



SOLVENTS

1A.XXX

Features

- Solvents

General Description

Solvents exist in all coatings formulations to deliver the resins and pigments to the surface of the substrate. There are many ways to categorize solvents, but in wood coatings the “activity” of the solvents is often one of the best. Solvents, using this definition, exist as either active, latent or diluent compounds.

1A.101 Acetone, 1A.106 n-Butyl Acetate, 1A.137 Mineral Spirits, 1A.352 Ethyl Alcohol, Spirits 1A.355 Butyl Cellosolve.

Recommended For

Interior use only

Limitations

Product Information																																							
<p>Colors — Standard: N/A</p> <p>— Tint Bases: N/A</p> <p>— Special Colors: N/A</p> <p>Certification: The products supported by this data sheet contain a maximum of 900 grams per liter VOC /VOS (7.5 lbs/gal.) excluding water & exempt solvents.</p> <p>These products are not compliant in some areas as a Thinner when used in Architectural and Industrial Maintenance applications.</p> <p>Technical Assistance: For Technical Assistance please contact your authorized Lenmar® Dealer/Distributor, your Lenmar® sales representative, Technical Service at 1-800-225-5554, or visit www.lenmar-coatings.com.</p>	<table border="1"> <thead> <tr> <th>Technical Data</th> <th>Solvents</th> </tr> </thead> <tbody> <tr> <td colspan="2" style="text-align: center;">Flash Point</td> </tr> <tr> <td>1A.101 Acetone</td> <td>1°F</td> </tr> <tr> <td>1A.106 n-Butyl Acetate</td> <td>77°F</td> </tr> <tr> <td>1A.137 Mineral Spirits</td> <td>105°F</td> </tr> <tr> <td>1A.352 Ethyl Alcohol, Spirits</td> <td>59°F</td> </tr> <tr> <td>1A.355 Butyl Cellosolve</td> <td>150°F</td> </tr> <tr> <td colspan="2" style="text-align: center;">Weight per Gallon</td> </tr> <tr> <td>1A.101 Acetone</td> <td>6.59 lbs</td> </tr> <tr> <td>1A.106 n-Butyl Acetate</td> <td>7.35 lbs</td> </tr> <tr> <td>1A.137 Mineral Spirits</td> <td>6.31 lbs</td> </tr> <tr> <td>1A.352 Ethyl Alcohol, Spirits</td> <td>6.6 lbs</td> </tr> <tr> <td>1A.355 Butyl Cellosolve</td> <td>7.51 lbs</td> </tr> <tr> <td colspan="2" style="text-align: center;">Volatile Organic Compounds (VOC)</td> </tr> <tr> <td>1A.101</td> <td>0g/L</td> </tr> <tr> <td>1A.106</td> <td>880g/L</td> </tr> <tr> <td>1A.137</td> <td>788g/L</td> </tr> <tr> <td>1A.352</td> <td>790g/L</td> </tr> <tr> <td>1A.355</td> <td>900g/L</td> </tr> </tbody> </table>	Technical Data	Solvents	Flash Point		1A.101 Acetone	1°F	1A.106 n-Butyl Acetate	77°F	1A.137 Mineral Spirits	105°F	1A.352 Ethyl Alcohol, Spirits	59°F	1A.355 Butyl Cellosolve	150°F	Weight per Gallon		1A.101 Acetone	6.59 lbs	1A.106 n-Butyl Acetate	7.35 lbs	1A.137 Mineral Spirits	6.31 lbs	1A.352 Ethyl Alcohol, Spirits	6.6 lbs	1A.355 Butyl Cellosolve	7.51 lbs	Volatile Organic Compounds (VOC)		1A.101	0g/L	1A.106	880g/L	1A.137	788g/L	1A.352	790g/L	1A.355	900g/L
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WARNING! If you scrape, sand or remove old paint, you may release lead dust. **LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE.** Wear a NIOSH-approved respirator to control lead exposure. Carefully clean up with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

These products are recommended for interior use only.

Solvents exist in all coatings formulations to deliver the resins and pigments to the surface of the substrate. There are many ways to categorize solvents, but in wood coatings the "activity" of the solvents is often one of the best. Solvents, using this definition, exist as either active, latent or diluent compounds.

Active solvents are solvents which can dissolve the resins used in film-forming. For lacquer products, all ketones and acetates are active. The relative evaporation rates of solvents will determine their overall effect on the coating. Acetone is a very fast solvent, and will accelerate the cure of the coating. It is also delisted as a VOC, so can be added without altering the VOC level of coatings. Butyl Acetate is a mid-range solvent and can be used to simply thin a coating without affecting the overall cure of the coating. PM Acetate and Butyl Cellosolve (also known as EB Glycol Ether Acetate) are both slow evaporating solvents and act as retarders in coatings.

Latent solvents are solvents which, by themselves, are not active, but when placed in a system with active solvents, may increase the total solubility of the system for the resins. (They make active solvents more efficient.) Alcohols are active for conversion varnishes, but latent for nitrocellulose coatings. Xylene is latent for varnishes, and diluent for lacquer products. Addition of these solvents in the proper systems will also act as thinners and retarders without adverse effect to the film forming resins.

Diluent solvents are solvents which have no effect on the solubility of the resins at all. Naphtha and Mineral Spirits are diluents. They may be used to reduce or retard alkyd or oil-based stains, as they do not adversely affect the resins in those pigmented systems. Other solvents added to these stain systems may make settling worse or hurt the color stability because of their "activity". For lacquer systems, mineral spirits can be especially dangerous. It is a very slow solvent and can get trapped in nitrocellulose systems creating blushing and blooming problems.

