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| | | SDS Number: 000000128885 |
| Pliogrip™ 1010C CART ADHESIVE ™ Trademark, Ashland or its subsidiaries, registered in various countries 615127 | | Version: 1.1 |

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : Pliogrip™ 1010C CART
ADHESIVE
™ Trademark, Ashland or its subsidiaries, registered in various countries

Recommended use of the chemical and restrictions on use

Use of the Substance/Mixture : Adhesives
Industrial chemical

| | |
|--|---|
| 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
Skin corrosion : Category 1A
Serious eye damage : Category 1
Skin sensitization : Category 1
Specific target organ systemic toxicity - single exposure : Category 3 (Respiratory system)

GHS Label element

Hazard pictograms : 

Signal Word : Danger

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Hazard Statements : Highly flammable liquid and vapor.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Causes serious eye damage.
May cause respiratory irritation.

Precautionary Statements : **Prevention:**
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.
Wash skin thoroughly after handling.
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 SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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. Immediately call a POISON CENTER or doctor/physician.
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 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

PART A

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Substance / Mixture : Mixture

Hazardous components

| Chemical Name | CAS-No. | Classification | Concentration (%) |
|-------------------------------|----------------|---|--------------------|
| ACRYLATE STYRENE COPOLYMER | 800986-5738P | Skin Irrit. 2; H315 Eye Irrit. 2A; H319 STOT SE 3; H335 Aquatic Chronic 4; H413 | >= 20.00 - < 30.00 |
| ORGANIC ACRYLATES | 254504001-5624 | Skin Sens. 1; H317 STOT SE 3; H335 | >= 1.00 - < 1.50 |
| WAX | 800986-5065P | Not a hazardous substance or mixture. | >= 1.00 - < 1.50 |

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

| | | | |
|--------------------|---------|--|-------|
| METHYLMETHACRYLATE | 80-62-6 | Flam. Liq. 2; H225 Skin Irrit. 2; H315 Skin Sens. 1B; H317 STOT SE 3; H335 | 56.30 |
| METHACRYLIC ACID | 79-41-4 | Flam. Liq. 4; H227 Acute Tox. 4; H302 Acute Tox. 3; H311 Skin Corr. 1A; H314 Eye Dam. 1; H318 STOT SE 3; H335 | 5.00 |

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| DIMETHYL-N,N P-TOLUIDINE | 99-97-8 | Flam. Liq. 4; H227 Acute Tox. 4; H302 Acute Tox. 2; H330 STOT RE 2; H373 Aquatic Acute 3; H402 Aquatic Chronic 3; H412 | 0.68 |
|--------------------------|---------|---|------|

PART B

Substance / Mixture : Mixture

Chemical nature : Defatter

Hazardous components

| Chemical Name | CAS-No. | Classification | Concentration (%) |
|---------------|----------------|----------------|-------------------|
| SILICA | 254504001-5937 | | >= 1.50 - < 5.00 |

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

| | | | |
|--------------------------------------|------------|---|-------|
| BENZOYL PEROXIDE | 94-36-0 | Org. Perox. B; H241 Eye Irrit. 2A; H319 Skin Sens. 1; H317 | 14.10 |
| TITANIUM DIOXIDE (TiO ₂) | 13463-67-7 | This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012). | 5.00 |

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|-----------------|-----------|--|------|
| ZINC STEARATE | 557-05-1 | | 1.69 |
| CALCIUM SULFATE | 7778-18-9 | Not a hazardous substance or mixture. | 1.12 |

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.
Keep patient warm and at rest.
If unconscious place in recovery position and seek medical
advice.
If symptoms persist, call a physician.
- 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 : Get medical attention immediately.
Do NOT induce vomiting.
Rinse mouth with water.
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 : Signs and symptoms of exposure to this material through
breathing, swallowing, and/or passage of the material through
the skin may include:
stomach or intestinal upset (nausea, vomiting, diarrhea)
irritation (nose, throat, airways)
Cough
Headache
Dizziness
Drowsiness

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effects on memory
 loss of appetite
 Shortness of breath
 pain in the hands and feet
 Difficulty in breathing
 May cause an allergic skin reaction.
 Causes serious eye damage.
 May cause respiratory irritation.
 Causes severe burns.

