

SAFETY DATA SHEET

GHS HazCom 2012

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision Date – March 31, 2016

Section 1 IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name: Ultra-Ever Dry SE (Bottom/Base Coat)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Bottom coat for use on various substrates and exhibiting superhydrophobic and oleophobic characteristics when used with Ultra-Ever Dry SE Top Coat; Industrial Use Only

Uses advised against: Aerosolization for consumer products strictly prohibited

1.3 Details of the supplier of the safety data sheet

UltraTech International, Inc.

11542 Davis Creek Court, Jacksonville, FL 32256 USA

Telephone: 1-800-353-1611

Web address: www.ultraeverdry.com

1.4 Emergency telephone number

Emergency number available 24 hours: CHEMTREC 1-800-424-9300 (USA); +1-703-527-3887 (International)

Section 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS hazards:

Flammable liquids	Category 2
Eye irritation	Category 2A
Carcinogenicity	Category 2
Acute toxicity, inhalation	Category 4
Acute toxicity, dermal	Category 4
Acute toxicity, oral	Category 5
Aspiration hazard	Category 1
Skin corrosion/irritation	Category 2
Reproductive toxicity	Category 1B
Single target organ toxicity - single exposure	Category 3, Narcotic effects, Respiratory tract irritation

2.2 Label elements

Hazard symbols:



Signal word: DANGER

Hazard statements: H225 Highly flammable liquid and vapor.

H303 May be harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer.

H360 Suspected of damaging fertility or the unborn child.

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Precautionary statements:

- Prevention: P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P235 Keep cool.
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.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P263 Avoid contact during pregnancy/while nursing.
P264 Wash hands/face 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.
P281 Use personal protective equipment as required.
- Response: IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician. Do NOT induce vomiting. P301+P310+P331
IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Wash with plenty of soap and water. P302+P361+P363+P352
If skin irritation occurs: Get medical advice/attention. P332+P313
Specific measures and treatment (see Section 4 for supplemental first aid instructions). P321+P322
IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. P304+P340
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P305+P351+P338
If eye irritation persists: Get medical advice/attention. P337+P313
If exposed or concerned: Get medical advice/attention. P308+P313
Call a POISON CENTER or doctor/physician if you feel unwell. P312
In case of fire: Use alcohol-resistant foam, carbon dioxide, dry chemical or foam to extinguish. P370+P378
- Storage: Store locked up in a well-ventilated place. Keep container tightly closed. Keep cool. P403+P405+P233+P235
- Disposal: Dispose of contents/container in accordance with local regulations. P501

2.3 Other hazards

No additional information available.

Section 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Not applicable.

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3.2 Mixture

<u>Components</u>	<u>CAS No.</u>	<u>EC#</u>	<u>% by Wt</u>	<u>Classification (GHS-US)</u>
Xylenes (mixture of o-, m- and p-isomers with ethylbenzene)	1330-20-7	215-535-7	36%	H226, H315
tert-Butyl Acetate	540-88-5	208-760-7	36%	H225
Acetone	67-64-1	200-662-2	11%	H225, H319, H336
Proprietary polymer	-	-	16%	Not classified
Proprietary additive	-	-	1%	Not classified

Section 4 FIRST AID MEASURES

4.1 Description of first aid measures

- Inhalation: Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. In case of shortness of breath, give oxygen. Seek immediate medical attention.
- Skin contact: Wash thoroughly with soap and water. Seek medical attention if redness, itching or burning occurs.
- Eye contact: Flush eyes immediately with large amounts of water for 15 minutes. Seek medical attention.
- Ingestion: If swallowed, call a poison control center or doctor immediately. Aspiration hazard. Do not induce vomiting without medical advice. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Never give mouth to mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation: May cause irritation to the respiratory tract.
- Symptoms/injuries after skin contact: Causes skin irritation.
- Symptoms/injuries after eye contact: Causes serious eye irritation.
- Symptoms/injuries after ingestion: Aspiration hazard. May cause irritation to mouth, throat and stomach.

4.3 Indication of any immediate medical attention and special treatment needed

- Note to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Protection of first-aiders: No action should 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.

Section 5 FIRE-FIGHTING MEASURES

5.1 Extinguishing media

- Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, dry chemical or foam.
- Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the substance or mixture

Flammable liquid and vapor! Water spray may be ineffective. Closed containers may explode when exposed to extreme heat. Beware of vapors accumulating to form explosive concentrations. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame.

