

SAFETY DATA SHEET

According to EC Regulation 1907/2006 (REACH), Attachment II

Date of issue: 01/01/2014

Last change: 10/02/2015

Reform Pava 46 (Part B)

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

1.1. Product identifier : Reform Pava 46 – Part B

Refer to Section 3 for REACH information

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

Use of the Substance/Mixture : Curing Agent

Restrictions on Use : No data available.

1.3 Details of the supplier of the safety data sheet : Pava Resine Srl
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1.4. Emergency telephone number : +39 049 5953085

SECTION 2: Hazards identification

2.1 Classification according to Regulation 1272/2008 (CLP)

Serious Eye Damage - Category 1 H318:Causes serious eye damage.

2.2. Label Elements according to Regulation 1272/2008 (CLP)

Hazard pictograms/symbols



Signal Word: Danger

Hazard Statements:

H318:Causes serious eye damage.

Precautionary Statements:

Prevention : P280a:Wear protective gloves and eye/face protection.

Response : 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 CENTRE/doctor.

2.3 Other Hazards

Severe eye irritant.

Mild respiratory tract irritant.

Mild skin irritant.

Risk of serious damage to eyes.

Corrosive to eyes.

SECTION 3: Composition/information on ingredients

Substance/Mixture : Mixture

Components	EINECS / ELINCS Number	CAS Number	Concentration
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Decanedioic acid, compds. w/ 1,3-benzenedimethanamine-bi s a-deta glyc ph et rx prod-epic-form-propylene-oxid e-teta pol	Not Available	260549-92-6	20% - 50 %
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Components	Classification (CLP)	REACH Reg. #
Decanedioic acid, compds. w/ 1,3-benzenedimethanamine-bi s a-deta glyc ph et rx prod-epic-form-propylene-oxid e-teta pol	Eye Dam. 1 ;H318	

If REACH registration numbers do not appear the substance is either exempt from registration, does not meet the minimum volume threshold for registration, or the registration date has not yet come due. Refer to section 16 for full text of each relevant R-phrase and H-phrases.

CHEMICAL FAMILY: Polyamine Epoxy Resin Adduct Emulsion.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.
- Eye contact : Immediate medical attention is required. Rinse immediately with plenty of water also under the eyelids for at least 20 minutes. Remove contact lenses. Care should be taken not to rinse contaminated water into the unaffected eye. Rinse immediately with plenty of water also under the eyelids for at least 20 minutes. Remove contact lenses.
- Skin contact : Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash off immediately with plenty of water for at least 20 minutes. Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay.
- Ingestion : Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position. Prevent aspiration of vomit. Turn victim's head to the side.
- Inhalation : If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. Move to fresh air.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Alcohol-resistant foam. Carbon dioxide (CO₂).
Dry chemical.
Dry sand.
Limestone powder.

- Extinguishing media which must not be used for safety reasons. : No data available.

5.2 Special hazards arising from the

- : Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.

substance or mixture

5.3 Advice for fire-fighters : Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.

Further information : Do not allow run-off from fire fighting to enter drains or water courses., Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures : Wear suitable protective clothing, gloves and eye/face protection. Use self-contained breathing apparatus and chemically protective clothing. Evacuate personnel to safe areas.

6.2 Environmental precautions : Try to prevent the material from entering drains or water courses. Do not flush into surface water or sanitary sewer system. Construct a dike to prevent spreading.

6.3 Methods and material for containment and cleaning up : Collect run-off water and transfer to drums or tanks for later disposal. Full face shield with goggles underneath. Contact Air Products' Emergency Response Center for advice. Approach suspected leak areas with caution. Place in appropriate chemical waste container.

Additional advice : Full face shield with goggles underneath. Open enclosed spaces to outside atmosphere. If possible, stop flow of product.

6.4 Reference to Other Sections : For more information refer to Sections 8 & 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Use only in well-ventilated areas. Avoid contact with eyes. Avoid breathing vapors and/or aerosols. Use personal protective equipment. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

Product may partially freeze with extended exposure to cold temperatures, resulting in crystallization, haziness or separation. If this occurs, product should be warmed to 100-140°F (38-60°C) for one hour and stirred until clear. Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3 Specific end use(s)

Refer to section 1 or the extended SDS if applicable

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

If applicable, refer to the extended section of the SDS for further information on CSA.