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
toxic fumes
Hydrocarbons
hydrogen chloride
Carbon monoxide
Organic acids
Aldehydes
Alcohols
various hydrocarbons
acrid smoke and fumes
undefined organics
zinc oxide
Nitrogen oxides (NO_x)
sulfur compounds

Specific extinguishing methods :

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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.

Polymerization will take place under fire conditions. If polymerization occurs in a closed container, there is a possibility it will rupture violently. Cool storage container with water, if exposed to fire.

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,

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allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

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.

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

PART A

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|------------|--------------|----------------------------------|---|--------------|
| WAX | 800986-5065P | TWA | 2 mg/m3 Fume. | ACGIH |
| | | REL | 2 mg/m3 Fume. | NIOSH/GUID E |
| | | TWA | 2 mg/m3 Fume. | Z1A |

| | | | | |
|--------------------|---------|------|----------------------|--------------|
| METHYLMETHACRYLATE | 80-62-6 | TWA | 50 ppm | ACGIH |
| | | STEL | 100 ppm | ACGIH |
| | | REL | 100 ppm 410 mg/m3 | NIOSH/GUID E |
| | | PEL | 100 ppm 410 mg/m3 | OSHA_TRA NS |
| | | TWA | 50 ppm | ACGIHLIS_P |
| | | STEL | 100 ppm | ACGIHLIS_P |
| METHACRYLIC ACID | 79-41-4 | TWA | 20 ppm | ACGIH |
| | | REL | 20 ppm 70 mg/m3 | NIOSH/GUID E |

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PART B

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|--------------------------------------|----------------|----------------------------------|---|-------------|
| SILICA | 254504001-5937 | REL | 6 mg/m3 | NIOSH/GUIDE |
| | | TWA | 0.8 mg/m3 | Z3 |
| BENZOYL PEROXIDE | 94-36-0 | TWA | 5 mg/m3 | ACGIH |
| | | REL | 5 mg/m3 | NIOSH/GUIDE |
| | | PEL | 5 mg/m3 | OSHA_TRANS |
| TITANIUM DIOXIDE (TiO ₂) | 13463-67-7 | TWA | 5 mg/m3 | Z1A |
| | | TWA | 10 mg/m3 | ACGIH |
| | | PEL | 15 mg/m3 Total dust. | OSHA_TRANS |
| ZINC STEARATE | 557-05-1 | TWA | 1 mg/m3 Respirable fraction. | ACGIHLIS_P |
| | | REL | 10 mg/m3 Total | NIOSH/GUIDE |
| | | REL | 5 mg/m3 Respirable. | NIOSH/GUIDE |
| | | PEL | 5 mg/m3 Respirable fraction. | OSHA_TRANS |
| | | PEL | 15 mg/m3 Total dust. | OSHA_TRANS |
| | | TWA | 10 mg/m3 | ACGIH |
| | | TWA | 5 mg/m3 Respirable fraction. | TN OEL |
| | | TWA | 10 mg/m3 Total dust. | TN OEL |
| | | TWA | 10 mg/m3 Inhalable fraction. | ACGIH |
| CALCIUM SULFATE | 7778-18-9 | REL | 10 mg/m3 Total | NIOSH/GUIDE |
| | | REL | 5 mg/m3 Respirable. | NIOSH/GUIDE |
| | | PEL | 15 mg/m3 Total dust. | OSHA_TRANS |
| | | PEL | 5 mg/m3 Respirable fraction. | OSHA_TRANS |
| | | TWA | 5 mg/m3 Respirable fraction. | TN OEL |

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|--|--|-----|---------------------------------|--------|
| | | TWA | 15 mg/m3 Total dust. | TN OEL |
| | | TWA | 5 mg/m3 Respirable fraction. | Z1A |
| | | TWA | 15 mg/m3 Total dust. | Z1A |

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
Chemical resistant apron
Safety shoes
Flame-resistant clothing
Choose body protection according to the amount and 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.
Ensure that eyewash stations and safety showers are close to the workstation location.