5.3 Advice for firefighters

Full protective equipment, including self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) should be used. Water may be used to keep containers and surroundings cool. Evacuate area and fight fire from a safe distance.

Section 6 ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

Refer to Section 8 of SDS for personal protection details. Evacuate unnecessary personnel to safe areas.

6.2 Environmental precautions

Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

6.3 Methods and material for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material and place in container for disposal according to local/national regulations (see Section 13 of SDS). Remove all sources of ignition.

Ventilate area.

6.4 Reference to other sections

Refer to Section 8 of SDS.

Section 7 HANDLING AND STORAGE**7.1 Precautions for safe handling**

Keep away from heat, sparks or open flame. Ventilate area during use and until all vapors are gone. Avoid breathing fumes, vapors or mist. Do not eat, drink or smoke while using this product. Wash hands thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. Launder contaminated clothing before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Keep in closed containers when not in use. Store in a dry, well ventilated place. Isolate from heat, electrical equipment, sparks and open flame. Do not store above 49° C / 120° F. Store large quantities in buildings designed and protected for storage of NFPA Class II combustible liquids.

7.3 Specific end use(s)

Oleophobic top coat for use on various substrates and exhibiting superhydrophobic and oleophobic characteristics; Industrial Use Only.

Section 8 EXPOSURE CONTROL/PERSONAL PROTECTION**8.1 Control parameters**

Chemical Name	CAS No.	Wt %	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Xylenes	1330-20-7	36	100 ppm	150 ppm 655 mg/m ³	100 ppm 435 mg/m ³	N.E.
tert-Butyl Acetate	540-88-5	36	220 ppm	N.E.	220 ppm	N.E.
Acetone	67-64-1	11	500 ppm, 8h	750 ppm 1800 mg/m ³	1000 ppm 2400 mg/m ³	N.E.
Proprietary Polymer	---	16	N.E.	N.E.	N.E.	N.E.
Proprietary Additive	---	1	N.E.	N.E.	N.E.	N.E.

8.2 Exposure controls

Appropriate engineering controls: Should be sufficient to reduce exposures below the workplace standards for Acetone established by the national regulations to the lowest level achievable.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Chemical type goggles, safety glasses with splash shields or suitable face shields should be used.

Hand protection: Repeated exposure may cause skin irritation and/or sensitization. Wear impermeable gloves, e.g. PVC, nitrile, neoprene. Handle in accordance with sensible hygiene and safety practice.

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Body protection: Suitable protective clothing and eye protection should be in accordance with national or regional standards and regulations.

Respiratory protection: Ventilation and respiratory protection must be used. In addition to engineering controls and safe work practices, personal protective equipment may be needed. Personal respiratory protection equipment appropriate for this material can range from (1) a reusable cartridge half face mask with organic solvent cartridge filter and particulate filter (P100); to (2) a supplied air system depending on the scope of work. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators. Persons should not be assigned to tasks requiring the use of respirators unless it has been determined they are physically able to perform the work and are trained to use the equipment.

Environmental exposure controls: Avoid discharge into the environment.

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Clear liquid with suspended fine particles
Physical state:	Liquid
Color:	Colorless
Odor:	Sweet odor
Odor threshold:	Not established
pH:	Not determined
Melting point/range:	Not determined
Freezing point/range:	Not determined
Boiling point/range:	60-82° C, 140-180° F
Flash point:	-12° C, 10° F closed cup
Evaporation rate:	Slower than ether
Flammability (solid, gas):	Flammable liquid
Upper/lower flammability/explosive limits:	1.0-10.0 vol %
Vapor pressure:	Not determined
Vapor density:	Heavier than air
Relative density:	0.86 g/cm ³ @ 20° C, 68° F
Solubilities:	Partly soluble
Partition coefficient: n-octanol/water:	Not determined
Auto-ignition temperature:	349° C, 660° F
Decomposition temperature:	Not determined
Viscosity, dynamic:	Not determined
Viscosity, kinematic:	14-20 mm ² /s @ 40° C, 104° F
Specific gravity:	0.84
Volatile content:	83%

9.2 Other information

Highly flammable liquid and vapor.

Section 10 STABILITY AND RELIABILITY

10.1 Reactivity

Stable under recommended transport or storage conditions.

