

Material Safety Data Sheet

UNDERCOAT THINNER

1. Product and Company Identification

Product name : Undercoat Thinner
Supplier : StressKote Brittle Coatings, LLC
S14 W33511 Hwy 18
Building C
Delafield, WI 53018
262-510-9568

Date Revised : 1/16/08
Responsible name : **StressKote Brittle Coatings, LLC**
In case of emergency : StressKote 262-510-9568

2. Hazards Identification

Physical state : Liquid.
Odor : Aromatic.
OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Emergency overview : CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.
Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Contains material that can cause target organ damage.

Routes of entry : Ingestion. Inhalation. Skin contact.

Potential acute health effects

Inhalation : Inhalation of the spray or mist may produce severe irritation of respiratory tract, characterized by coughing, choking or shortness of breath.

Ingestion : Harmful if swallowed.
Skin : This product may irritate skin upon contact.
Eyes : This product may irritate eyes upon contact.

Potential chronic health effects

Chronic effects : Contains material that can cause target organ damage.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.
Target organs : Contains material which causes damage to the following organs: lungs, the nervous system, mucous membranes, brain, skin, eye, lens or cornea.
Contains material which may cause damage to the following organs: blood, kidneys, the reproductive system, liver, cardiovascular system, upper respiratory tract, central nervous system (CNS), ears.

Medical conditions aggravated by overexposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (section 11)

3. Composition/Information on Ingredients

| | | |
|--|------------|------|
| 1) Toluene | 108-88-3 | 36.1 |
| 2) Light Aliphatic Solvent Naphtha (D) | 64742-89-8 | >9 |
| 3) Butyl Acetate | 123-86-4 | >9 |
| 4) Methyl Ethyl Ketone | 78-93-3 | 16.5 |
| 5) Isopropanol | 67-63-0 | >9 |

There are no 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

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Inhalation** : Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Ingestion** : Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-Fighting Measures

- Flammability of the product** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Extinguishing media** :
- Suitable** : Use an extinguishing agent suitable for the surrounding fire
 - Not suitable** : None known.
- 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.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon oxides
- 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.
- Special remarks on fire hazards** : Vapor may travel considerable distance to source of ignition and flash back. (Toluene)
- Special remarks on explosion hazards** : No additional remark.

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. Avoid breathing 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).
- 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. Wash spillages into an effluent treatment plant or proceed as follows. 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. 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. 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

Product name

Toluene

Light Aliphatic Solvent Naphtha (D)

Butyl Acetate

Methyl Ethyl Ketone

Isopropanol

Exposure limits

ACGIH TLV (United States, 2007).

TWA: 20 ppm

ACGIH (United States).

TWA: 400 ppm

OSHA (United States).

TWA: 400 ppm

ACGIH (United States).

TWA: 150 ppm

OSHA (United States).

TWA: 150 ppm

OSHA (United States).

TWA: 200 ppm

OSHA (United States).

TWA: 200 ppm

ACGIH (United States).

TWA: 200 ppm

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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

Respiratory

: Use a properly fitted, air-purifying or air-fed respirator 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.

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.

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, gases or dusts.

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.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and Chemical Properties

| | |
|-----------------------------------|---|
| Physical state | : Liquid. |
| Flash point | : The lowest known value is CLOSED CUP: -13.889°C (7°F). (Setaflash.). (Light Aliphatic Solvent Naphtha (D)) |
| Auto-ignition temperature | : The lowest known value is 398.89°C (750°F) (Isopropyl alcohol). |
| Flammable limits | : The greatest known range is LOWER: 2% UPPER: 12% (Isopropyl alcohol) |
| Color | : Clear |
| Odor | : Aromatic. |
| pH | : Neutral. |
| Boiling/condensation point | : The lowest known value is 79°C (174.2°F) (Methyl Ethyl Ketone). Weighted average: 101.14°C (214.1°F) |
| Melting/freezing point | : May start to solidify at -74°C (-101.2°F) based on data for: Butyl Acetate. Weighted average: -87.96°C (-126.3°F) |
| Relative density | : Weighted average: 0.81 (Water = 1) |
| Vapor pressure | : The highest known value is 119 mm of Hg (@ 20°C) (Light Aliphatic Solvent Naphtha (D)). Weighted average: 47.79 mm of Hg (@ 20°C) |
| Vapor density | : The highest known value is 4 (Air = 1) (Butyl Acetate). Weighted average: 3.11 (Air = 1) |
| Volatility | : 100% (v/v) Weighted average. 100% (w/w). Weighted average. |
| Evaporation rate | : The highest known value is 4.3 (Light Aliphatic Solvent Naphtha (D)). Weighted average: 2.53 compared to Butyl acetate. |
| Dispersibility properties | : Not dispersible in the following materials: cold water and hot water. |