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When using do not smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

PART A

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| Appearance | : viscous |
| Physical state | : liquid |
| Odour | : acrylic-like |
| Odour Threshold | : No data available |
| pH | : No data available |
| | : No data available |
| Boiling point/boiling range | : > 210 °F / > 99 °C |
| Flash point | : 62.1 °F / 16.7 °C |
| Evaporation rate | : No data available |
| Flammability (solid, gas) | : No data available |
| Upper explosion limit | : No data available |
| Lower explosion limit | : No data available |
| Vapour pressure | : No data available |
| Relative vapour density | : > 1(Air = 1.0) |
| Relative density | : No data available |
| Density | : > 0.96 g/cm ³ |
| Solubility(ies) | |
| Water solubility | : insoluble |
| Solubility in other solvents | : No data available |
| Partition coefficient: n-octanol/water | : No data available |
| Thermal decomposition | : No data available |
| Viscosity | |
| Viscosity, dynamic | : > 140.000 mPa.s |

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Viscosity, kinematic : No data available
Oxidizing properties : No data available

PART B

Appearance : viscous
Physical state : liquid
Odour : No data available
Odour Threshold : No data available
pH : No data available
: No data available
: No data available
Flash point : > 212 °F / > 100 °C
Evaporation rate : No data available
Flammability (solid, gas) : No data available
Upper explosion limit : No data available
Lower explosion limit : No data available
Vapour pressure : No data available
Relative vapour density : No data available
Relative density : No data available
Density : ca. 1.15 g/cm³ (20 °C)
Solubility(ies)
Water solubility : slightly soluble
Solubility in other solvents : No data available
Partition coefficient: n-octanol/water : No data available
Thermal decomposition : No data available
Viscosity
Viscosity, dynamic : > 140.00 mPa.s

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Viscosity, kinematic : No data available

Oxidizing properties : The substance or mixture is not classified as oxidizing.

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 : Hazardous polymerisation may occur.
Vapours may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

temperature extremes
Exposure to sunlight.
Exposure to moisture
Exposure to light.

Incompatible materials : Acids
alkalis
aluminum
Amines
Combustible material
nitrates
Oxidizing agents
Oxygen
peroxides
Reducing agents
strong alkalis
Strong bases
UV light.
Peroxides

Hazardous decomposition products : carbon dioxide and carbon monoxide
Hydrocarbons
Nitrogen oxides (NOx)
sulfur compounds
toxic fumes
undefined organics
zinc oxide

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation
Skin contact

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Eye Contact
Ingestion

Acute toxicity

Not classified based on available information.

Components:

SILICA:

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

Acute dermal toxicity : LD 50 (Rabbit): > 2,000 mg/kg
Assessment: Not classified as acutely toxic by dermal absorption under GHS.

ORGANIC ACRYLATES:

Acute oral toxicity : LD50 (Rat): 8,700 mg/kg

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Assessment: No adverse effect has been observed in acute dermal toxicity tests.

WAX:

Acute oral toxicity : LD 50 (Rat, Female): > 5,000 mg/kg
Method: OECD Test Guideline 420
GLP: yes

Acute dermal toxicity : LD 50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

Components:

METHYLMETHACRYLATE:

Acute oral toxicity : LD 50 (Rat): 7,800 mg/kg

Acute inhalation toxicity : LC 50 (Rat): 29.8 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD 50 (Rabbit): > 5,000 mg/kg

BENZOYL PEROXIDE:

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

Acute inhalation toxicity : LC50 (Rat): 24.3 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

METHACRYLIC ACID:

Acute oral toxicity : LD 50 (Mouse): 1,250 mg/kg

LD 50 (Rat, male): 1,320 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LD 50 (Rat): 7.1 mg/l

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Exposure time: 4 h
Test atmosphere: dust/mist
Remarks: Aerosol

Acute dermal toxicity : LD 50 (Rabbit): 500 - 1,000 mg/kg

ZINC STEARATE:

Acute oral toxicity : LD 50 (Rat): > 5,000 mg/kg
Assessment: No adverse effect has been observed in acute oral toxicity tests.