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10.2 Chemical stability

Stable under normal temperatures and pressures. Avoid temperatures above 49° C / 120° F.

10.3 Possibility of hazardous reactions

No dangerous reactions known.

10.4 Conditions to avoid

Incompatible materials. Keep away from heat, sparks or open flame.

10.5 Incompatible materials

Oxidizing agents, strong acids and strong alkalis.

10.6 Hazardous decomposition products

By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide and formaldehyde.

Section 11 TOXICOLOGICAL INFORMATION

11.1 Toxicokinetics, metabolism and distribution

The acute effects of this mixture have not been tested. Data on individual components are tabulated below.

CAS No.	Chemical Name	Wt %	Oral LD50	Dermal LD50	Vapor LC50
1330-20-7	Xylenes (mixed isomers with ethylbenzene)	36	>4000 mg/kg Rat	>4200 mg/kg Rabbit	29 mg/L (Rat, 4hr)
540-88-5	tert-Butyl Acetate	36	4100 mg/kg Rat	>2000 mg/kg Rabbit	>2.23 mg/L (Rat, 4hr)
67-64-1	Acetone	11	>2000 mg/kg Rat	>2000 mg/kg Rabbit	>20 mg/L (Rat, 4hr)
---	Proprietary Polymer	16	N.A.	N.A.	N.A.
---	Proprietary Additive	1	N.A.	N.A.	N.A.

11.2 Information on toxicological effects

Effects of overexposure – Eye contact: Causes serious eye irritation.

Effects of overexposure – Skin contact: Causes skin irritation. Allergic reactions possible.

Effects of overexposure – Inhalation: May be toxic if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors or mist. High vapor concentrations may cause irritation to the eyes, nose, throat and lungs. Prolonged or excessive inhalation may cause respiratory tract irritation.

Effects of overexposure – Ingestion: May be harmful if swallowed.

Effects of overexposure – Chronic hazard: High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

Primary routes of entry: Eye contact, inhalation, ingestion, skin absorption, skin contact.

STOT – Single exposure: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects and respiratory tract irritation.

STOT – Repeated exposure: No data available.

Aspiration toxicity: No data available.

Carcinogenicity: Ethylbenzene -- Findings from a 2-year inhalation study in rodents conducted by NTP were as follows: Effects were observed only at the highest exposure level (750 ppm). At this level the incidence of renal tumors was elevated in male rats (tubular carcinomas) and female rats (tubular adenomas). Also, the incidence of tumors was elevated in male mice (alveolar and bronchiolar carcinomas) and female mice (hepatocellular carcinomas). IARC has classified ethyl benzene as “possibly carcinogenic to humans” (Group 2B).

Section 12 ECOLOGICAL INFORMATION**12.1 Toxicity**

Product is a mixture of listed components.

	Acute toxicity	Time	Species	Method	Evaluation	Remarks
Xylenes	LC50	96h	Fish	unknown	13.4 mg/l static test	Literature value
	EC50	48h	Daphnia	unknown	3.82 mg/l static test	Literature value
tert-Butyl Acetate	LC50	96h	Fish	OECD 203	240 mg/l semi-static test	
	EC50	48h	Daphnia	OECD 202	350 mg/l static test	
	EbC50	72h	Algae	OECD 201	6.1 mg/l static test	
	NOEC	16h	Bacteria	unknown	78 mg/l static test	
Acetone	LC50	96h	Fish	OECD 301B*	> 100 mg/l static test	Literature value
	EC50	48h	Daphnia	OECD 301B*	> 100 mg/l static test	Literature value
	EC50	96h	Algae	OECD 301B*	> 100 mg/l static test	Literature value
	NOEC	28d	Daphnia	OECD 301B*	> 100 mg/l flow-through test	Literature value
Silica	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Proprietary additive	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

*OECD Test Guideline 301B (28 d): > 60%

12.2 Persistence and degradability

Readily biodegradable.

12.3 Bioaccumulative potential

Not bioaccumulative.

12.4 Mobility in soil

Aqueous solution has high mobility in soil.

12.5 Other adverse effects

None identified.

Section 13 DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Disposal methods: Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to an approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements. Do not contaminate any lakes, streams, ponds, groundwater, storm drains, sewer systems or soil.

Empty containers: Empty containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity or other sources of ignition; they may explode and cause injury or death.

