

Safety Data Sheet

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

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

Product Identifier
Product form: Mixture
Product name: Ecopol-A600
Intended Use Of The Product

Use of the substance/mixture: Iron control agent

Name, Address, And Telephone Of The Responsible Party

Economy® Polymers & Chemicals

435 E. Anderson Road 77047 Houston, TX

T 713-723-8416; 1-800-231-2066 www.economypolymers.com

Emergency Telephone Number

Emergency number : CHEMTREC 1-800-424-9300 (US); 703-527-3887 (International, collect calls are accepted)

SECTION 2: HAZARDS IDENTIFICATION

Classification Of The Substance Or Mixture

GHS-US classification

Flam. Liq. 2 H225 Acute Tox. 4 (Oral) H302 Acute Tox. 3 (Dermal) H311 Skin Corr. 1A H314 Eye Dam. 1 H318 STOT SE 1 H370

Label Elements

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H225 - Highly flammable liquid and vapour

H302 - Harmful if swallowed H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage H370 - Causes damage to organs

Precautionary statements (GHS-

US)

: P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking

P233 - Keep container tightly closed.

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 vapors, mist, spray.

P264 - Wash hands, forearms and other exposed areas thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P280 - Wear protective gloves, protective clothing, eye protection, respiratory protection,

08/19/2013 EN (English) 1/13

Safety Data Sheet

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

and face protection.

P301+P312 - If swallowed, call a doctor if you feel unwell.

P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER or doctor.

P312 - Call a POISON CENTER or doctor if you feel unwell.

P321 - Specific treatment (see section 4).

P330 - If swallowed, rinse mouth.

P361 - Remove/Take off immediately all contaminated clothing.

P363 - Wash contaminated clothing before reuse.

P370+P378 - In case of fire: Use appropriate media for extinction.

P403+P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

P501 - Dispose of contents/container according to local, regional, national, territorial, provincial, and international regulations.

Other Hazards Not available

Unknown acute toxicity (GHS US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

| Name | Product Identifier | % (w/w) | GHS-US classification |
|----------------|--------------------|---------|---------------------------------|
| Acetic acid | (CAS No.) 64-19-7 | 60-70 | Flam. Liq. 3, H226 |
| | | | Acute Tox. 4 (Dermal), H312 |
| | | | Skin Corr. 1A, H314 |
| | | | Eye Dam. 1, H318 |
| Methyl alcohol | (CAS No.) 67-56-1 | 10-20 | Flam. Liq. 2, H225 |
| | | | Acute Tox. 3 (Oral), H301 |
| | | | Acute Tox. 3 (Dermal), H311 |
| | | | Acute Tox. 3 (Inhalation), H331 |
| | | | STOT SE 1, H370 |

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description Of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). IF exposed or concerned: Get medical advice/attention.

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician.

Eye Contact: 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.

Ingestion: Rinse mouth. Do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms And Effects Both Acute and Delayed

General: Causes severe skin burns and eye damage. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. Causes damage to organs. Harmful if swallowed

08/19/2013 EN (English) 2/13

Safety Data Sheet

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

Inhalation: Causes severe respiratory irritation if inhaled. Corrosive to the respiratory tract.

Skin Contact: Toxic in contact with skin. Causes severe irritation which will progress to chemical burns.

Eye Contact: Causes serious eye damage. Can cause blindness. Vapors may cause severe irritation and tearing.

Ingestion: Swallowing a small quantity of this material will result in serious health hazard. Fatal if swallowed. May cause burns or

irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic symptoms: May cause erosion of the teeth, inflammation of the nose and respiratory system, and darkening of the skin.

Indication Of Any Immediate Medical Attention And Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing Media

Suitable extinguishing media: Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). Water spray. **Unsuitable extinguishing media**: Do not use a heavy water stream. Use of heavy stream of water may spread fire

Special Hazards Arising From The Substance Or Mixture

Fire hazard: Highly flammable liquid and vapour

Explosion hazard: May form flammable/explosive vapour-air mixture. **Reactivity**: Thermal decomposition generates :Corrosive vapours.