Acute inhalation toxicity : LC50 (Rat): 200 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD 50 (Rabbit): > 2,000 mg/kg
Assessment: No adverse effect has been observed in acute dermal toxicity tests.

CALCIUM SULFATE:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Assessment: Not classified as acutely toxic by ingestion under GHS.
Remarks: No mortality observed at this dose.

Acute inhalation toxicity : LC50 (Rat): > 2.61 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: Not classified as acutely toxic by inhalation under GHS.
Remarks: No mortality observed at this dose.

DIMETHYL-N,N P-TOLUIDINE:

Acute oral toxicity : LD 50 (Rat): 1,650 mg/kg

Acute inhalation toxicity : LC 50 (Rat): 1.4 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Assessment: Not classified as acutely toxic by dermal absorption under GHS.

Skin corrosion/irritation

Causes severe burns.

Product:

Remarks: May cause skin irritation in susceptible persons., Causes severe skin burns and eye damage.

Remarks: Individuals with direct skin contact with methyl methacrylate have experienced temporary loss of feeling and mild nerve damage in the fingers.

Components:

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ACRYLATE STYRENE COPOLYMER:
Result: Irritating to skin

SILICA:
Result: Not irritating to skin

ORGANIC ACRYLATES:
Result: Slightly irritating to skin

WAX:
Result: Not irritating to skin

Components:

METHYLMETHACRYLATE:
Result: Irritating to skin

BENZOYL PEROXIDE:
Method: OECD Test Guideline 404
Result: Not irritating to skin

METHACRYLIC ACID:
Method: OECD Test Guideline 404
Result: Corrosive after 3 minutes or less of exposure

ZINC STEARATE:
Species: Rabbit
Method: Draize Test
Result: Not irritating to skin

CALCIUM SULFATE:
Species: Rabbit
Result: Not irritating to skin

DIMETHYL-N,N P-TOLUIDINE:
Result: Mildly irritating to skin

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks: May cause irreversible eye damage.

Components:

ACRYLATE STYRENE COPOLYMER:
Result: Irritating to eyes

SILICA:
Result: Not irritating to eyes

ORGANIC ACRYLATES:
Result: Not irritating to eyes

WAX:
Result: Not irritating to eyes

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Components:

METHYLMETHACRYLATE:

Result: Slightly irritating to eyes

BENZOYL PEROXIDE:

Result: Irritating to eyes

METHACRYLIC ACID:

Result: Corrosive to eyes

ZINC STEARATE:

Species: Rabbit

Result: Not irritating to eyes

CALCIUM SULFATE:

Species: Rabbit

Result: Not irritating to eyes

Method: OECD Test Guideline 405

DIMETHYL-N,N P-TOLUIDINE:

Result: Mildly irritating to eyes

Respiratory or skin sensitisation

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.

Components:

ORGANIC ACRYLATES:

Test Type: Local lymph node assay

Species: Mouse

Assessment: May cause sensitization by skin contact.

Method: OECD Test Guideline 406

Components:

METHYLMETHACRYLATE:

Test Type: Local lymph node assay

Species: Mouse

Assessment: The product is a skin sensitizer, sub-category 1B.

Method: OECD Test Guideline 429

BENZOYL PEROXIDE:

Assessment: May cause sensitization by skin contact.

METHACRYLIC ACID:

Test Type: Buehler Test

Species: Guinea pig

Assessment: Did not cause sensitisation on laboratory animals.

Method: OECD Test Guideline 406

ZINC STEARATE:

Assessment: Does not cause skin sensitisation.

CALCIUM SULFATE:

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Test Type: Buehler Test
Species: Guinea pig
Assessment: Does not cause skin sensitisation.
Method: OECD Test Guideline 406

DIMETHYL-N,N P-TOLUIDINE:
Assessment: Does not cause skin sensitisation.

Germ cell mutagenicity

Not classified based on available information.

Components:

ORGANIC ACRYLATES:

Genotoxicity in vitro : Result: Conflicting results have been seen in different studies.
Remarks: In vitro tests showed mutagenic effects which were not observed with in vivo test.