Section 14. TRANSPORT INFORMATION**14.1 UN number and proper shipping name**

	Domestic (USDOT)	Land transport (ADR/RID)	International Sea (IMDG)	International Air (ICAO/IATA)	TDG (Canada)
UN number	N.A.	UN1263	UN1263	UN1263	N.A.
UN proper shipping name	PAINT Products in Limited Quantities	PAINT (Contains: Acetone)	PAINT (Contains: Acetone)	PAINT (Contains: Acetone)	PAINT Products in Limited Quantities

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Hazard class	N.A.	3	3	3	N.A.
Packaging group	N.A.	II	II	II	N.A.
Limited quantity	Yes	No	No	No	Yes
Special precautions for user	See Section 2.2	See Section 2.2	See Section 2.2	See Section 2.2	See Section 2.2
Transport in bulk according to Annex II or MARPOL 73/78 and the IBC Code		IBC02	IBC02	IBC02	

14.2 Additional information

No supplementary information available.

Section 15 REGULATORY INFORMATION**15.1 US Federal regulations**

OSHA Hazards (HCS 1994): Flammable liquid, eye irritant.

TSCA Inventory Listing: All components of this mixture are exempt from or are listed on the U.S. EPA TSCA Inventory List.

SARA Section 311/312 Classification: Fire Hazard, Immediate (acute) Health Hazard.

SARA Section 313 Status:

Component	CAS No.	Wt %	SARA 313 – Threshold Values %
Xylenes	1330-20-7	36	1.0
Ethyl benzene	100-41-4	approx. 1-3	0.1

SARA Section 302 Status: No components of this mixture are subject to the reporting requirements.

15.2 International regulationsWHMIS Classification:

Class B, Division 2: Flammable liquid

Class D, Division 2, Subdivision B: Toxic material.

European Union:

Classification according to Regulation (EU) 1272/2008.

Flammable Liquids, Category 2

Skin Irritation, Category 2

Eye Irritation, Category 2

STOT – Single Exposure, Category 3 (Narcotic effects, Respiratory tract irritation)

Australia Inventory of Chemical Substances (AICS):

Listed

Canada Domestic Substances List (DSL) Inventory:

Listed

China Inventory of Existing Chemical Substances (IECSC):

Listed

European Inventory of Existing Commercial Chemical Substances (EINECS):

Listed

Japan Inventory of Existing and New Chemical Substances (ENCS):

Listed

Korea Existing Chemicals Inventory (KECI):

Listed

New Zealand Inventory of Chemicals (NZIoC):

Listed

Philippines Inventory of Chemicals/Chemical Substances (PICCS):

Listed

Taiwan National Existing Chemical Inventory (NECI):

Listed

Please note: The names and CAS numbers which are used for this product in the stated inventories may deviate from the information which is listed in Section 3. Some materials may also be exempt.

15.3 US State regulations

California Prop. 65 Components:

Component	CAS No.	Wt %	California Prop. 65	Prop 65 NSRL	Category
Ethyl benzene	100-41-4	approx. 1-3	Carcinogen	54 µg/day	Carcinogen

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State Right-to-Know:

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Xylenes	X	X	X	X	X
Ethyl benzene	X	X	X	X	X

Section 16 OTHER INFORMATION

For Research and Industrial Use Only.

HMIS Ratings: Health: 1 Flammability: 3 Physical Hazard: 0 Personal Protection: H
NFPA Ratings: Health: 1 Flammability: 3 Instability: 0

Further information

This version replaces all previous versions.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

LEGEND: N.A. – NO INFORMATION AVAILABLE; N.E. – NOT ESTABLISHED; N.D. – NOT DETERMINED

ABBREVIATIONS: CAS = CHEMICAL ABSTRACT SERVICE; OSHA = OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION; ACGIH = AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS; TLV = THRESHOLD LIMIT VALUES; TWA = TIME-WEIGHTED AVERAGE; PEL = PERMITTED EXPOSURE LIMIT; STEL = SHORT TERM EXPOSURE LIMIT; PMCC = PENSKY-MARTENS CLOSED CUP; RCRA = RESOURCE CONSERVATION AND RECOVERY ACT; TSCA = TOXIC SUBSTANCES CONTROL ACT; HMIS = WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM; NFPA = NATIONAL FIRE PROTECTION ASSOCIATION

Further information can be found at: <http://www.msdsonline.com/resources/msds-resources/glossary-of-terms/>