Advice For Firefighters

Firefighting instructions: Exercise caution when fighting any chemical fire.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Not available

Other information: Do not allow the product to be released into the environment

Reference To Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment And Emergency Procedures

General measures: Use special care to avoid static electric charges. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Do NOT breathe (dust, vapor, mist, gas)

For Non-Emergency Personnel

Protective equipment: Use appropriate personal protection equipment (PPE).

Emergency procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective equipment: Use appropriate personal protection equipment (PPE).

Emergency procedures: Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods And Material For Containment And Cleaning Up

For containment: Absorb and/or contain spill with inert material, then place in suitable container. Do not take up in combustible material such as: saw dust or cellulosic material.

Methods for cleaning up: Clear up spills immediately and dispose of waste safely.

Reference To Other Sections

SECTION 7: HANDLING AND STORAGE

Precautions For Safe Handling

Additional hazards when processed: Handle empty containers with care because residual vapours are flammable.

08/19/2013 EN (English) 3/13

Safety Data Sheet

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

Hygiene measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Wash hands, forearms, and other exposed areas thoroughly after handling.

Conditions For Safe Storage, Including Any Incompatibilities

Technical measures: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Comply with applicable regulations.

Storage conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep in fireproof place.

Protect from freezing

Incompatible materials: Strong acids. Strong bases. Strong oxidizers. Heat sources.

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

Specific End Use(s)
Iron control agent

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

| Methyl alcohol (67-56-1) | | | |
|--------------------------|-----------------------------|-----------|--|
| Mexico | OEL TWA (mg/m³) | 260 mg/m³ | |
| Mexico | OEL TWA (ppm) | 200 ppm | |
| Mexico | OEL STEL (mg/m³) | 310 mg/m³ | |
| Mexico | OEL STEL (ppm) | 250 ppm | |
| USA ACGIH | ACGIH TWA (ppm) | 200 ppm | |
| USA ACGIH | ACGIH STEL (ppm) | 250 ppm | |
| USA OSHA | OSHA PEL (TWA) (mg/m3) | 260 mg/m³ | |
| USA OSHA | OSHA PEL (TWA) (ppm) | 200 ppm | |
| USA NIOSH | NIOSH REL (ceiling) (mg/m3) | 325 mg/m³ | |
| USA NIOSH | NIOSH REL (STEL) (ppm) | 250 ppm | |
| USA NIOSH | NIOSH REL (TWA) (mg/m3) | 260 mg/m³ | |
| USA NIOSH | NIOSH REL (TWA) (ppm) | 200 ppm | |
| USA IDLH | US IDLH (ppm) | 6000 ppm | |
| Alberta | OEL STEL (mg/m³) | 328 mg/m³ | |
| Alberta | OEL STEL (ppm) | 250 ppm | |
| Alberta | OEL TWA (mg/m³) | 262 mg/m³ | |
| Alberta | OEL TWA (ppm) | 200 ppm | |
| British Columbia | OEL STEL (ppm) | 250 ppm | |
| British Columbia | OEL TWA (ppm) | 200 ppm | |
| Manitoba | OEL STEL (ppm) | 250 ppm | |
| Manitoba | OEL TWA (ppm) | 200 ppm | |
| New Brunswick | OEL STEL (mg/m³) | 328 mg/m³ | |
| New Brunswick | OEL STEL (ppm) | 250 ppm | |
| New Brunswick | OEL TWA (mg/m³) | 262 mg/m³ | |
| New Brunswick | OEL TWA (ppm) | 200 ppm | |
| New Foundland | OEL STEL (ppm) | 250 ppm | |
| &Labrador | | | |
| New Foundland | OEL TWA (ppm) | 200 ppm | |