Genotoxicity in vivo : Test Type: Micronucleus test
Test species: Mouse
Method: OECD Test Guideline 474
Result: negative

Components:

BENZOYL PEROXIDE:

Genotoxicity in vitro : Remarks: In vitro tests did not show mutagenic effects

Genotoxicity in vivo : Test Type: dominant lethal test
Test species: Mouse
Result: negative

METHACRYLIC ACID:

Genotoxicity in vitro : Test Type: Ames test
Method: OECD Test Guideline 471
Result: negative

Genotoxicity in vivo : Test Type: Mammalian bone marrow sister chromatid exchange
Test species: Rat
Cell type: Bone marrow
Method: OECD Test Guideline 475
Result: negative

ZINC STEARATE:

Genotoxicity in vitro : Test Type: Ames test
Result: negative
Remarks: In vitro tests did not show mutagenic effects

Genotoxicity in vivo : Test Type: Micronucleus test
Test species: Mouse
Method: OECD Test Guideline 474
Result: negative
Remarks: Information given is based on data obtained from similar substances.

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CALCIUM SULFATE:

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

DIMETHYL-N,N P-TOLUIDINE:

Genotoxicity in vitro : Remarks: In vitro tests have shown mutagenic effects.

Carcinogenicity

Not classified based on available information.

Components:

BENZOYL PEROXIDE:

Remarks: Information taken from reference works and the literature.

DIMETHYL-N,N P-TOLUIDINE:

Result: positive
Remarks: see user defined free text

Reproductive toxicity

Not classified based on available information.

Components:

ORGANIC ACRYLATES:

Effects on fertility : Species: Rat
Application Route: Oral
Symptoms: No effects on reproduction parameters
Method: OECD Test Guideline 422

Effects on foetal development : Species: Rat
Application Route: Oral
Developmental Toxicity: No observed adverse effect level F1:
500 mg/kg body weight
Method: OECD Test Guideline 414

Components:

BENZOYL PEROXIDE:

Effects on fertility : Species: Rat
Application Route: Oral
Fertility: No observed adverse effect level (Mating/Fertility):
1,000 mg/kg body weight
Method: OECD Test Guideline 422

METHACRYLIC ACID:

Effects on fertility : Species: Rat
Application Route: Oral
Fertility: No observed adverse effect level (Mating/Fertility):
400 mg/kg body weight
Symptoms: No effects on fertility No effects on reproduction
parameters
Method: OECD Test Guideline 416

Effects on foetal development : Species: Rabbit
Application Route: Oral

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Developmental Toxicity: No observed adverse effect level F1:
450 mg/kg body weight
Symptoms: No specific developmental abnormalities
Method: OECD Test Guideline 414

ZINC STEARATE:

Effects on foetal development : Symptoms: No specific developmental abnormalities

DIMETHYL-N,N P-TOLUIDINE:

Effects on fertility : Remarks: see user defined free text

Effects on foetal development : Remarks: see user defined free text

STOT - single exposure

May cause respiratory irritation.

Components:

ACRYLATE STYRENE COPOLYMER:

Assessment: May cause respiratory irritation.

ORGANIC ACRYLATES:

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

Components:

METHYLMETHACRYLATE:

Target Organs: Upper respiratory tract

Assessment: May cause respiratory irritation.

METHACRYLIC ACID:

Exposure routes: Inhalation

Target Organs: Respiratory Tract

Assessment: May cause respiratory irritation.

STOT - repeated exposure

Not classified based on available information.

Components:

DIMETHYL-N,N P-TOLUIDINE:

Exposure routes: Ingestion

Target Organs: Blood

Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

Repeated dose toxicity

Components:

ORGANIC ACRYLATES:

Species: Rat

NOAEL: 300 mg/kg

Application Route: Oral

Method: OECD Test Guideline 422

Components:

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BENZOYL PEROXIDE:

Species: Rat
 NOAEL: 1,000 mg/kg
 Application Route: Oral
 Exposure time: 28-day
 Method: OECD Test Guideline 422

DIMETHYL-N,N P-TOLUIDINE:

LOAEL: 10 mg/kg
 Target Organs: Blood
 Remarks: Substances that, on the basis of evidence from studies in experimental animals can be presumed to have the potential to be harmful to human health following single exposure
 Information taken from reference works and the literature.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: Solvents may degrease the skin.

