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		SDS Number: R0378847
IB ROOFING VERTIBOND ADHESIVE		Version: 2.0
150635		

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : IB ROOFING VERTIBOND ADHESIVE

Recommended use of the chemical and restrictions on use

Details of the supplier of the safety data sheet Ashland P.O. Box 2219 Columbus, OH 43216 United States of America EHS Customer Requests@ashland.com	Emergency telephone number 1-800-ASHLAND (1-800-274-5263) Regulatory Information Number 1-800-325-3751 Product Information 614-790-3333
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SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 2

Serious eye damage : Category 1

Skin sensitization : Category 1

Reproductive toxicity : Category 2

Specific target organ systemic toxicity - single exposure : Category 3 (Central nervous system)

GHS Label element

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : Highly flammable liquid and vapor.
 May cause an allergic skin reaction.
 Causes serious eye damage.
 May cause drowsiness or dizziness.

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Suspected of damaging fertility or the unborn child.

Precautionary Statements

: **Prevention:**

Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 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.
 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
 Use only outdoors or in a well-ventilated area.
 Contaminated work clothing must not be allowed out of the workplace.
 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.
 IF exposed or concerned: Get medical advice/ attention.
 If skin irritation or rash occurs: Get medical advice/ attention.
 Wash contaminated clothing before reuse.
 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

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

Disposal:

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

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture
 Chemical nature : Defatter

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Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
POLYMER	800986-5750P	Skin Irrit. 2; H315 Eye Irrit. 2A; H319 Skin Sens. 1; H317	>= 1.50 - < 5.00

The identity of one or more component(s) is being withheld under business confidentiality.

ACETONE	67-64-1	Flam. Liq. 2; H225 Eye Irrit. 2A; H319 STOT SE 3; H336	31.37
METHYL ACETATE	79-20-9	Flam. Liq. 2; H225 Eye Irrit. 2A; H319 STOT SE 3; H336	31.32
BUTANOL NORMAL	71-36-3	Flam. Liq. 3; H226 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335, H336	3.85
TRIMETHYLBENZENE 1,2,4-	95-63-6	Flam. Liq. 3; H226 Skin Irrit. 2; H315 Eye Irrit. 2A; H319 STOT SE 3; H335 Asp. Tox. 1; H304	2.05

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PETROLEUM NAPHTHA, LIGHT AROMATIC	64742-95-6	Flam. Liq. 3; H226 Skin Irrit. 2; H315 Eye Irrit. 2A; H319 Asp. Tox. 1; H304	1.38
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SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : Move to fresh air.
If unconscious place in recovery position and seek medical advice.
Consult a physician after significant exposure.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.
If on skin, rinse well with water.
Wash contaminated clothing before re-use.
If on clothes, remove clothes.
- In case of eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.
- If swallowed : Obtain medical attention.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion.

Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material.
Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through

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the skin may include:
redness of the skin
stomach or intestinal upset (nausea, vomiting, diarrhea)
irritation (nose, throat, airways)
Cough
temporary changes in behavior
effects on memory
loss of appetite
visual disturbances
chest pain
Blurred vision
Shortness of breath
confusion
irregular heartbeat
respiratory failure
Difficulty in breathing
May cause an allergic skin reaction.
Causes serious eye damage.
May cause drowsiness or dizziness.
Suspected of damaging fertility or the unborn child.

Notes to physician : No hazards which require special first aid measures.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Water spray
Foam
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide
Hydrocarbons
Hydrogen cyanide (hydrocyanic acid)
nitrogen oxides (NO_x)
hydrogen chloride
toxic fumes
Carbon oxides
Nitrogen oxides (NO_x)

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Sulphur oxides

Specific extinguishing methods

:

Product is compatible with standard fire-fighting agents.

Further information

:

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Use a water spray to cool fully closed containers.