08/19/2013 EN (English) 4/13

Safety Data Sheet

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

| | · · · · · · · · · · · · · · · · · · · | |
|-------------------------|--|-----------------------|
| & Labrador | | |
| Nova Scotia | OEL STEL (ppm) | 250 ppm |
| Nova Scotia | OEL TWA (ppm) | 200 ppm |
| Nunavut | OEL STEL (mg/m³) | 328 mg/m³ |
| Nunavut | OEL STEL (ppm) | 250 ppm |
| Nunavut | OEL TWA (mg/m³) | 262 mg/m³ |
| Nunavut | OEL TWA (ppm) | 200 ppm |
| Northwest | OEL STEL (mg/m³) | 328 mg/m ³ |
| Territories | | |
| Northwest | OEL STEL (ppm) | 250 ppm |
| Territories | | |
| Northwest | OEL TWA (mg/m³) | 262 mg/m³ |
| Territories | | |
| Northwest | OEL TWA (ppm) | 200 ppm |
| Territories | | |
| Ontario | OEL STEL (ppm) | 250 ppm |
| Ontario | OEL TWA (ppm) | 200 ppm |
| Prince Edward Island | OEL STEL (ppm) | 250 ppm |
| Prince Edward | OEL TWA (ppm) | 200 ppm |
| Island | The state of the s | |
| Québec | VECD (mg/m³) | 328 mg/m³ |
| Québec | VECD (mg/m) | 250 ppm |
| Québec | VEMP (mg/m³) | 262 mg/m³ |
| Québec | VEMP (ppm) | 200 ppm |
| Saskatchewan | OEL STEL (ppm) | 250 ppm |
| Saskatchewan | OEL TWA (ppm) | 200 ppm |
| Yukon | OEL STEL (mg/m³) | 310 mg/m³ |
| Yukon | OEL STEL (ppm) | 250 ppm |
| Yukon | OEL TWA (mg/m³) | 260 mg/m³ |
| Yukon | OEL TWA (ppm) | 200 ppm |
| Acetic acid (64-1 | | 1 22 PF |
| Mexico | OEL TWA (mg/m³) | 25 mg/m³ |
| Mexico | OEL TWA (ppm) | 10 ppm |
| Mexico | OEL STEL (mg/m³) | 37 mg/m³ |
| Mexico | OEL STEL (ppm) | 15 ppm |
| USA ACGIH | ACGIH TWA (ppm) | 10 ppm |
| USA ACGIH | ACGIH STEL (ppm) | 15 ppm |
| USA OSHA | OSHA PEL (TWA) (r | ng/m3) 25 mg/m³ |
| USA OSHA | OSHA PEL (TWA) (p | |
| USA NIOSH | NIOSH REL (TWA) (| |
| USA NIOSH | NIOSH REL (TWA) (| ppm) 10 ppm |
| USA NIOSH | NIOSH REL (STEL) (| mg/m3) 37 mg/m³ |
| USA NIOSH | NIOSH REL (STEL) (| opm) 15 ppm |
| USA IDLH | US IDLH (ppm) | 50 ppm |
| Alberta | OEL STEL (mg/m³) | 37 mg/m³ |
| Alberta | OEL STEL (ppm) | 15 ppm |
| Alberta | OEL TWA (mg/m³) | 25 mg/m³ |
| Alberta | OEL TWA (ppm) | 10 ppm |
| | | |

