

Burning rate : Not applicable.

Color : Not available.

Odor : Not available.

Taste : Not available.

Molecular weight : Not applicable.

Molecular formula : Not applicable.

pH : Not available.

Boiling/condensation point : 56 to 151℃ (132.8 to 303.8℉)

Melting/freezing point : Not available.

Critical temperature : Not available.

Relative density : 0.928

Vapor density : Heavier than air

Volatility : 74.89% (w/w)

Odor threshold : Not available.

Evaporation rate : Highest known value: Greater than 1. (isobutyl acetate) compared with butyl acetate

Viscosity : Not available.

Ionicity (in water) : Not available.

Dispersibility properties : Not available.

Solubility : Not available.

10. Stability and reactivity

Chemical stability : The product is stable, under normal conditions of storage and use.

Hazardous polymerization : Will not undergo hazardous polymerization.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Other Conditions to avoid: temperatures above 140 degrees, high humidity, light, moisture, allow air blanket above liquid, drying out,

Materials to avoid : Reactive or incompatible with the following materials: oxidizing materials, reducing materials, acids and alkalis.

Hazardous decomposition products : Not available.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
isobutyl acetate	LC50 Inhalation Vapor	Rat	3500 ppm	4 hours
xylene, mixed isomers	LD50 Oral	Rat	4300 mg/kg	-
	LC50 Inhalation Vapor	Rat	5000 ppm	4 hours
toluene	LD50 Dermal	Rabbit	12124 mg/kg	-
	LD50 Oral	Rat	636 mg/kg	-
	LC50 Inhalation Vapor	Rat	49000 mg/m³	4 hours
butyl acetate	LD50 Oral	Rat	10768 mg/kg	-
	LC50 Inhalation Vapor	Rat	390 ppm	4 hours
propan-2-one	LD50 Oral	Rat	5800 mg/kg	-
	LC50 Inhalation Vapor	Rat	50100 mg/m³	8 hours
isobutyl isobutyrate	LC50 Inhalation Vapor	Rat	5000 ppm	6 hours
2-methoxy-1-methylethyl acetate	LD50 Oral	Rat	8532 mg/kg	-
n-butanol	LD50 Dermal	Rabbit	3400 mg/kg	-
	LD50 Oral	Rat	790 mg/kg	-
	LC50 Inhalation Vapor	Rat	8000 ppm	4 hours
propan-2-ol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
	LC50 Inhalation Vapor	Rat	12000 ppm	8 hours
ethyl benzene	LD50 Dermal	Rabbit	15486 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
	LC50 Inhalation Vapor	Rat	55000 mg/m³	2 hours

Carcinogenicity

Product/ingredient name	IARC	NTP	OSHA
ethyl benzene	2B	-	-

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Not available.			

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
toluene	Positive - Unreported	Mammal - species unspecified	-	-

12. Ecological information

Data available upon request.

13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. 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

13. Disposal considerations

safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport information

Note: Information contained in this section may vary from the actual shipping description depending on quantity in containers, mode of shipment and use of exemptions.

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN1263	Paint. Marine pollutant (proprietary) RQ (xylene, mixed isomers, toluene)	3	II		RQ: 1128.88lbs (511.965kgs) [xylene, mixed isomers] RQ: 11190.7lbs (5075.15kgs) [toluene]
TDG Classification	UN1263	Paint. Marine pollutant (chlorinated paraffins)	3	II		The marine pollutant mark is not required when transported by road or rail.
IMDG Class	UN1263	Paint	3	II		-
IATA-DGR Class	UN1263	Paint	3	II		The environmentally hazardous substance mark may appear if required by other transportation regulations.

PG* : Packing group

15. Regulatory information

United States

U.S. Federal regulations : **United States inventory (TSCA 8b) :** All components are listed or exempted.

(HAPS) Clean Air Act (CAA) 112 regulated toxic substances: xylene, mixed isomers; ethyl benzene; toluene; cumene

SARA 313

Form R - Reporting requirements :

Product name	CAS number	Concentration
toluene	108-88-3	8.95
xylene, mixed isomers	1330-20-7	8.87
n-butanol	71-36-3	6.19
ethyl benzene	100-41-4	2.08

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

15. Regulatory information

California Prop. 65

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

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
toluene	No.	Yes.	No.	No.
ethyl benzene	Yes.	No.	No.	No.
cumene	Yes.	No.	No.	No.

Canada

Canada inventory : All components of this product are on the CEPA DSL inventory.

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

International regulations

International lists : **Australia inventory (AICS)**: Not determined.
China inventory (IECSC): All components are listed or exempted.
Japan inventory: Not determined.
Korea inventory: All components are listed or exempted.
Malaysia Inventory (EHS Register): Not determined.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
Philippines inventory (PICCS): Not determined.
Taiwan inventory (CSNN): Not determined.

** All values in this section reported as percentage by weight, unless otherwise specified.

16. Other information

HMIS III ® Hazardous Material Information System (U.S.A.) :

Health	*	2
Flammability		3
Physical hazards		1
Personal protection		

Caution: HMIS III ® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risk, and 4 representing severe hazards or risk. Although HMIS III ® ratings are not required on MSDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS III ® ratings are to be used with a fully implemented HMIS III ® program. HMIS III ® is a registered mark of the National Paint & Coatings Association (NPCA).

The customer is responsible for determining the PPE code for this material.

Other special considerations : Not available.

Notice to reader

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

16. Other information

development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

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