

SAFETY DATA SHEET

Version #: 03

Issue date: 06-05-2023

Revision date: 07-06-2023

Supersedes date: 07-06-2023

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation of the mixture EPOCAST 36 Hardener

Registration number -

Synonyms None.

SKU# 10015/10025/10035

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

Identified uses Not available.

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Supplier

Company name ITW Performance Polymers

Address Bay 150
Shannon Industrial Estate
Co. Clare, Ireland

Division

Telephone Phone 353(61)771500

e-mail customerservice.shannon@itwpp.com

Contact person Not available.

1.4. Emergency telephone number Emergency Number 44(0)1235 239 670

General in EU 112 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

Austria National Poisons Information Center +431 406 4343 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

Belgium National Poisons Control Center 070 245 245 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

Bulgaria National Toxicological Information Center +359 2 9154 233 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

Croatia Poisons Information Center +385 1 2348 342 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)

Cyprus Poison Center 1401 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

Czech Republic National Poisons Information Center +420 224 919 293, or +420 224 915 402 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.)

Denmark National Poisons Control Center +45 82 12 12 12 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

Estonia National Poisons Information Center 16662 or abroad: (+372) 626 9390 (Monday 9:00AM to Saturday 9:00AM (closed on Sundays and on national holidays). SDS/Product information may not be available for the Emergency Service.)

Finland National Poison Information Center (09) 471 977 (direct) or (09) 4711 (exchange) (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

France National Poisons Control Center ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

| | |
|---|---|
| Greece Poison Information Centre | (0030) 2107793777 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.) |
| Hungary National Emergency Phone Number | +36-80-201-199 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.) |
| Iceland Poison Center | (+354) 543 2222 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.) |
| Latvia Emergency medical aid | 113 |
| Latvia Poison and Drug Information Center | +371 67042473 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.) |
| Lithuania Neatidėliotina informacija apsinuodijus | +370 5 236 20 52 or +37068753378 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.) |
| Malta Accident and Emergency Department | 2545 4030 (Hours of operation not provided. SDS/Product information may not be available for the Emergency Service.) |
| Netherlands National Poisons Information Center (NVIC) | NVIC: +31 (0)88 755 8000 (Only for the purpose of informing medical personnel in cases of acute intoxications) |
| Norway Norwegian Poison Information Center | 22 59 13 00 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.) |
| Portugal Poison Center | 800 250 250 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.) |
| Romania Biroul RSI si Informare Toxicologica | 021.318.36.06 (Available 8:00AM-3:00PM. SDS/Product information may not be available for the Emergency Service.) |
| Slovakia National Toxicological Information Center | +421 2 5477 4166 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.) |
| Spain Toxicology Information Service | + 34 91 562 04 20 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.) |
| Sweden National Poison Information Center | 112 - and ask for Poison Information (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.) |
| Switzerland Tox Info Suisse | 145 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.) |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

| | | |
|-----------------------------------|-------------|---|
| Skin corrosion/irritation | Category 1B | H314 - Causes severe skin burns and eye damage. |
| Serious eye damage/eye irritation | Category 1 | H318 - Causes serious eye damage. |
| Skin sensitization | Category 1 | H317 - May cause an allergic skin reaction. |

Environmental hazards

| | | |
|--|------------|--|
| Hazardous to the aquatic environment, acute aquatic hazard | Category 1 | H400 - Very toxic to aquatic life. |
| Hazardous to the aquatic environment, long-term aquatic hazard | Category 1 | H410 - Very toxic to aquatic life with long lasting effects. |

2.2. Label elements

UFI:

Austria: QRE0-U081-J00X-NDC0
 Belgium: QRE0-U081-J00X-NDC0
 Bulgaria: QRE0-U081-J00X-NDC0
 Croatia: QRE0-U081-J00X-NDC0
 Cyprus: QRE0-U081-J00X-NDC0
 Czech Republic: QRE0-U081-J00X-NDC0
 Denmark: QRE0-U081-J00X-NDC0
 Estonia: QRE0-U081-J00X-NDC0
 EU: QRE0-U081-J00X-NDC0
 Finland: QRE0-U081-J00X-NDC0
 France: QRE0-U081-J00X-NDC0
 Germany: QRE0-U081-J00X-NDC0
 Greece: QRE0-U081-J00X-NDC0
 Hungary: QRE0-U081-J00X-NDC0
 Iceland: QRE0-U081-J00X-NDC0
 Ireland: QRE0-U081-J00X-NDC0
 Italy: QRE0-U081-J00X-NDC0
 Latvia: QRE0-U081-J00X-NDC0
 Lithuania: QRE0-U081-J00X-NDC0
 Luxembourg: QRE0-U081-J00X-NDC0
 Malta: QRE0-U081-J00X-NDC0
 Netherlands: QRE0-U081-J00X-NDC0
 Norway: QRE0-U081-J00X-NDC0
 Poland: QRE0-U081-J00X-NDC0
 Portugal: QRE0-U081-J00X-NDC0
 Romania: QRE0-U081-J00X-NDC0
 Slovakia: QRE0-U081-J00X-NDC0
 Slovenia: QRE0-U081-J00X-NDC0
 Spain: QRE0-U081-J00X-NDC0
 Sweden: QRE0-U081-J00X-NDC0

Contains:

3,6,9,12-tetra-azatetradecamethylenediamine; pentactylenehexamine

Hazard pictograms



Signal word

Danger

Hazard statements

| | |
|------|---|
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary statements

Prevention

| | |
|------|---|
| P260 | Do not breathe vapor. |
| P264 | Wash thoroughly after handling. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. |

Response

| | |
|--------------------|--|
| P301 + P330 + P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| P303 + P361 + P353 | IF ON SKIN (or hair): 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/doctor. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |
| P391 | Collect spillage. |

Storage

| | |
|------|------------------|
| P405 | Store locked up. |
|------|------------------|

Disposal

| | |
|------|---|
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulations. |
|------|---|

| | |
|---------------------------------------|--|
| Supplemental label information | 100% of the mixture consists of component(s) of unknown acute oral toxicity. 100% of the mixture consists of component(s) of unknown acute inhalation toxicity. |
| 2.3. Other hazards | This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The mixture does not contain any substances included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties at a concentration equal to or greater than 0.1% by weight. |

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

| Chemical name | % | CAS-No. / EC No. | REACH Registration No. | Index No. | Notes |
|---|----------|------------------------|------------------------|--------------|-------|
| 3,6,9,12-tetra-azatetradecamethylene diamine; pentacthylenehexamine | 60 - 100 | 4067-16-7 223-775-9 | - | 612-064-00-2 | |
| Classification: Skin Corr. 1B;H314, Eye Dam. 1;H318, Skin Sens. 1;H317, Aquatic Acute 1;H400, Aquatic Chronic 1;H410 | | | | | |

List of abbreviations and symbols that may be used above

ATE: Acute toxicity estimate.
M: M-factor
vPvB: very persistent and very bioaccumulative substance.
PBT: persistent, bioaccumulative and toxic substance.
#: This substance has been assigned Union workplace exposure limit(s).
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

4.1. Description of first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Ingestion Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

4.2. Most important symptoms and effects, both acute and delayed Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Special fire fighting procedures Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|------------------------------------|---|
| For non-emergency personnel | Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. |
| For emergency responders | Keep unnecessary personnel away. Ensure adequate ventilation. Avoid breathing mist/vapors. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS. |

6.2. Environmental precautions Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other sections For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Do not breathe mist/vapors. Do not get in eyes, on skin, or on clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

ANNEX 1, PART 1 Categories of dangerous substances

Hazard categories in accordance with Regulation (EC) No 1272/2008

- E1 Hazardous to the Aquatic Environment Acute (Lower-tier requirements = 100 tons; Upper-tier requirements = 200 tons)

- E1 Hazardous to the Aquatic Environment Chronic (Lower-tier requirements = 100 tons; Upper-tier requirements = 200 tons)

7.3. Specific end use(s) Observe industrial sector guidance on best practices.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| | |
|---|--|
| Occupational exposure limits | No exposure limits noted for ingredient(s). |
| Biological limit values | No biological exposure limits noted for the ingredient(s). |
| Recommended monitoring procedures | Follow standard monitoring procedures. |
| Derived no effect levels (DNELs) | Not available. |
| Predicted no effect concentrations (PNECs) | Not available. |

