Revised on 08/31/2016

1 Identification

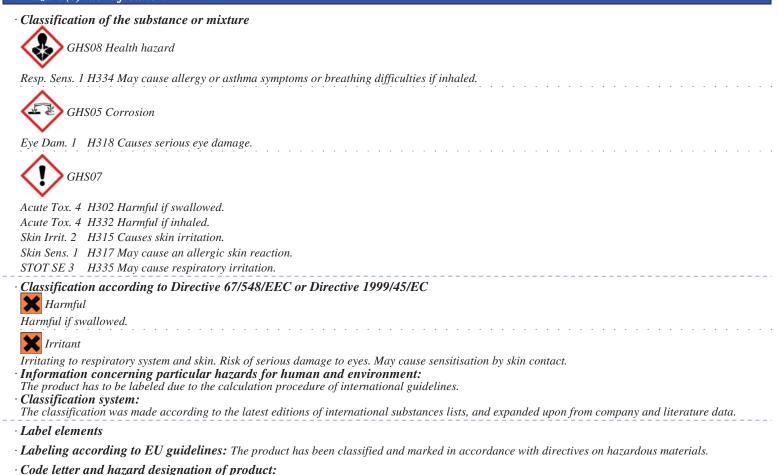
- · Product identifier H1301
- · Trade name: Durapot 862 Hardener
- · Article number: 862H
- · Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Cotronics Corp 131 47th Street Brooklyn, NY 11232

USA

• Information department: In the event of an emergency please call Chemtrec at 1 800-424-9300 (24 hour)

2 Hazard(s) identification





· Risk phrases: Harmful if swallowed. Irritating to respiratory system and skin. Risk of serious damage to eyes. May cause sensitisation by skin contact.

· Safety phrases:

Keep away from food, drink and animal feedingstuffs. When using do not eat or drink. Do not breathe vapour. Do not breathe fumes.

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Wear suitable protective clothing, gloves and eye/face protection. In case of insufficient ventilation, wear suitable respiratory equipment. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of accident by inhalation: remove casualty to fresh air and keep at rest. After contact with skin, wash immediately with plenty of soap and water. Keep container tightly closed. **Classification system:**

· NFPÅ ratings (scale 0 - 4)



· HMIS-ratings (scale 0 - 4)

HEALTH 3 FIRE 1 Health = 3 Fire = 1 REACTIVITY 0 Reactivity = 0

· Other hazards

- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Nonhazardous materials will not be listed seperately

• <i>Components:</i> Not a dangerous substance according to GHS	
25134-21-8 Acid Anhydride Complex	50-<100%
56-81-5 Glycerol	2.5-<10%
552-30-7 Anhydride	5-<10%
288-32-4 Imidazole	0.1-<0.5%

4 First-aid measures

· Description of first aid measures

• General information: Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident. • After inhalation:

Supply fresh air and call for a doctor.

Move to a place with fresh air and keep at rest.

In case of unconsciousness and call a doctor.

If transporting move stably into a side position for transportation.

• After skin contact:

Wash with soap and water.

If irritated or rash develops seek medical attention

- After eye contact:
- *Rinse opened eye for several minutes under running water. Get medical attention*
- After swallowing: Never Induce vomiting, immediately call a doctor.
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters Wear self-contained breathing apparatus, if necessary

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· Protective equipment: Use personal protective equipment.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Dispose contaminated material as waste according to item 13.
- Ensure adequate ventilation.
- Reference to other sections
- See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- **Requirements to be met by storerooms and receptacles:** Keep in sealed containers
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep sealed container(s) at room temperature
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

56-81-5 Glycerol

- PEL Long-term value: 15* 5** mg/m³
- mist; *total dust **respirable fraction
- TLV TLV withdrawn-insufficient data human occup. exp.