Carcinogenicity:

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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.

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

Components:

ACRYLATE STYRENE COPOLYMER:

Ecotoxicology Assessment

Chronic aquatic toxicity : May cause long lasting harmful effects to aquatic life.

SILICA:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): > 10,000 mg/l
 Exposure time: 96 h
 Method: OECD Test Guideline 203

ORGANIC ACRYLATES:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 15.95 mg/l

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Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Water flea (*Daphnia magna*)): 44.9 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (*Pseudokirchneriella subcapitata* (green algae)):
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Water flea (*Daphnia magna*)): 5.05 mg/l
Exposure time: 21 d
End point: Reproduction Test
Method: OECD Test Guideline 211

METHYLMETHACRYLATE:

Toxicity to fish : LC 50 (Fathead minnow (*Pimephales promelas*)): 130 mg/l
Exposure time: 96 h
Method: Static

LC 50 (*Oncorhynchus mykiss* (rainbow trout)): > 79 mg/l
Exposure time: 96 h
Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (*Daphnia magna*)): 69 mg/l
Exposure time: 48 h
Test Type: flow-through test

Toxicity to algae : EC 50 (*Pseudokirchneriella subcapitata* (algae)): > 110 mg/l
Exposure time: 72 h
Test Type: static test

Toxicity to fish (Chronic toxicity) : LC 50 (*Danio rerio* (zebra fish)): 33.7 mg/l
Exposure time: 35 d
Test Type: flow-through test
Method: OECD Test Guideline 210

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Water flea (*Daphnia magna*)): 37 mg/l
Exposure time: 21 d
Test Type: flow-through test
Method: OECD Test Guideline 211

BENZOYL PEROXIDE:

Toxicity to fish : LC 50 (*Oncorhynchus mykiss* (rainbow trout)): 0.06 mg/l
Exposure time: 96 h
Test Type: semi-static test
Method: OECD Test Guideline 203

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- Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (*Daphnia magna*)): 0.11 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
- Toxicity to algae : EC 50 (*Pseudokirchneriella subcapitata* (green algae)): 0.07 mg/l
End point: Growth inhibition
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201
- M-Factor (Acute aquatic toxicity) : 10
- METHACRYLIC ACID:**
- Toxicity to fish : LC50 (*Oncorhynchus mykiss* (rainbow trout)): 85 mg/l
Exposure time: 96 h
Test Type: flow-through test
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Water flea (*Daphnia magna*)): > 130 mg/l
Exposure time: 48 h
Test Type: flow-through test
- Toxicity to algae : EC50 (*Pseudokirchneriella subcapitata* (green algae)): 20 mg/l
End point: Biomass
Exposure time: 72 h
Test Type: flow-through test
Method: OECD Test Guideline 201
- Toxicity to fish (Chronic toxicity) : NOEC (*Danio rerio* (zebra fish)): 10 mg/l
Exposure time: 35 d
Test Type: flow-through test
Method: OECD Test Guideline 210
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Water flea (*Daphnia magna*)): 53 mg/l
Exposure time: 21 d
Test Type: flow-through test
Method: OECD Test Guideline 211
- ZINC STEARATE:**
- Toxicity to fish : (*Danio rerio* (zebra fish)): > 100 mg/l
Exposure time: 96 h
Test Type: static test
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Water flea (*Daphnia magna*)): Calculated 0.768 mg/l
Exposure time: 48 h
- Toxicity to algae : EC50 (*Pseudokirchneriella subcapitata* (green algae)): Calculated 0.99 mg/l
Exposure time: 72 h

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Toxicity to fish (Chronic toxicity) : NOEC (Danio rerio (zebra fish)): 100 mg/l
Exposure time: 7 d

CALCIUM SULFATE:

Toxicity to fish : LC 50 (Fathead minnow (Pimephales promelas)): > 1,970 mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to daphnia and other aquatic invertebrates : LC 50 (Daphnia magna (Water flea)): > 1,970 mg/l
Exposure time: 48 h
Test Type: static test