8.2 Exposure controls

Engineering measures

Provide readily accessible eye wash stations and safety showers.

Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

Personal protective equipment

- | | |
|---|--|
| Respiratory protection | : Keep self contained breathing apparatus readily available for emergency use. In atmospheres where the material is sprayed, workers should avoid contact with aerosols containing the Curing Agent through proper engineering controls such as exhaust ventilation and/or proper protective equipment such as full-face air-supplied respirators, gloves and full body protective clothing. Wear appropriate respirator when ventilation is inadequate. |
| Hand protection | : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Nitrile rubber.
In emergency situations, wear impermeable gloves with cuffs to prevent spread of material to area above the wrists.
Butyl-rubber
Nitrile rubber.
Neoprene gloves. |
| Eye/face Protection | : Where there is the potential for exposure, chemical splash-proof goggles and a face shield must be worn. Other individuals working in the vicinity of this material where exposure can occur should also be fitted with chemical splash goggles. Workers should not contact their eyes or skin with hands contaminated with the Curing Agent. |
| Skin and body protection | : Long sleeve shirts and trousers without cuffs. |
| Environmental exposure controls | : Try to prevent the material from entering drains or water courses. Do not flush into surface water or sanitary sewer system. |
| Special instructions for protection and hygiene | : Discard contaminated leather articles. Wash hands at the end of each workshift and before eating, smoking or using the toilet. Provide readily accessible eye wash stations and safety showers. |
| Environmental Exposure Controls | : If applicable, refer to the extended section of the SDS for further information on CSA. |

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

(a/b) Physical state/Colour	: Viscous. Yellow.
(c) Odour	: Ammoniacal.
(d) Density	: 1.1 g/cm ³ (68.671 lb/ft ³) at 21 °C (70 °F)
(e) Relative Density	: 1.1 (water = 1)
(f) Melting point / freezing point	: < 32 °F (< 0 °C)
(g) Boiling point/range	: > 212 °F (> 100 °C)
(h) Vapor pressure	: No data available.
(i) Water solubility	: No data available.
(j) Partition coefficient (n-octanol/water)	: No data available.
(k) pH	: 9.2
(l) Viscosity	: 7,500 mPa.s at 68 °F (20 °C)
(m) Particle characteristics	: No data available.
(n) Lower and upper explosion / flammability limits	: Not applicable.
(o) Flash point	: > 212 °F (> 100 °C)
(p) Autoignition temperature	: No data available.
(q) Decomposition temperature	: No data available.

9.2. Other information

Explosive properties	: No data available.
Oxidizing properties	: No data available.
Odor threshold	: No data available.
Evaporation rate	: No data available.
Flammability (solid, gas)	: Not applicable.

Relative vapor density : Not applicable.

SECTION 10: Stability and reactivity

- 10.1 Reactivity : Refer to possibility of hazardous reactions and/or incompatible materials sections.
- 10.2. Chemical stability : Stable under normal conditions.
- 10.3. Possibility of hazardous reactions : No data available.
- 10.4. Conditions to avoid : No data available.
- 10.5. Incompatible materials : Organic acids (i.e. acetic acid, citric acid etc.).
Mineral acids.
Sodium hypochlorite.
Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.
Oxidizing agents.
- 10.6 Hazardous decomposition products : Nitric acid.
Ammonia
Nitrogen oxides (NO_x).
Nitrogen oxide can react with water vapors to form corrosive nitric acid.
Carbon monoxide.
Carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Likely routes of exposure

- Effects on Eye : Severe eye irritation. Causes eye burns.
- Effects on Skin : Mild skin irritation.
- Inhalation Effects : Harmful if inhaled and may cause delayed lung injury. May cause nose, throat, and lung irritation. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.
- Ingestion Effects : No data available.
- Symptoms : Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat.

Acute toxicity

Acute Oral Toxicity	: LD50 : > 2,000 mg/kg Species : Rat.
Acute Inhalation Toxicity	: Inhalation of aerosols of a chemically similar material resulted in the deaths of rats during administration and in transient central nervous system symptoms including lethargy, ataxia, tremors and convulsions.
Acute Dermal Toxicity	: LD50 : > 2,000 mg/kg Species : Rabbit.
Skin corrosion/irritation	: Mild skin irritation. Irritation data from similar products.
Serious eye damage/eye irritation	: Severe eye irritation. Corrosive to eyes.
Sensitization.	: No data available.