Special protective equipment for firefighters

:

In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

:

Evacuate personnel to safe areas.
Remove all sources of ignition.
Use personal protective equipment.
Ensure adequate ventilation.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental precautions

:

Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up

:

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Other information

:

Comply with all applicable federal, state, and local regulations.
Suppress (knock down) gases/vapours/mists with a water spray jet.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling

:

Open drum carefully as content may be under pressure.
Avoid formation of aerosol.
Provide sufficient air exchange and/or exhaust in work rooms.
Do not breathe vapours/dust.
Do not smoke.
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

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Container hazardous when empty.
 Take precautionary measures against static discharges.
 Avoid exposure - obtain special instructions before use.
 Avoid contact with skin and eyes.
 Smoking, eating and drinking should be prohibited in the application area.
 For personal protection see section 8.
 Dispose of rinse water in accordance with local and national regulations.
 Container may be opened only under exhaust ventilation hood.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
 Containers which are opened must be carefully resealed and kept upright to prevent leakage.
 Observe label precautions.
 No smoking.
 Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis		
ACETONE	67-64-1	TWA	500 ppm	ACGIH		
		STEL	750 ppm	ACGIH		
		REL	250 ppm 590 mg/m3	NIOSH/GUID E		
		PEL	1,000 ppm 2,400 mg/m3	OSHA_TRANS		
		TWA	250 ppm	ACGIHLIS_P		
		STEL	500 ppm	ACGIHLIS_P		
		TWA	750 ppm 1,800 mg/m3	Z1A		
		STEL	1,000 ppm 2,400 mg/m3	Z1A		
		METHYL ACETATE	79-20-9	TWA	200 ppm	ACGIH
				STEL	250 ppm	ACGIH
		REL	200 ppm 610 mg/m3	NIOSH/GUID E		
		STEL	250 ppm 760 mg/m3	NIOSH/GUID E		
		PEL	200 ppm 610 mg/m3	OSHA_TRANS		
		BUTANOL NORMAL	71-36-3	TWA	20 ppm	ACGIH
		Ceil_Time	50 ppm	NIOSH/GUID		

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			150 mg/m3	E
		PEL	100 ppm 300 mg/m3	OSHA_TRANS
TRIMETHYLBENZENE 1,2,4-	95-63-6	REL	25 ppm 125 mg/m3	NIOSH/GUIDE
		TWA	25 ppm	ACGIH
CUMENE	98-82-8	TWA	50 ppm	ACGIH
		REL	50 ppm 245 mg/m3	NIOSH/GUIDE
		PEL	50 ppm 245 mg/m3	OSHA_TRANS

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
ACETONE	67-64-1	acetone	Urine	Sampling time: End of shift.	50 mg/l	
Remarks:	Nonspecific					

Engineering measures : Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

Hand protection
Remarks

: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

: Wear chemical splash goggles and face shield when there is potential for exposure of the eyes or face to liquid, vapor or mist.
Maintain eye wash station in immediate work area.

Skin and body protection

: Wear as appropriate:
impervious clothing
Safety shoes
Flame-resistant clothing
Choose body protection according to the amount and

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concentration of the dangerous substance at the work place.
 Discard gloves that show tears, pinholes, or signs of wear.
 Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : Wash hands before breaks and at the end of workday.
 When using do not eat or drink.
 When using do not smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Colour : amber

Odour : No data available

Odour Threshold : No data available

pH : No data available

: No data available

Boiling point/boiling range : 133.0 °F / 56.1 °C

Flash point : -4 °F / -20 °C
 Method: Seta closed cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit : 16 %(V)
 Calculated Explosive Limit

Lower explosion limit : 2.6 %(V)
 Calculated Explosive Limit

Vapour pressure : 307.9692 hPa (25 °C)
 Calculated Vapor Pressure

Relative vapour density : > 1AIR=1

Relative density : 0.93 (25 °C)

Density : 0.93 g/cm3 (25 °C)

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n- : No data available

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octanol/water

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Oxidizing properties : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Vapours may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Acids
Alkali metals
alkalis
aluminum
Amines
Ammonia
halogens
Lead
nitrates
Oxidizing agents
peroxides
Reducing agents
strong alkalis
water
Peroxides

Hazardous decomposition products
acetic acid
carbon dioxide and carbon monoxide
Carbon oxides
Hydrocarbons
Methanol
Nitrogen oxides (NO_x)
Sulphur oxides
toxic fumes

SECTION 11. TOXICOLOGICAL INFORMATION

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Information on likely routes of exposure : Inhalation
Skin contact
Eye Contact
Ingestion

Acute toxicity

Not classified based on available information.