LC 50 (Water flea (Ceriodaphnia dubia)): > 1,940 mg/l
Exposure time: 24 h
Method: Static
Remarks: Mortality

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): > 79 mg/l
End point: Growth inhibition
Exposure time: 72 h
Remarks: No toxicity at the limit of solubility

DIMETHYL-N,N P-TOLUIDINE:

Toxicity to fish : LC 50 (Fathead minnow (Pimephales promelas)): 50 - 55.6 mg/l
Exposure time: 96 h
Method: Flow through
Remarks: Mortality

LC 50 (Fathead minnow (Pimephales promelas)): 52 mg/l
Exposure time: 96 h
Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Water flea (Daphnia magna)): 15.3 mg/l
Exposure time: 48 h

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 24.37 mg/l
Exposure time: 72 h

Persistence and degradability

Components:

SILICA:

Biodegradability : Result: The methods for determining biodegradability are not applicable to inorganic substances.

ORGANIC ACRYLATES:

Biodegradability : Result: Readily biodegradable
Biodegradation: 69 %

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Exposure time: 28 d
Method: OECD Test Guideline 301F
Remarks: The 10 day time window criterion is not fulfilled.

METHYLMETHACRYLATE:

Biodegradability : Result: Readily biodegradable
Biodegradation: 94.3 %
Exposure time: 14 d
Method: OECD Test Guideline 301C

BENZOYL PEROXIDE:

Biodegradability : Biodegradation: 68 %
Exposure time: 28 d
Method: OECD Test Guideline 301D
Remarks: The 10 day time window criterion is not fulfilled.

Result: Readily biodegradable
Biodegradation: 100 %
Exposure time: 21 d
Method: OECD Test Guideline 301C

Physico-chemical removability : Remarks: Readily eliminated from water

Stability in water : Degradation half life(DT50): 2.4 h (50 °C)

METHACRYLIC ACID:

Biodegradability : Inoculum: activated sludge
Result: Readily biodegradable
Biodegradation: 87 %
Exposure time: 28 d

ZINC STEARATE:

Biodegradability : Result: Readily biodegradable

CALCIUM SULFATE:

Biodegradability : Result: The methods for determining biodegradability are not applicable to inorganic substances.

DIMETHYL-N,N P-TOLUIDINE:

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 0 %
Exposure time: 20 d
Method: OECD Test Guideline 301D

Bioaccumulative potential

Components:

ORGANIC ACRYLATES:

Bioaccumulation : Bioconcentration factor (BCF): 21.9
Remarks: Bioaccumulation is unlikely.

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Partition coefficient: n-octanol/water : log Pow: 2.4

METHYLMETHACRYLATE:
Partition coefficient: n-octanol/water : log Pow: 1.38

BENZOYL PEROXIDE:
Partition coefficient: n-octanol/water : log Pow: 3.46

METHACRYLIC ACID:
Bioaccumulation : Bioconcentration factor (BCF): 1.0
Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: 0.93

ZINC STEARATE:
Bioaccumulation : Bioconcentration factor (BCF): 3.16
Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: 1.2

DIMETHYL-N,N P-TOLUIDINE:
Bioaccumulation : Bioconcentration factor (BCF): 33

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., Very toxic to aquatic life., 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.

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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. |
|-----------|----------------------|---------------|--------------------|---------------|------------------------------|
|-----------|----------------------|---------------|--------------------|---------------|------------------------------|

U.S. DOT - ROAD

| | | | | | |
|---------|-----------|---|--|----|------------------|
| UN 1133 | Adhesives | 3 | | II | LIMITED QUANTITY |
|---------|-----------|---|--|----|------------------|

U.S. DOT - RAIL

| | | | | | |
|---------|-----------|---|--|----|------------------|
| UN 1133 | Adhesives | 3 | | II | LIMITED QUANTITY |
|---------|-----------|---|--|----|------------------|

U.S. DOT - INLAND WATERWAYS

| | | | | | |
|---------|-----------|---|--|----|------------------|
| UN 1133 | Adhesives | 3 | | II | LIMITED QUANTITY |
|---------|-----------|---|--|----|------------------|