Chronic toxicity or effects from long term exposures

Carcinogenicity	: No data available.
Reproductive toxicity	: No data is available on the product itself.
Germ cell mutagenicity	: No data is available on the product itself.
Specific target organ systemic toxicity (single exposure)	: Eyes. Eye disease.
Specific target organ systemic toxicity (repeated exposure)	: Ocular irritation tests with rabbits did not result in any animal deaths.
Aspiration hazard	: No data available.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity	: No data is available on the product itself.
Toxicity to other organisms	: No data is available on the product itself.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data is available on the product itself.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

If applicable, refer to the extended section of the SDS for further information on CSA.

12.6 Other adverse effects

Information given is based on data obtained from similar substances. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Effect on the ozone layer

Ozone Depleting Potential : No data available.

Global Warming Potential : No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods : Contact supplier if guidance is required.

Contaminated packaging : Dispose of container and unused contents in accordance with federal, state, and local requirements.

SECTION 14: Transport information

ADR

Not dangerous goods

IATA

Not dangerous goods

IMDG

Not dangerous goods

RID

Not dangerous goods

Further Information

Not dangerous goods The transportation information is not intended to convey all specific regulatory data relating to this material. For complete transportation information, contact an Air Products customer service representative.

SECTION 15: Regulatory information

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

Country	Regulatory list	Notification
USA	TSCA	Included on Inventory.
EU	EINECS	Included on EINECS inventory or polymer substance, monomers included on EINECS inventory or no longer polymer.
Canada	DSL	Not on Inventory. Notifications have been submitted to Environment Canada.
Australia	AICS	Included on Inventory.
Japan	ENCS	Included on Inventory.
South Korea	ECL	Included on Inventory.
China	SEPA	Included on Inventory.
Philippines	PICCS	Included on Inventory.

WGK Identification Number: : 2 - water endangering

15.2 Chemical safety assessment

If this product does not contain exposure scenarios, the components in this product are either exempt from REACH, do not meet the minimum volume threshold for a CSA, or the CSA has not yet been completed.

SECTION 16: Other information

Ensure all national/local regulations are observed.

Hazard Statements:

H318 Causes serious eye damage.

Indication of Method:

Serious Eye Damage Category 1 Causes serious eye damage. Calculation method

Abbreviations and acronyms:

ATE - Acute Toxicity Estimate

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

EINECS - European Inventory of Existing Commercial Chemical Substances

ELINCS - European List of Notified Chemical Substances

CAS# - Chemical Abstract Service number

PPE - Personal Protection Equipment

Kow - octanol-water partition coefficient
DNEL - Derived No Effect Level
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
NOEC - No Observed Effect Concentration
PNEC - Predicted No Effect Concentration
RMM - Risk Management Measure
OEL - Occupational Exposure Limit
PBT - Persistent, Bioaccumulative and Toxic
vPvB - Very Persistent and Very Bioaccumulative
STOT - Specific Target Organ Toxicity
CSA - Chemical Safety Assessment
EN - European Standard
UN - United Nations
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
IATA - International Air Transport Association
IMDG - International Maritime Dangerous Goods
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
WGK - Water Hazard Class

Key literature references and sources for data:

ECHA - Guidance on the compilation of safety data sheets
ECHA - Guidance on the application of the CLP Criteria
ARIEL database

Safety data Sheet by

PAVA Resine laboratory.

Interlocutor

PAVA Resine laboratory.

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Note for reader

Information in this safety data sheet have been considered valid by Pava Resine at the moment of preparation or they have been prepared basing on sources considered to be reliable, but user has to investigate and understand other sources of information, follow all laws and procedures about safe handling and use of the product and to define suitability of the product for the expected use. All Pava Resine products are subjected to sell terms and conditions of Pava Resine. Pava Resine do not issue any warranties, explicit or implicit, concerning the product or its merchantability or SUITABILITY for any purpose or concerning accuracy of any information provided by PAVA RESINE, except that product consists with specifications. None information in this document represents a sell offer of products. User has to ensure that his activities respect all national and local norms. Since using product conditions cannot be regulated by producer, user has to define conditions that are necessary to use this product safely.