08/19/2013 EN (English) 5/13

Safety Data Sheet

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

| British Columbia | OEL STEL (ppm) | 15 ppm |
|-------------------------|------------------------------------|----------------------|
| British Columbia | OEL TWA (ppm) | 10 ppm |
| Manitoba | OEL STEL (ppm) | 15 ppm |
| Manitoba | OEL TWA (ppm) | 10 ppm |
| New Brunswick | OEL STEL (mg/m³) | 37 mg/m³ |
| New Brunswick | OEL STEL (fig/fit) OEL STEL (ppm) | 15 ppm |
| New Brunswick | OEL TWA (mg/m³) | 25 mg/m³ |
| New Brunswick | OEL TWA (filg/fill) OEL TWA (ppm) | 10 ppm |
| Newfoundland & Labrador | OEL STEL (ppm) | 15 ppm |
| Newfoundland & Labrador | OEL TWA (ppm) | 10 ppm |
| Nova Scotia | OEL TWA (ppm) | 15 ppm |
| | VII / | • • |
| Nova Scotia | OEL TWA (ppm) OEL STEL (mg/m³) | 10 ppm 39 mg/m³ |
| Nunavut | , , | |
| Nunavut | OEL STEL (ppm) | 15 ppm |
| Nunavut | OEL TWA (mg/m³) | 26 mg/m³ |
| Nunavut | OEL TWA (ppm) | 10 ppm |
| Northwest Territories | OEL STEL (mg/m³) | 39 mg/m ³ |
| Northwest Territories | OEL STEL (ppm) | 15 ppm |
| Northwest Territories | OEL TWA (mg/m³) | 26 mg/m³ |
| Northwest Territories | OEL TWA (ppm) | 10 ppm |
| Ontario | OEL STEL (ppm) | 15 ppm |
| Ontario | OEL TWA (ppm) | 10 ppm |
| Prince Edward Island | OEL STEL (ppm) | 15 ppm |
| Prince Edward Island | OEL TWA (ppm) | 10 ppm |
| Québec | VECD (mg/m³) | 37 mg/m ³ |
| Québec | VECD (ppm) | 15 ppm |
| Québec | VEMP (mg/m³) | 25 mg/m³ |
| Québec | VEMP (ppm) | 10 ppm |
| Saskatchewan | OEL STEL (ppm) | 15 ppm |
| Saskatchewan | OEL TWA (ppm) | 10 ppm |
| Yukon | OEL STEL (mg/m³) | 43 mg/m³ |
| Yukon | OEL STEL (ppm) | 25 ppm |
| Yukon | OEL TWA (mg/m³) | 25 mg/m³ |
| Yukon | OEL TWA (ppm) | 10 ppm |

Exposure Controls

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases/vapours may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Provide sufficient ventilation to keep ammonia vapors below the permissible exposure limit.

Personal protective equipment:Gloves.Protective clothing.Face shield.Head/neck protection.Protective goggles.Insufficient ventilation: wear respiratory protection













Materials for protective clothing: Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing. Corrosionproof clothing.

Hand protection: Wear chemically resistant protective gloves.

Eye protection: Chemical goggles or safety glasses. Chemical goggles or face shield.

Skin and body protection: Wear suitable protective clothing.

08/19/2013 EN (English) 6/13

Safety Data Sheet

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

Respiratory protection: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

Thermal hazard protection: Wear suitable protective clothing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information On Basic Physical And Chemical Properties

Physical state : Liquid

Appearance : Clear, orange, Transparent

Odour : vinegar-like
Odour threshold : Not available

pH : 2 - 4

Relative evaporation rate (butylacetate=1) Not available -30 °C (-22°F) **Melting point** Freezing point Not available **Boiling point** 65 °C (149°F) Flash point 12 °C (53.6°F) Auto-ignition temperature Not available **Decomposition Temperature** Not available Flammability (solid, gas) Not available Lower flammable limit Not available Upper flammable limit Not available Vapour pressure Not available Relative vapour density at 20 °C Not available Relative density Not available 0.97-1.00 Specific gravity density Solubility Not available **Log Pow** Not available Log Kow Not available Viscosity, kinematic Not available Viscosity, dynamic Not available Explosion data - sensitivity to mechanical impact : Not available

SECTION 10: STABILITY AND REACTIVITY

Explosion data - sensitivity to static discharge

Reactivity Thermal decomposition generates: Corrosive vapours.