8.2. Exposure controls

Appropriate engineering controls Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

| | |
|----------------------------|--|
| General information | Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. |
| Eye/face protection | Wear safety glasses with side shields (or goggles) and a face shield. Face shield is recommended. |
| Skin protection | |
| - Hand protection | Wear appropriate chemical resistant gloves. |

| | |
|---------------------------------|--|
| - Other | Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. |
| Respiratory protection | In case of insufficient ventilation, wear suitable respiratory equipment. |
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. |
| Hygiene measures | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace. |
| Environmental exposure controls | Inform appropriate managerial or supervisory personnel of all environmental releases. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|------------------------|
| Physical state | Liquid. |
| Form | Liquid. |
| Color | Yellow |
| Odor | Amine |
| Melting point/freezing point | Not available. |
| Boiling point or initial boiling point and boiling range | Not available. |
| Flammability | Not applicable. |
| Flash point | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| pH | Not available. |
| Kinematic viscosity | Not available. |
| Solubility | |
| Solubility (water) | Not available. |
| Partition coefficient (n-octanol/water) (log value) | Not available. |
| Vapor pressure | 0,000005 hPa estimated |
| Density and/or relative density | Not available. |
| Vapor density | Not available. |
| Particle characteristics | Not available. |

9.2. Other information

| | |
|---|---|
| 9.2.1. Information with regard to physical hazard classes | No relevant additional information available. |
| 9.2.2. Other safety characteristics | No relevant additional information available. |

SECTION 10: Stability and reactivity

| | |
|--|---|
| 10.1. Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| 10.2. Chemical stability | Material is stable under normal conditions. |
| 10.3. Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| 10.4. Conditions to avoid | Contact with incompatible materials. |
| 10.5. Incompatible materials | Peroxides. Phenols. |
| 10.6. Hazardous decomposition products | No hazardous decomposition products are known. |

SECTION 11: Toxicological information

| | |
|--|--|
| General information | Occupational exposure to the substance or mixture may cause adverse effects. |
| Information on likely routes of exposure | |
| Inhalation | May cause irritation to the respiratory system. |
| Skin contact | Causes severe skin burns. May cause an allergic skin reaction. |
| Eye contact | Causes serious eye damage. |

| | |
|------------------|---|
| Ingestion | Causes digestive tract burns. |
| Symptoms | Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. |

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

| | |
|---|---|
| Acute toxicity | Due to partial or complete lack of data the classification is not possible. |
| Skin corrosion/irritation | Causes severe skin burns and eye damage. |
| Serious eye damage/eye irritation | Causes serious eye damage. |
| Respiratory sensitization | Due to partial or complete lack of data the classification is not possible. |
| Skin sensitization | May cause an allergic skin reaction. |
| Germ cell mutagenicity | Due to partial or complete lack of data the classification is not possible. |
| Carcinogenicity | Due to partial or complete lack of data the classification is not possible. |
| Reproductive toxicity | Due to partial or complete lack of data the classification is not possible. |
| Specific target organ toxicity - single exposure | Due to partial or complete lack of data the classification is not possible. |
| Specific target organ toxicity - repeated exposure | Not applicable. |
| Aspiration hazard | Due to partial or complete lack of data the classification is not possible. |
| Mixture versus substance information | No information available. |

11.2. Information on other hazards

| | |
|--|---|
| Endocrine disrupting properties | This mixture does not contain any substances having endocrine disrupting properties with respect to human health as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight. |
| Other information | Not available. |

SECTION 12: Ecological information

| | |
|---|--|
| 12.1. Toxicity | Very toxic to aquatic life with long lasting effects. |
| 12.2. Persistence and degradability | No data is available on the degradability of any ingredients in the mixture. |
| 12.3. Bioaccumulative potential | No data available. |
| Partition coefficient n-octanol/water (log K_{ow}) | Not available. |
| Bioconcentration factor (BCF) | Not available. |
| 12.4. Mobility in soil | No data available. |
| 12.5. Results of PBT and vPvB assessment | This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. |
| 12.6. Endocrine disrupting properties | This mixture does not contain any substances having endocrine disrupting properties with respect to the environment as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight. |
| 12.7. Other adverse effects | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|-------------------------------|--|
| Residual waste | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| Contaminated packaging | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. |
| EU waste code | The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. |

| | |
|-------------------------------------|--|
| Disposal methods/information | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| Special precautions | Dispose in accordance with all applicable regulations. |