10. Stability and Reactivity

| | |
|---|---|
| Stability | : The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur. |
| Conditions to avoid | : No specific data. |
| Materials to avoid | : No specific data. |
| Hazardous decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| Hazardous polymerization | : Will not occur. |
| Conditions of reactivity | : Highly flammable in presence of open flames and sparks, of heat. Slightly flammable to flammable in presence of oxidizing materials, of combustible materials. Very slightly to slightly flammable in presence of reducing materials. |

11. Toxicological Information

Acute Toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|-----------------------|------------|-------------|----------|
| Toluene | LD50 Dermal | Rabbit | >2000 mg/kg | - |
| | LD50 Oral | Rat | >2000 mg/kg | - |
| 2-Butanone | LC50 Inhalation Gas. | Rat | >5000 ppm | 1 hours |
| | LD50 Dermal | Rabbit | >2000 mg/kg | - |
| | LD50 Oral | Rat | >2000 mg/kg | - |
| Butyl Acetate | LC50 Inhalation Gas. | Rat | >5000 ppm | 1 hours |
| | LD50 Dermal | Guinea pig | 8770 mg/kg | - |
| | LD50 Oral | Rat | 14130 mg/kg | - |
| | LD50 Oral | Mouse | 7100 mg/kg | - |
| | LC50 Inhalation Vapor | Guinea pig | >7000 ppm | 13 hours |
| | LC50 Inhalation Vapor | Rat | >1800 ppm | 6 hours |

Conclusion/Summary : No additional remark.

Chronic toxicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Inhalation of vapors may cause dizziness, an irregular heartbeat, narcosis, nausea or asphyxiation. (Toluene)

Classification

| Product/ingredient name | ACGIH | IARC | EPA | NIOSH | NTP | OSHA |
|-------------------------------------|-------|------|-----|-------|-----|------|
| Toluene | A5 | 4 | - | - | - | - |
| Light Aliphatic Solvent Naphtha (D) | A5 | 4 | - | - | - | - |
| Butyl Acetate | A4 | 4 | - | - | - | - |
| 2-Butanone | A5 | 4 | - | - | - | - |
| Isopropanol | A5 | 4 | - | - | - | - |

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

12. Ecological Information

Environmental effects : No known significant effects or critical hazards

Aquatic ecotoxicity

Conclusion/Summary : Not available.

Biodegradability

Conclusion/Summary : No additional remark.


Toxicity of the products of biodegradation : The products of degradation are less toxic than the product itself.

13. Disposal Considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. 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. Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport Information

| Regulatory information | UN number | Proper shipping name | Classes | PG* | Label | Additional information |
|---------------------------|-----------|------------------------|---------|-----|---|------------------------|
| DOT Classification | UN1263 | PAINT RELATED MATERIAL | 3 | II |  | No additional remark. |

PG*: Packing group

15. Regulatory Information

HCS Classification : Target organ effects
U.S. Federal regulations : **United States inventory (TSCA 8b)**: All components are listed or exempted.
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: No products were found.
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Barsol A-1504: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.
Clean Air Act (CAA) 112 accidental release prevention: No products were found.
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

SARA 313

| | <u>Product name</u> | <u>CAS number</u> | <u>Concentration</u> |
|--|---------------------|-------------------|----------------------|
| Form R – Reporting requirements | Toluene | 108-88-3 | 36.1 |
| | 2-Butanone | 78-93-3 | 16.5 |

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.

Undercoat Thinner

15. Regulatory Information

California Prop. 65

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

| <u>Ingredient name</u> | <u>Cancer</u> | <u>Reproductive</u> | <u>No significant risk level</u> | <u>Maximum acceptable dosage level</u> |
|--|--|---------------------|----------------------------------|--|
| Toluene | No. | Yes. | No. | No. |
| United States inventory (TSCA 8b) | United States inventory (TSCA 8b): All components are listed or exempted. | | | |

16. Other Information

Label requirements Hazardous Material Information System (U.S.A.) : CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.

| | |
|------------------|---|
| Health | 2 |
| Flammability | 3 |
| Physical hazards | 0 |
| | |

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

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

National Fire Protection Association :



Other special considerations : Format Change: 06-14-96; TLV Update 10/20/03; Inventory blend number added 2/28/07; TLV Update 1/16/08
Date of printing : 1/16/2008.
Date of issues : 1/16/2008.
Version : 2

▣ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.