552-30-7 Anhydride

- REL Long-term value: 0.04 mg/m³, 0.005 ppm Handle as extremely toxic substance
- TLV Short-term value: 0.002* mg/m³ Long-term value: 0.0005* mg/m³ Skin; DSEN, RSEN; *inh. fraction + vapor
- Additional information: Personal protection is required while machining this material. Use suitable face/eye/hand protection.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:
- Do not eat or drink while working.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Avoid contact with the skin. Avoid contact with the eyes and skin.
- Do not inhale vapors or fumes.
- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.
- · Protection of hands: Impervious gloves

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• Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical · General Information	and chemical properties
· Appearance: Form: Color: · Odor:	Liquid Light yellow Low Odor
· pH-value:	Not determined.
• Change in condition Melting point/Melting range: Boiling point/Boiling range:	
· Flash point:	$> 135 \ ^{\circ}C \ (> 275 \ ^{\circ}F)$
· Flammability (solid, gaseous):	Not Applicable.
• Auto igniting:	Product is not selfigniting.
• Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits: Lower: Upper:	Not Applicable Not Applicable.
· Vapor pressure:	Not determined.
· Density at 20 °C (68 °F):	1.21 g/cm ³ (10.097 lbs/gal)
• Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Viscosity at 20 °C (68 °F):	320 cps (Brookfield Viscometer)
 Solvent content: Organic solvents: Other information 	<.2 % No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability Stable under recommended storage conditions.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- · Incompatible materials: Acids, acid anyhydrides, strong oxidizing agents
- · Hazardous decomposition products: Carbon oxides, nitrogen oxides, hydrogen cyanide

11 Toxicological information

- · Information on toxicological effects
- Acute toxicity:
- · LD/LC50 values that are relevant for classification:

25134-21-8 Acid Anhydride Complex

Oral LD50 915-958 mg/kg (Rat) (RTECS)

behavioral:/simnolence (general depressed activity) Kidney, Ureter, Bladder Nutritional and Gross metabolic weight gain or loss

Dermal LD50 4290 mg/kg (Rat)

Bahavioral Somnolence, lungs, t horax, or respiration : other changes (Contd. of page 3)

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Inhalative LC10 750 mg/m3 (Rat) (RTECS) 4 hours 552-30-7 Anhydride Oral LD50 5600 mg/kg (Rat) 288-32-4 Imidazole Oral LD50 880 mg/kg (Mouse) 970 mg/kg (Rat) • Primary irritant effect: • On the skin: Irritating to skin. · On the eye: Strong irritant with the danger of severe eye injury. · Sensitization: Sensitization possible through skin contact. • Additional toxicological information: The product shows the following dangers according to internally approved calculation methods for preparations: Harmful Irritant · Carcinogenic categories · IARC (International Agency for Research on Cancer) None of the materials are listed · NTP (National Toxicology Program) None of the materials are listed OSHA-Ca (Occupational Safety & Health Administration)

12 Ecological information

None of the materials are listed

· Toxicity

• Aquatic toxicity:

288-32-4 Imidazole

EC50/48 h 341.5 mg/l (Daphnia magna)

EC50/72 h (static) 133 mg/l (Scenedesmus subspicatus)

- LC50/48 h (static) 280 mg/l (Golden orfe)
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal cons<u>iderations</u>

· Waste treatment methods

• Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- *Recommendation:* Dispose material in accordance with federal, state, local and international regulations.

14 Transport<u>information</u>

- · UN-Number
- · DOT, ADR, ADN, IMDG, IATA
- · UN proper shipping name
- · DOT, ADR, ADN, IMDG, IATA

Not Regulated for Transport

Not Regulated for Transport

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· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA	
· Class	Not Regulated for Transport
· Packing group	
· DOT, ĂĎR, IMDG, IATA	Not Regulated for Transport
Environmental hazards:	
• Marine pollutant:	No
· Special precautions for user	Not applicable.
• Transport in bulk according to Annex II of MARPOL73/78 and the	he
IBC Code	Not applicable.
· UN "Model Regulation":	-