Standard additions for all products when adding pure solvents are from 3-10%, and should be added in small increments of 2 – 3 ounces until the desired change or effect is achieved. (Butyl Cellosolve should not be added at levels above 5% without previous approval from technical service.) Make every effort to keep additions of solvent to a minimum. All products are formulated to achieve a certain balance. Each addition of solvents can affect that balance.

Never assume that all manufacturers and their finishes are the same. Test all additions on sample pieces before beginning or continuing application.

General Recommendations

1. Solvents should be treated as an "Add only when needed" item.
2. Add in at 2-3 ounces at a time, and no more than 10 percent, unless otherwise noted.
3. Too much solvent added, or the wrong solvent added, can result in a major shift in product performance. Always add with care and test all products before application on final substrate.
4. All solvent additions will raise the VOC levels of a product (even waterbornes) and care should be taken to remain in compliance with local, state and federal regulations.

Clean Up

USE COMPLETELY OR DISPOSE OF PROPERLY.

This product contains organic solvents which may cause adverse effects to the environment if handled improperly. Emptied containers may retain product residue. Follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind or weld on or near the container.

Disposal of wastes containing either organic solvents or free-liquids in landfills is prohibited. **Local disposal requirements vary; consult your sanitation department or state-designated environmental agency for local disposal options.**

Environmental Health & Safety Information

1A.101 Acetone:

DANGER!

Causes serious eye irritation

May cause drowsiness or dizziness

Highly flammable liquid and vapor

Prevention: Wash face, hands and any exposed skin thoroughly after handling. Avoid breathing dust /fume /mist /vapors /spray. Use only outdoors or in a well-ventilated area. Keep away from heat /sparks /open flames /hot surfaces, no smoking. Keep container tightly closed. Ground /bond container and receiving equipment. Use explosion-proof electrical /ventilating /lighting /equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves /protective clothing /eye protection /face protection. Keep cool.

Response: If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention. If on skin (or hair), take off immediately all contaminated clothing. Rinse skin with water.

If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. In case of fire, use CO₂, dry chemical, or foam for extinction.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents /container to an approved waste disposal plant.

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

KEEP OUT OF REACH OF CHILDREN

READ ALL DIRECTIONS BEFORE USE.
UNDERSTAND **ALL** DANGERS WITH THIS
PRODUCT PRIOR TO USE.

Refer to Safety Data Sheet for additional
health and safety information.

Environmental Health & Safety Information

1A.106 n-Butyl Acetate:

DANGER!

Causes serious eye irritation

May cause drowsiness or dizziness

Highly flammable liquid and vapor

Prevention: Wash face, hands and any exposed skin thoroughly after handling. Avoid breathing dust /fume /mist /vapors /spray. Use only outdoors or in a well-ventilated area. Keep away from heat /sparks /open flames /hot surfaces, no smoking. Keep container tightly closed. Ground /bond container and receiving equipment. Use explosion-proof electrical /ventilating /lighting /equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves /protective clothing /eye protection /face protection. Keep cool.

Response: If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention. If on skin (or hair), take off immediately all contaminated clothing. Rinse skin with water.

If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. In case of fire, use CO₂, dry chemical, or foam for extinction.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents /container to an approved waste disposal plant.

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Environmental Health & Safety Information

1A.137 Mineral Spirits:

DANGER!

Causes serious eye irritation

May cause drowsiness or dizziness

Highly flammable liquid and vapor

Prevention: Wash face, hands and any exposed skin thoroughly after handling. Avoid breathing dust /fume /mist /vapors /spray. Use only outdoors or in a well-ventilated area. Keep away from heat /sparks /open flames /hot surfaces, no smoking. Keep container tightly closed. Ground /bond container and receiving equipment. Use explosion-proof electrical /ventilating /lighting /equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves /protective clothing /eye protection /face protection. Keep cool.

Response: If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention. If on skin (or hair), take off immediately all contaminated clothing. Rinse skin with water.

If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. In case of fire, use CO₂, dry chemical, or foam for extinction.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents /container to an approved waste disposal plant.

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

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Environmental Health & Safety Information
1A.352 Ethyl Alcohol

DANGER!

Causes serious eye irritation

May cause cancer

Highly flammable liquid and vapor

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wash face, hands and any exposed skin thoroughly after handling. Wear eye/face protection. Keep away from heat/sparks/open flames/hot surfaces, no smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Response: If exposed or concerned, get medical attention. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention. If on skin (or hair), take off immediately all contaminated clothing. Rinse skin with water. In case of fire, use CO₂, dry chemical, or foam for extinction.

Storage: Store locked up. Store in a well-ventilated place, keep cool.

Disposal: Dispose of contents/container to an approved waste disposal plant.

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

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Environmental Health & Safety Information
1A.355 Butyl Cellosolve:

DANGER!

Harmful if swallowed

Toxic in contact with skin

Harmful if inhaled

Combustible liquid

Prevention: Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves /protective clothing /eye protection /face protection. Avoid breathing dust /fume /mist /vapors /spray. Use only outdoors or in a well-ventilated area. Keep away from heat /sparks /open flames /hot surfaces, no smoking.

Response: If on skin, wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. If swallowed, call a POISON CENTER or physician if you feel unwell. Rinse mouth. In case of fire, use CO₂, dry chemical, or foam for extinction.

Storage: Store locked up. Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents /container to an approved waste disposal plant.

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