Chemical Stability Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

Possibility Of Hazardous Reactions Hazardous polymerization will not occur.

Conditions To Avoid Direct sunlight. Extremely high or low temperatures. Open flame. Sparks.

Incompatible Materials Strong acids. Strong bases. Strong oxidizers

Hazardous Decomposition Products Carbon oxides (CO, CO2). May release flammable gases. Thermal decomposition generates :Corrosive vapours.

Not available

SECTION 11: TOXICOLOGICAL INFORMATION

Information On Toxicological Effects - Product

Acute toxicity : Harmful if swallowed. Toxic in contact with skin.

LD50 and LC50 Data Not available

Skin corrosion/irritation: Causes severe skin burns and eye damage. pH: 2 - 4

Serious eye damage/irritation: Causes serious eye damage. pH: 2 - 4

08/19/2013 EN (English) 7/13

Safety Data Sheet

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

Respiratory or skin sensitisation: Not classified

Germ cell mutagenicity: Not classified

Teratogenicity: Not available **Carcinogenicity**: Not classified

Specific target organ toxicity (repeated exposure): Not classified

Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): Causes damage to organs.

Aspiration hazard: Not classified

Symptoms/injuries after inhalation: Causes severe respiratory irritation if inhaled. Corrosive to the respiratory tract.

Symptoms/injuries after skin contact: Toxic in contact with skin. Causes severe irritation which will progress to chemical burns. **Symptoms/injuries after eye contact**: Causes serious eye damage. Can cause blindness. Vapors may cause severe irritation and tearing.

Symptoms/injuries after ingestion: Swallowing a small quantity of this material will result in serious health hazard. Fatal if

swallowed. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. **Chronic symptoms**: May cause erosion of the teeth, inflammation of the nose and respiratory system, and darkening of the skin.

<u>Information On Toxicological Effects - Ingredient(s)</u>

LD50 and LC50 Data

| Methyl alcohol (67-56-1) | | |
|----------------------------|--------------------------------|--|
| LC50 inhalation rat (mg/l) | 83.2 mg/l (Exposure time: 4 h) | |
| ATE (oral) | 100 mg/kg | |
| ATE (dermal) | 300 mg/kg | |
| ATE (vapours) | 3 mg/l/4h | |
| Acetic acid (64-19-7) | | |
| LD50 oral rat | 3310 mg/kg | |
| LD50 dermal rabbit | 1060 mg/kg | |
| LC50 inhalation rat (mg/l) | 11.4 mg/l (Exposure time: 4 h) | |

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

| Methyl alcohol (67-56-1) | | |
|--|--|--|
| LC50 fishes 1 | 28200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow- | |
| | through]) | |
| LC50 fish 2 | > 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static]) | |
| Acetic acid (64-19-7) | | |
| LC50 fishes 1 | 79 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static]) | |
| EC50 Daphnia 1 | 47 mg/l (Exposure time: 24 h - Species: Daphnia magna) | |
| LC50 fish 2 | 75 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static]) | |
| EC50 Daphnia 2 65 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static]) | | |

Persistence And Degradability

| Ecopol-A600 | |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |

Bioaccumulative Potential

| Ecopol-A600 | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |
| Methyl alcohol (67-56-1) | |
| BCF fish 1 | < 10 |
| Log Pow | -0.77 |

08/19/2013 EN (English) 8/13

Safety Data Sheet

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

| Acetic acid (64-19-7) | |
|-----------------------|------------------|
| Log Pow | -0.31 (at 20 °C) |

Mobility In Soil Not available

Other Adverse Effects

Other information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste disposal recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Additional information: Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials: Hazardous waste due to toxicity.