Components:

POLYMER:

Acute oral toxicity : LD50 (Rat): > 15,000 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 23,000 mg/kg

Components:

ACETONE:

Acute oral toxicity : LD 50 (Rat, female): 5,800 mg/kg

Acute inhalation toxicity : LC 50 (Rat, female): 76 mg/l
Exposure time: 4 h

Acute dermal toxicity : LD 50 (Rabbit): > 7,426 mg/kg

METHYL ACETATE:

Acute oral toxicity : LD 50 (Rat, male): 6,482 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rabbit): > 49.2 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD 50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: No adverse effect has been observed in acute dermal toxicity tests.

BUTANOL NORMAL:

Acute oral toxicity : LD 50 (Rat): 790 mg/kg

Acute inhalation toxicity : LC 50 (Rat): > 24 mg/l
Exposure time: 4 h
Assessment: No adverse effect has been observed in acute inhalation toxicity tests.

Acute dermal toxicity : LD 50 (Rabbit): 3,400 mg/kg

TRIMETHYLBENZENE 1,2,4-:

Acute oral toxicity : LD 50 (Rat): 6 g/kg
Method: EC Directive 92/69/EEC B.1 Acute Toxicity (Oral)
GLP: yes

Acute inhalation toxicity : LC 50 (Rat): > 2000 ppm
Exposure time: 12 h

Acute dermal toxicity : LD 50 (Rabbit): > 3,440 mg/kg

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Assessment: No adverse effect has been observed in acute dermal toxicity tests.

Remarks: Information given is based on data obtained from similar substances.

PETROLEUM NAPHTHA, LIGHT AROMATIC:

Acute oral toxicity : LD 50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC 50 (Rat): > 7.6 mg/l

Exposure time: 4 h

Test atmosphere: vapour

Method: OECD Test Guideline 403

Assessment: No adverse effect has been observed in acute inhalation toxicity tests.

Acute dermal toxicity : LD 50 (Rabbit): > 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment: No adverse effect has been observed in acute dermal toxicity tests.

Skin corrosion/irritation

Not classified based on available information.

Product:

Result: Repeated exposure may cause skin dryness or cracking.

Remarks: May cause skin irritation in susceptible persons.

Components:

POLYMER:

Result: Irritating to skin

Components:

ACETONE:

Result: Mildly irritating to skin

Result: Repeated exposure may cause skin dryness or cracking.

METHYL ACETATE:

Species: Rabbit

Method: OECD Test Guideline 404

Result: Slightly irritating to skin

BUTANOL NORMAL:

Result: Irritating to skin

TRIMETHYLBENZENE 1,2,4-:

Result: Irritating to skin

PETROLEUM NAPHTHA, LIGHT AROMATIC:

Species: Rabbit

Method: OECD Test Guideline 404

Result: Irritating to skin

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Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks: May cause irreversible eye damage.

Components:

POLYMER:

Result: Irritating to eyes

Components:

ACETONE:

Result: Irritating to eyes

METHYL ACETATE:

Species: Rabbit

Result: Irritating to eyes

Method: OECD Test Guideline 405

BUTANOL NORMAL:

Result: Corrosive to eyes

TRIMETHYLBENZENE 1,2,4-:

Result: Irritating to eyes

PETROLEUM NAPHTHA, LIGHT AROMATIC:

Result: Irritating to eyes

Respiratory or skin sensitisation

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.

Components:

POLYMER:

Assessment: May cause sensitization by skin contact.

Components:

METHYL ACETATE:

Assessment: Does not cause skin sensitisation.

TRIMETHYLBENZENE 1,2,4-:

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Not classified based on available information.

Components:

POLYMER:

Genotoxicity in vitro

: Test Type: in vitro assay

Result: Positive results were obtained in some in vitro tests.

Components:

METHYL ACETATE:

Genotoxicity in vitro

: Remarks: In vitro tests did not show mutagenic effects

Genotoxicity in vivo

: Test Type: Micronucleus test

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Test species: Rat
Method: OECD Test Guideline 474
Result: negative

TRIMETHYLBENZENE 1,2,4-:

Genotoxicity in vitro : Test Type: Ames test
Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Test species: Mouse
Result: negative

PETROLEUM NAPHTHA, LIGHT AROMATIC:

Genotoxicity in vitro : Test Type: Ames test
Metabolic activation: with and without metabolic activation
Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Test species: Rat
Application Route: Inhalation
Method: OPPTS 870.5395
Result: negative

Test Type: in vivo assay
Test species: Rat
Method: OECD Test Guideline 475
Result: negative

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

Components:

METHYL ACETATE:

Effects on fertility : Symptoms: No effects on reproduction parameters
Remarks: Information taken from reference works and the literature.