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 | |
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INTERNATIONAL MARITIME DANGEROUS GOODS

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| | | | | | |
|----|------|-----------|---|----|--|
| UN | 1133 | ADHESIVES | 3 | II | MARINE POLLUTANT:(DIPROPYLEN E GLYCOL DIBENZOATE) |
|----|------|-----------|---|----|--|

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 | yes |
|------------------|-----|

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

PART A

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|--------------------|---------|-----------------------|--------------------------------|
| METHYLMETHACRYLATE | 80-62-6 | 1000 | 1776.041204 |

SARA 311/312 Hazards : Reactivity Hazard
 Fire Hazard
 Acute Health Hazard

SARA 313 Component(s)

| | | |
|---------|---------|---------|
| 80-62-6 | 80-62-6 | 56.30 % |
|---------|---------|---------|

California Prop 65 WARNING! This product contains a chemical known to the State of California to cause cancer.

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2-CHLORO-1,3-BUTADIENE 126-99-8

TRANS-1,4-DICHLOROBUT-2-ENE 110-57-6

1,3, BUTADIENE 106-99-0

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

TOLUENE 108-88-3

1,3, BUTADIENE 106-99-0

PART B

SARA 311/312 Hazards : Acute Health Hazard

SARA 313 Component(s)

| | | |
|------------------|----------|---------|
| BENZOYL PEROXIDE | 94-36-0 | 14.10 % |
| ZINC STEARATE | 557-05-1 | 1.69 % |

California Prop 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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.

AUSTR : On the inventory, or in compliance with the inventory

ENCS : Exempt

KECL : On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

Inventories

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

Registration: Trade Secret

| Chemical Name | Identification number |
|----------------------------|-----------------------|
| ACRYLATE STYRENE COPOLYMER | 800986-5738P |
| SILICA | 254504001-5937 |

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ORGANIC ACRYLATES

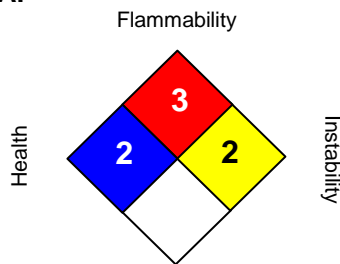
254504001-5624

WAX

800986-5065P

SECTION 16. OTHER INFORMATION**Further information**

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PART A**NFPA:**

Special hazard.

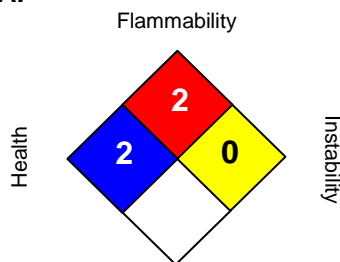
HMIS III:

| | |
|------------------------|-----------|
| HEALTH | 2* |
| FLAMMABILITY | 3 |
| PHYSICAL HAZARD | 2 |

0 = not significant, 1 =Slight,
 2 = Moderate, 3 = High
 4 = Extreme, * = Chronic

NFPA Flammable and Combustible Liquids Classification

Flammable Liquid Class IB

PART B**NFPA:**

Special hazard.

HMIS III:

| | |
|------------------------|-----------|
| HEALTH | 2* |
| FLAMMABILITY | 2 |
| PHYSICAL HAZARD | 0 |

0 = not significant, 1 =Slight,
 2 = Moderate, 3 = High
 4 = Extreme, * = Chronic

NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

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

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PART A

| | |
|------|---|
| H225 | Highly flammable liquid and vapor. |
| H227 | Combustible liquid. |
| H241 | Heating may cause a fire or explosion. |
| H302 | Harmful if swallowed. |
| H311 | Toxic 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. |
| H330 | Fatal if inhaled. |
| H335 | May cause respiratory irritation. |
| H373 | May cause damage to organs through prolonged or repeated exposure if swallowed. |
| H402 | Harmful to aquatic life. |
| H412 | Harmful to aquatic life with long lasting effects. |

PART B

| | |
|------|--|
| H241 | Heating may cause a fire or explosion. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |

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

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LCxx : Lethal Concentration, for xx percent of test population
 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