SECTION 14: TRANSPORT INFORMATION

In accordance with ICAO/IATA/DOT/TDG

UN Number

UN-No.(DOT): 2920 DOT NA no.: UN2920

UN Proper Shipping Name

DOT Proper Shipping Name

Department of Transportation (DOT) Hazard Classes

Hazard labels (DOT)

: Corrosive liquids, flammable, n.o.s. (Acetic acid, methyl alcohol)

: 8 - Class 8 - Corrosive material 49 CFR 173.136

: 8 - Corrosive substances

3 - Flammable liquid





DOT Symbols

Packing group (DOT)

DOT Special Provisions (49 CFR 172.102)

: G - Identifies PSN requiring a technical name

: I - Great Danger

: A6 - For combination packagings, if plastic inner packagings are used, they must be packed in tightly closed metal receptacles before packing in outer packagings.

B10 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks, and DOT 57 portable tanks are not authorized.

T14 - 6 6 mm Prohibited 178.275(g)(3).

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the formula: Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx) : None DOT Packaging Non Bulk (49 CFR 173.xxx) 201 DOT Packaging Bulk (49 CFR 173.xxx) 243

08/19/2013 EN (English) 9/13

Safety Data Sheet

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

Additional information

Emergency Response Guide (ERG) Number : 132

Overland transport Not available

Transport by sea

DOT Vessel Stowage Location : C - The material must be stowed "on deck only" on a cargo vessel and on a

passenger vessel.

DOT Vessel Stowage Other : 25 - Shade from radiant heat,40 - Stow "clear of living quarters"

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 : 0.5 L

CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 CFR : 2.5 L

175.75)

SECTION 15: REGULATORY INFORMATION

US Federal regulations

| Water (7732-18-5) | |
|---|--|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| Methyl alcohol (67-56-1) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| Listed on SARA Section 313 (Specific toxic chemical listings) | |

1.0 %

Acetic acid (64-19-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State regulations

| Methyl alcohol (67-56-1) | |
|--|---|
| U.S California - Proposition 65 - Developmental Toxicity | WARNING: This product contains chemicals known to the State |
| | of California to cause birth defects. |

Methyl alcohol (67-56-1)

- U.S. California SCAQMD Toxic Air Contaminants Non-Cancer Acute
- U.S. California SCAQMD Toxic Air Contaminants Non-Cancer Chronic
- U.S. California Toxic Air Contaminant List (AB 1807, AB 2728)
- U.S. Colorado Hazardous Wastes Discarded Chemical Products, Off-Specification Species, Container and Spill Residues
- U.S. Connecticut Hazardous Air Pollutants HLVs (30 min)
- U.S. Connecticut Hazardous Air Pollutants HLVs (8 hr)
- U.S. Connecticut Volatile Substances

SARA Section 313 - Emission Reporting

- U.S. Delaware Pollutant Discharge Requirements Reportable Quantities
- U.S. Hawaii Occupational Exposure Limits Skin Designations
- U.S. Hawaii Occupational Exposure Limits STELs
- U.S. Hawaii Occupational Exposure Limits TWAs
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Acceptable Ambient Concentrations
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Emission Levels (ELs)
- U.S. Idaho Occupational Exposure Limits TWAs
- U.S. Illinois Toxic Air Contaminants
- U.S. Louisiana Reportable Quantity List for Pollutants
- U.S. Maine Air Pollutants Hazardous Air Pollutants
- U.S. Maine Chemicals of High Concern
- U.S. Massachusetts Allowable Ambient Limits (AALs)
- U.S. Massachusetts Allowable Threshold Concentrations (ATCs)
- U.S. Massachusetts Oil & Hazardous Material List Groundwater Reportable Concentration Reporting Category 1
- U.S. Massachusetts Oil & Hazardous Material List Groundwater Reportable Concentration Reporting Category 2