Effects on foetal development : Symptoms: No specific developmental abnormalities
Remarks: Information taken from reference works and the literature.

STOT - single exposure

May cause drowsiness or dizziness.

Components:

ACETONE:

Exposure routes: Inhalation
Target Organs: Nervous system
Assessment: May cause drowsiness or dizziness.

METHYL ACETATE:

Target Organs: Central nervous system
Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

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BUTANOL NORMAL:

Target Organs: Respiratory system

Assessment: May cause respiratory irritation.

Target Organs: Central nervous system

Assessment: May cause drowsiness or dizziness.

TRIMETHYLBENZENE 1,2,4-:

Exposure routes: Inhalation

Target Organs: Respiratory Tract

Assessment: May cause respiratory irritation.

STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity

Components:

METHYL ACETATE:

Species: Rat

NOAEL: 1.05 mg/l

Application Route: Inhalation

Test atmosphere: dust/mist

Exposure time: 28-day

Method: OECD Test Guideline 412

Aspiration toxicity

Not classified based on available information.

Product:

No aspiration toxicity classification

Components:

ACETONE:

May be harmful if swallowed and enters airways.

TRIMETHYLBENZENE 1,2,4-:

May be fatal if swallowed and enters airways.

PETROLEUM NAPHTHA, LIGHT AROMATIC:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

Carcinogenicity:

IARC

Group 2B: Possibly carcinogenic to humans

CUMENE

98-82-8

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity : Acute aquatic toxicity Category 3; Harmful to aquatic life.

Chronic aquatic toxicity : Chronic aquatic toxicity Category 3; Harmful to aquatic life with long lasting effects.

Components:

POLYMER:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2 mg/l
Exposure time: 96 h
Test Type: semi-static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Water flea (Daphnia magna)): 1.8 mg/l
Exposure time: 48 h
Test Type: static test

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (microalgae)): 11 mg/l
End point: Growth inhibition
Exposure time: 72 h
Test Type: static test

ACETONE:

Toxicity to fish : LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss)): 4,740 - 6,330 mg/l
Exposure time: 96 h
Test Type: static test

LC 50 (Fathead minnow (Pimephales promelas)): 8,733 - 9,482 mg/l
Exposure time: 96 h
Test Type: flow-through test

Toxicity to algae : NOEC (Microcystis aeruginosa): 530 mg/l
Exposure time: 8 d
Test Type: static test

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 2,112 mg/l
Exposure time: 28 d
Test Type: flow-through test

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METHYL ACETATE:

- Toxicity to fish : LC 50 (Danio rerio (zebra fish)): > 250 mg/l
 Exposure time: 95 h
 Test Type: static test
 Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Water flea (Daphnia magna)): 1,026 mg/l
 Exposure time: 48 h
 Test Type: static test
 Method: OECD Test Guideline 202
- Toxicity to algae : EC50 (Scenedesmus capricornutum (fresh water algae)): > 120 mg/l
 End point: Growth inhibition
 Exposure time: 72 h
 Test Type: static test
 Method: OECD Test Guideline 201

BUTANOL NORMAL:

- Toxicity to fish : LC 50 (Bluegill (Lepomis macrochirus)): > 100 - 500 mg/l
 Exposure time: 96 h
 Test Type: static test
 Method: Static
 Remarks: Mortality
- Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (Daphnia magna)): 1,897 - 2,072 mg/l
 Exposure time: 48 h
 Test Type: static test
 Method: Static
 Remarks: Intoxication

TRIMETHYLBENZENE 1,2,4-:

- Toxicity to fish : LC 50 (Fathead minnow (Pimephales promelas)): 7.72 mg/l
 Exposure time: 96 h
 Test Type: flow-through test
- Toxicity to daphnia and other aquatic invertebrates : LC 50 (Daphnia magna (Water flea)): 3.6 mg/l
 Exposure time: 48 h
 Test Type: static test
 Method: OECD Test Guideline 202