SECTION 14: Transport information

ADR

| | |
|---|--|
| 14.1. UN number | UN2735 |
| 14.2. UN proper shipping name | AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3,6,9,12-tetra-azatetradecamethylenediamine; pentactylenehexamine) |
| 14.3. Transport hazard class(es) | |
| Class | 8 |
| Subsidiary risk | - |
| Label(s) | 8 |
| Hazard No. (ADR) | 80 |
| Tunnel restriction code | E |
| 14.4. Packing group | III |
| 14.5. Environmental hazards | No. |
| 14.6. Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |

RID

| | |
|---|--|
| 14.1. UN number | UN2735 |
| 14.2. UN proper shipping name | AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3,6,9,12-tetra-azatetradecamethylenediamine; pentactylenehexamine) |
| 14.3. Transport hazard class(es) | |
| Class | 8 |
| Subsidiary risk | - |
| Label(s) | 8 |
| 14.4. Packing group | III |
| 14.5. Environmental hazards | Yes |
| 14.6. Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |

ADN

| | |
|---|--|
| 14.1. UN number | UN2735 |
| 14.2. UN proper shipping name | AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3,6,9,12-tetra-azatetradecamethylenediamine; pentactylenehexamine) |
| 14.3. Transport hazard class(es) | |
| Class | 8 |
| Subsidiary risk | - |
| Label(s) | 8 |
| 14.4. Packing group | III |
| 14.5. Environmental hazards | No. |
| 14.6. Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |

IATA

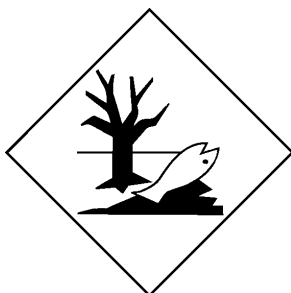
| | |
|---|---|
| 14.1. UN number | UN2735 |
| 14.2. UN proper shipping name | Amines, liquid, corrosive, n.o.s. (3,6,9,12-tetra-azatetradecamethylenediamine; pentactylenehexamine) |
| 14.3. Transport hazard class(es) | |
| Class | 8 |
| Subsidiary risk | - |
| 14.4. Packing group | III |
| 14.5. Environmental hazards | Yes |
| ERG Code | 8L |
| 14.6. Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Other information | |
| Passenger and cargo aircraft | Allowed with restrictions. |
| Cargo aircraft only | Allowed with restrictions. |

IMDG

| | |
|---|---|
| 14.1. UN number | UN2735 |
| 14.2. UN proper shipping name | AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3,6,9,12-tetra-azatetradecamethylenediamine; pentaethylenehexamine), MARINE POLLUTANT |
| 14.3. Transport hazard class(es) | |
| Class | 8 |
| Subsidiary risk | - |
| 14.4. Packing group | III |
| 14.5. Environmental hazards | |
| Marine pollutant | Yes |
| EmS | F-A, S-B |
| 14.6. Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Pentaethylenehexamine | |
| 14.7. Maritime transport in bulk according to IMO instruments | Not established. |
| ADN; ADR; IATA; IMDG; RID | |



Marine pollutant



General information

IMDG Regulated Marine Pollutant.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

UFI:

Austria: QRE0-U081-J00X-NDC0
Belgium: QRE0-U081-J00X-NDC0
Bulgaria: QRE0-U081-J00X-NDC0
Croatia: QRE0-U081-J00X-NDC0
Cyprus: QRE0-U081-J00X-NDC0
Czech Republic: QRE0-U081-J00X-NDC0
Denmark: QRE0-U081-J00X-NDC0
Estonia: QRE0-U081-J00X-NDC0
EU: QRE0-U081-J00X-NDC0
Finland: QRE0-U081-J00X-NDC0
France: QRE0-U081-J00X-NDC0
Germany: QRE0-U081-J00X-NDC0
Greece: QRE0-U081-J00X-NDC0
Hungary: QRE0-U081-J00X-NDC0
Iceland: QRE0-U081-J00X-NDC0
Ireland: QRE0-U081-J00X-NDC0
Italy: QRE0-U081-J00X-NDC0
Latvia: QRE0-U081-J00X-NDC0
Lithuania: QRE0-U081-J00X-NDC0
Luxembourg: QRE0-U081-J00X-NDC0
Malta: QRE0-U081-J00X-NDC0
Netherlands: QRE0-U081-J00X-NDC0
Norway: QRE0-U081-J00X-NDC0
Poland: QRE0-U081-J00X-NDC0
Portugal: QRE0-U081-J00X-NDC0
Romania: QRE0-U081-J00X-NDC0
Slovakia: QRE0-U081-J00X-NDC0
Slovenia: QRE0-U081-J00X-NDC0
Spain: QRE0-U081-J00X-NDC0
Sweden: QRE0-U081-J00X-NDC0

Authorizations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use, as amended
- Conditions of restriction given for the associated entry number should be considered

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

ANNEX 1, PART 1 Categories of dangerous substances
Hazard categories in accordance with Regulation (EC) No 1272/2008
- E1 Hazardous to the Aquatic Environment Acute
- E1 Hazardous to the Aquatic Environment Chronic

Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

National regulations

Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended. Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

France regulations

France INRS Table of Occupational Diseases

Not regulated.

Product registration number

| | |
|-----------------------|--------------------------|
| Austria | UFI: QRE0-U081-J00X-NDC0 |
| Belgium | UFI: QRE0-U081-J00X-NDC0 |
| Czech Republic | UFI: QRE0-U081-J00X-NDC0 |
| Denmark | UFI: QRE0-U081-J00X-NDC0 |
| European Union | UFI: QRE0-U081-J00X-NDC0 |
| Finland | UFI: QRE0-U081-J00X-NDC0 |
| France | UFI: QRE0-U081-J00X-NDC0 |
| Germany | UFI: QRE0-U081-J00X-NDC0 |
| Greece | UFI: QRE0-U081-J00X-NDC0 |
| Hungary | UFI: QRE0-U081-J00X-NDC0 |
| Italy | UFI: QRE0-U081-J00X-NDC0 |

| | |
|-------------|--------------------------|
| Netherlands | UFI: QRE0-U081-J00X-NDC0 |
| Norway | UFI: QRE0-U081-J00X-NDC0 |
| Poland | UFI: QRE0-U081-J00X-NDC0 |
| Portugal | UFI: QRE0-U081-J00X-NDC0 |
| Slovakia | UFI: QRE0-U081-J00X-NDC0 |
| Slovenia | UFI: QRE0-U081-J00X-NDC0 |
| Spain | UFI: QRE0-U081-J00X-NDC0 |
| Sweden | UFI: QRE0-U081-J00X-NDC0 |
| Switzerland | UFI: QRE0-U081-J00X-NDC0 |

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.
 AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).
 CAS: Chemical Abstract Service.
 CEN: European Committee for Standardization.
 IATA: International Air Transport Association.
 IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
 IMDG: International Maritime Dangerous Goods.
 MAC: Maximum Allowed Concentration.
 MARPOL: International Convention for the Prevention of Pollution from Ships.
 PBT: Persistent, bioaccumulative and toxic.
 RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
 STEL: Short term exposure limit.
 TLV: Threshold Limit Value.
 TWA: Time Weighted Average.
 VLE: Exposure Limit Value.
 VME: Exposure Average Value.
 vPvB: Very persistent and very bioaccumulative.

References

Not available.

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any statements, which are not written out in full under sections 2 to 15

H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.

Revision information

Product and Company Identification: Product and Company Identification
 SECTION 2: Hazards identification: Hazard statements
 SECTION 2: Hazards identification: Prevention
 SECTION 2: Hazards identification: Response
 SECTION 2: Hazards identification: GHS Symbols
 SECTION 6: Accidental release measures: 6.2. Environmental precautions
 SECTION 7: Handling and storage: 7.2. Conditions for safe storage, including any incompatibilities
 SECTION 8: Exposure controls/personal protection: Environmental exposure controls
 SECTION 13: Disposal considerations: Disposal methods/information

Training information

Follow training instructions when handling this material.

Disclaimer

ITW Performance Polymers cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.