08/19/2013 EN (English) 10/13

Safety Data Sheet

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

- U.S. Massachusetts Oil & Hazardous Material List Reportable Quantity
- U.S. Massachusetts Oil & Hazardous Material List Soil Reportable Concentration Reporting Category 1
- U.S. Massachusetts Oil & Hazardous Material List Soil Reportable Concentration Reporting Category 2
- U.S. Massachusetts Right To Know List
- U.S. Massachusetts Threshold Effects Exposure Limits (TELs)
- U.S. Massachusetts Toxics Use Reduction Act
- U.S. Michigan Occupational Exposure Limits Skin Designations
- U.S. Michigan Occupational Exposure Limits STELs
- U.S. Michigan Occupational Exposure Limits TWAs
- U.S. Michigan Polluting Materials List
- U.S. Minnesota Groundwater Health Risk Limits
- U.S. Minnesota Hazardous Substance List
- U.S. Minnesota Permissible Exposure Limits Skin Designations
- U.S. Minnesota Permissible Exposure Limits STELs
- U.S. Minnesota Permissible Exposure Limits TWAs
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) 24-Hour
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) Annual
- U.S. New Jersey Discharge Prevention List of Hazardous Substances
- U.S. New Jersey Environmental Hazardous Substances List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New Jersey Special Health Hazards Substances List
- U.S. New Jersey Water Quality Ground Water Quality Criteria
- U.S. New Jersey Water Quality Practical Quantitation Levels (PQLs)
- U.S. New York Occupational Exposure Limits TWAs
- U.S. New York Reporting of Releases Part 597 List of Hazardous Substances
- U.S. North Dakota Air Pollutants Guideline Concentrations 1-Hour
- U.S. North Dakota Air Pollutants Guideline Concentrations 8-Hour
- U.S. North Dakota Hazardous Wastes Discarded Chemical Products, Off-Specification Species, Container and Spill Residues
- U.S. Oregon Permissible Exposure Limits TWAs
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Rhode Island Air Toxics Acceptable Ambient Levels 1-Hour
- U.S. Rhode Island Air Toxics Acceptable Ambient Levels Annual
- U.S. South Carolina Toxic Air Pollutants Maximum Allowable Concentrations
- U.S. South Carolina Toxic Air Pollutants Pollutant Categories
- U.S. Tennessee Occupational Exposure Limits Skin Designations
- U.S. Tennessee Occupational Exposure Limits STELs
- U.S. Tennessee Occupational Exposure Limits TWAs
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term
- U.S. Vermont Permissible Exposure Limits Skin Designations
- U.S. Vermont Permissible Exposure Limits STELs
- U.S. Vermont Permissible Exposure Limits TWAs
- U.S. Washington Dangerous Waste Discarded Chemical Products List
- U.S. Washington Permissible Exposure Limits Skin Designations
- U.S. Washington Permissible Exposure Limits STELs
- U.S. Washington Permissible Exposure Limits TWAs

Acetic acid (64-19-7)

- U.S. Connecticut Hazardous Air Pollutants HLVs (30 min)
- U.S. Connecticut Hazardous Air Pollutants HLVs (8 hr)
- U.S. Delaware Pollutant Discharge Requirements Reportable Quantities
- U.S. Hawaii Occupational Exposure Limits STELs