*15 Regulatory information

SÅl	
	tion 313 (specific toxic chemical listings):
	e of the ingredients are listed.
	tion 302 (extremely hazardous substance):
Sec	e of the ingredients are listed tion 304 (emergency release notification):
	e of the ingredients are listed tions 311/312 (hazards)
251	34-21-8 Acid Anhydride Complex: Acute
	56-81-5 Glycerol: Chronic
5.	52-30-7 Anhydride: Chronic, Acute
2	88-32-4 Imidazole: Chronic, Acute
	42-95-6 Solvent naphtha (petroleum), light aroma: Fire C A (Toxic Substances Control Act) (Substances not listed):
	ingredients are listed.
	position 65
	emicals known to cause cancer:
Che	e of the ingredients are listed e micals known to cause reproductive toxicity:
	e of the materials are listed e micals known to cause reproductive toxicity for females:
	e of the materials are listed
Che	emicals known to cause reproductive toxicity for males:
	e of the materials are listed
Che	emicals known to cause developmental toxicity:
	e of the materials are listed
	nnsylvania Right To Know Components
	34-21-8 Acid Anhydride Complex
	56-81-5 Glycerol
	52-30-7 Anhydride
	88-32-4 Imidazole
	95-95-4 Imidazole
647. Ma	42-95-6 Solvent naphtha (petroleum), light aroma ssachusetts Right To Know Components
56	-81-5 Glycerol
	-30-7 Anhydride
	v Jersey Right To Know Components
251.	34-21-8 Acid Anhydride Complex
	56-81-5 Glycerol
5	52-30-7 Anhydride
2	88-32-4 Imidazole
	95-95-4 Imidazole
	ode Island Right To Know Components
56-8	81-5 Glycerol

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· Minnesota Right To Know Components

- None of the ingredents are listed
- · Florida Right To Know Components
- None of the ingredients are listed
- · Carcinogenic categories
- · EPA (Environmental Protection Agency)
- None of the ingredients are listed
- TLV (Threshold Limit Value established by ACGIH)
- None of the ingredients are listed
- ·NIOSH-Ca (National Institute for Occupational Safety and Health)
- If non of the ingredients are listed
- **Product related hazard informations:**
- The product has been classified and marked in accordance with directives on hazardous materials.
- · Hazard symbols:



· Risk phrases: Harmful if swallowed. Irritating to respiratory system and skin. Risk of serious damage to eyes. May cause sensitisation by skin contact.

Safety phrases:

Keep away from food, drink and animal feedingstuffs. When using do not eat or drink. Do not breathe vapour. Do not breathe fumes. Wear suitable protective clothing, gloves and eye/face protection. In case of insufficient ventilation, wear suitable respiratory equipment. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of accident by inhalation: remove casualty to fresh air and keep at rest. After contact with skin, wash immediately with plenty of soap and water. Keep container tightly closed.

16 Other information

To the best of our knowledge, the information contained herein is correct. Cotronics does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. We do not guarantee that the hazards described herein are the only hazards that exist.

- · Department issuing SDS: Environment protection department.
- · Contact: Dr. Alan Reznik
- · Date of preparation / last revision 09/06/2016 / 13
- Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods

- DOT: US Department of Transportation IATA: International Air Transport Association
- ACGIH: American Conference of Governmental Industrial Hygienists
- EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)
- VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent
- Acute Tox. 4: Acute toxicity, Hazard Category 4
- Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2 Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
- Resp. Sens. 1: Sensitisation Respirat., Hazard Category I Skin Sens. 1: Sensitisation Skin, Hazard Category I
- STOT SE 3: Specific target organ toxicity Single exposure, Hazard Category 3
- * Data compared to the previous version altered.

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USA -

Safety Data Sheet acc. to OSHA HCS

Printing date 09/16/2015

Revised on 09/16/2015

Trade name: Durapot 862 Resin

(Contd. of page 7)

Safety phrases: Keep away from food, drink and animal feedingstuffs. When using do not eat or drink. Avoid contact with skin and eyes. Wear suitable protective clothing, gloves and eye/face protection. In case of insufficient ventilation, wear suitable respiratory equipment. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. In case of accident by inhalation: remove casualty to fresh air and keep at rest. After contact with skin, wash immediately with plenty of soap and water. Keep container tightly closed.

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- · Contact: Dr. Alan Reznik
- · Date of preparation / last revision 09/16/2015 / 8
- Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent Acute Tox. 4: Acute toxicity, Hazard Category 4 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 • * Data compared to the previous version altered. USA