PETROLEUM NAPHTHA, LIGHT AROMATIC:

- Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): 8.2 mg/l
 Exposure time: 96 h
 Test Type: semi-static test
 Test substance: WAF
 Remarks: Information given is based on data obtained from similar substances.
- LL50 (Oncorhynchus mykiss (rainbow trout)): 10 mg/l
 Exposure time: 96 h
 Test Type: semi-static test
 Test substance: WAF

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Method: OECD Test Guideline 203

Remarks: Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates : EL50 (Water flea (*Daphnia magna*)): 4.5 mg/l
 Exposure time: 48 h
 Test Type: static test
 Test substance: WAF
 Method: OECD Test Guideline 202
 Remarks: Information given is based on data obtained from similar substances.

Toxicity to algae : EL50 (*Pseudokirchneriella subcapitata* (green algae)): 3.7 mg/l
 End point: Growth inhibition
 Exposure time: 96 h
 Test Type: static test
 Test substance: WAF
 Method: OECD Test Guideline 201
 Remarks: Information given is based on data obtained from similar substances.

Toxicity to fish (Chronic toxicity) : NOEC (*Pimephales promelas* (fathead minnow)): 2.6 mg/l
 Exposure time: 14 d
 Test Type: semi-static test
 Test substance: WAF
 Method: OECD Test Guideline 204
 Remarks: Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Water flea (*Daphnia magna*)): 2.6 mg/l
 Exposure time: 21 d
 Test Type: semi-static test
 Test substance: WAF
 Method: OECD Test Guideline 211

Persistence and degradability

Components:

POLYMER:

Biodegradability : Result: Not readily biodegradable.
 Biodegradation: 12 %
 Exposure time: 28 d
 Method: OECD Test Guideline 302B

ACETONE:

Biodegradability : Result: Readily biodegradable
 Biodegradation: 90.9 %
 Exposure time: 28 d
 Method: OECD Test Guideline 301B

METHYL ACETATE:

Biodegradability : Result: Readily biodegradable

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Biodegradation: > 68 %
 Exposure time: 10 d
 Method: OECD Test Guideline 301D

BUTANOL NORMAL:

Biodegradability : Result: Readily biodegradable
 Biodegradation: 98 %
 Exposure time: 19 d
 Method: OECD Test Guideline 301E

Biochemical Oxygen Demand (BOD) : Theoretical oxygen demand
 2.59 mg/g

Chemical Oxygen Demand (COD) : 2.45 mg/g
 Method: Chemical oxygen demand

TRIMETHYLBENZENE 1,2,4-:

Biodegradability : Result: Not readily biodegradable.
 Result: Not readily biodegradable.

Bioaccumulative potential

Components:

POLYMER:

Partition coefficient: n-octanol/water : log Pow: Estimated 3.242

ACETONE:

Partition coefficient: n-octanol/water : log Pow: -0.24

METHYL ACETATE:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: 0.18

BUTANOL NORMAL:

Bioaccumulation : Species: Oncorhynchus mykiss (rainbow trout)
 Bioconcentration factor (BCF): 0.38
 Exposure time: 24 h
 Concentration: 921 mg/l
 Method: Static

Partition coefficient: n-octanol/water : log Pow: 0.88

TRIMETHYLBENZENE 1,2,4-:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

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Mobility in soil

Components:

No data available

Other adverse effects

No data available

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic life with long lasting effects.

Components:

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
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U.S. DOT - ROAD

UN	1133	Adhesives	3	II	
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U.S. DOT - RAIL

UN	1133	Adhesives	3	II	
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U.S. DOT - INLAND WATERWAYS

UN	1133	Adhesives	3	II	
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TRANSPORT CANADA - ROAD

UN	1133	ADHESIVES	3	II

TRANSPORT CANADA - RAIL

UN	1133	ADHESIVES	3	II

TRANSPORT CANADA - INLAND WATERWAYS

UN	1133	ADHESIVES	3	II

INTERNATIONAL MARITIME DANGEROUS GOODS

UN	1133	ADHESIVES	3	II

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

UN	1133	Adhesives	3	II

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

UN	1133	Adhesives	3	II

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

UN	1133	ADHESIVOS	3	II

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
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Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15. REGULATORY INFORMATION**EPCRA - Emergency Planning and Community Right-to-Know Act****CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
XYLENE	1330-20-7	100	13489.81519

SARA 311/312 Hazards : Acute Health Hazard

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Fire Hazard
Chronic Health Hazard

SARA 313 Component(s)

BUTANOL NORMAL	71-36-3	3.85 %
TRIMETHYLBENZENE 1,2,4-	95-63-6	2.05 %

California Prop 65

WARNING! This product contains a chemical known to the State of California to cause cancer.