08/19/2013 EN (English) 11/13

Safety Data Sheet

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

- U.S. Hawaii Occupational Exposure Limits TWAs
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Acceptable Ambient Concentrations
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Emission Levels (ELs)
- U.S. Idaho Occupational Exposure Limits TWAs
- U.S. Louisiana Reportable Quantity List for Pollutants
- U.S. Massachusetts Oil & Hazardous Material List Groundwater Reportable Concentration Reporting Category 1
- U.S. Massachusetts Oil & Hazardous Material List Groundwater Reportable Concentration Reporting Category 2
- U.S. Massachusetts Oil & Hazardous Material List Reportable Quantity
- U.S. Massachusetts Oil & Hazardous Material List Soil Reportable Concentration Reporting Category 1
- U.S. Massachusetts Oil & Hazardous Material List Soil Reportable Concentration Reporting Category 2
- U.S. Massachusetts Right To Know List
- U.S. Massachusetts Toxics Use Reduction Act
- U.S. Michigan Occupational Exposure Limits TWAs
- U.S. Michigan Polluting Materials List
- U.S. Minnesota Hazardous Substance List
- U.S. Minnesota Permissible Exposure Limits TWAs
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) 24-Hour
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) Annual
- U.S. New Jersey Discharge Prevention List of Hazardous Substances
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New Jersey Special Health Hazards Substances List
- U.S. New York Occupational Exposure Limits TWAs
- U.S. New York Reporting of Releases Part 597 List of Hazardous Substances
- U.S. North Carolina Control of Toxic Air Pollutants
- U.S. North Dakota Air Pollutants Guideline Concentrations 1-Hour
- U.S. North Dakota Air Pollutants Guideline Concentrations 8-Hour
- U.S. Oregon Permissible Exposure Limits TWAs
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Tennessee Occupational Exposure Limits TWAs
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term
- U.S. Washington Permissible Exposure Limits STELs
- U.S. Washington Permissible Exposure Limits TWAs
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights 25 Feet to Less Than 40 Feet
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights 40 Feet to Less Than 75 Feet
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights 75 Feet or Greater
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights Less Than 25 Feet

Canadian regulations

| Ecopol-A600 | |
|--|---|
| WHMIS Classification Class B Division 2 - Flammable Liquid | |
| | Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects |
| | Class D Division 2 Subdivision A - Very toxic material causing other toxic effects |







Water (7732-18-5)

Listed on the Canadian DSL (Domestic Sustances List) inventory.

WHMIS Classification Uncontrolled product according to WHMIS classification criteria

08/19/2013 EN (English) 12/13

Safety Data Sheet

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

| Methyl alcohol (67-56-1) | |
|---|---|
| Listed on the Canadian DSL (Domestic | Sustances List) inventory. |
| Listed on the Canadian Ingredient Disc | closure List |
| WHMIS Classification | Class B Division 2 - Flammable Liquid |
| | Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects |
| | Class D Division 2 Subdivision A - Very toxic material causing other toxic effects |
| | Class D Division 2 Subdivision B - Toxic material causing other toxic effects |
| Acetic acid (64-19-7) | |
| Listed on the Canadian DSL (Domestic Sustances List) inventory. | |
| WHMIS Classification | Class B Division 3 - Combustible Liquid |
| | Class D Division 2 Subdivision B - Toxic material causing other toxic effects |

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION

Indication of changes : Revision date: 08/19/2013

Other information : This document has been prepared in accordance with the SDS requirements of the

OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

| Acute Tox. 3 (Dermal) | Acute toxicity (dermal) Category 3 |
|---------------------------|---|
| Acute Tox. 3 (Inhalation) | Acute toxicity (inhalation) Category 3 |
| Acute Tox. 3 (Oral) | Acute toxicity (oral) Category 3 |
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal) Category 4 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral) Category 4 |
| Eye Dam. 1 | Serious eye damage/eye irritation Category 1 |
| Flam. Liq. 2 | Flammable liquids Category 2 |
| Flam. Liq. 3 | Flammable liquids Category 3 |
| Skin Corr. 1A | skin corrosion/irritation Category 1A |
| STOT SE 1 | Specific target organ toxicity (single exposure) Category 1 |
| H225 | Highly flammable liquid and vapour |
| H226 | Flammable liquid and vapour |
| H301 | Toxic if swallowed |
| H302 | Harmful if swallowed |
| H311 | Toxic in contact with skin |
| H312 | Harmful in contact with skin |
| H314 | Causes severe skin burns and eye damage |
| H318 | Causes serious eye damage |
| H331 | Toxic if inhaled |
| H370 | Causes damage to organs |

Party Responsible For The Preparation Of This Document:

Economy Polymers & Chemicals 435 E. Anderson Road Houston, TX 77047 713-723-8416; 1-800-231-2066

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS

08/19/2013 EN (English) 13/13