CUMENE	98-82-8
FORMALDEHYDE	50-00-0
ETHYL BENZENE	100-41-4
VINYLCYCLOHEXENE, 4-	100-40-3
BENZENE	71-43-2
ACRYLONITRILE	107-13-1
1,3, BUTADIENE	106-99-0
ACETALDEHYDE	75-07-0

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

VINYLCYCLOHEXENE, 4-	100-40-3
TOLUENE	108-88-3
BENZENE	71-43-2
1,3, BUTADIENE	106-99-0

The components of this product are reported in the following inventories:

TSCA	: On TSCA Inventory
DSL	: All components of this product are on the Canadian DSL.
AICS	: Not in compliance with the inventory
ENCS	: Not in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: Not in compliance with the inventory

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Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

Registration: Trade Secret

Chemical Name	Identification number
POLYMER	800986-5750P

SECTION 16. OTHER INFORMATION

Further information

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NFPA:	HMIS III:						
<p style="text-align: center;">Flammability</p> <p style="text-align: center;">Special hazard.</p>	<table border="1"> <tr> <td style="background-color: blue; color: white;">HEALTH</td> <td style="text-align: center;">3*</td> </tr> <tr> <td style="background-color: red; color: white;">FLAMMABILITY</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="background-color: yellow; color: black;">PHYSICAL HAZARD</td> <td style="text-align: center;">0</td> </tr> </table> <p>0 = not significant, 1 =Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	HEALTH	3*	FLAMMABILITY	3	PHYSICAL HAZARD	0
HEALTH	3*						
FLAMMABILITY	3						
PHYSICAL HAZARD	0						

NFPA Flammable and Combustible Liquids Classification

Flammable Liquid Class IB

Full text of H-Statements referred to under sections 2 and 3.

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H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H227	Combustible liquid.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H303	May be harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H305	May be harmful if swallowed and enters airways.
H311	Toxic in contact with skin.
H313	May be harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H401	Toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Further information

Sources of key data used to compile the Safety Data Sheet
Ashland internal data including own and sponsored test reports
The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists
BEI : Biological Exposure Index
CAS : Chemical Abstracts Service (Division of the American Chemical Society).
CMR : Carcinogenic, Mutagenic or Toxic for Reproduction
FG : Food grade
GHS : Globally Harmonized System of Classification and Labeling of Chemicals.
H-statement : Hazard Statement
IATA : International Air Transport Association.
IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization
ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"
IMDG : International Maritime Code for Dangerous Goods
ISO : International Organization for Standardization
logPow : octanol-water partition coefficient
LCxx : Lethal Concentration, for xx percent of test population

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LDxx : Lethal Dose, for xx percent of test population.
 ICxx : Inhibitory Concentration for xx of a substance
 Ecxx : Effective Concentration of xx
 N.O.S.: Not Otherwise Specified
 OECD : Organization for Economic Co-operation and Development
 OEL : Occupational Exposure Limit
 P-Statement : Precautionary Statement
 PBT : Persistent , Bioaccumulative and Toxic
 PPE : Personal Protective Equipment
 STEL : Short-term exposure limit
 STOT : Specific Target Organ Toxicity
 TLV : Threshold Limit Value
 TWA : Time-weighted average
 vPvB : Very Persistent and Very Bioaccumulative
 WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act
 DOT : Department of Transportation
 FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act
 HMIRC : Hazardous Materials Information Review Commission
 HMIS : Hazardous Materials Identification System
 NFPA : National Fire Protection Association
 NIOSH : National Institute for Occupational Safety and Health
 OSHA : Occupational Safety and Health Administration
 PMRA : Health Canada Pest Management Regulatory Agency
 RTK : Right to Know
 WHMIS : Workplace Hazardous Materials Information System