according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2015/830



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

1.1. product identifiers

Article No. (manufacturer/supplier) 0019A

Trade name/designation DWH 311 P resin

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

1.3. Details of the supplier of the safety data sheet

supplier (manufacturer/importer/downstream user/distributor)

DIAMANT Metallplastic GmbH

Hontzlarstr. 12-14 Telephone: +49(0)2166-98360 41238 Mönchengladbach Telefax: +49(0)2166-83025

Department responsible for information:

Lab

E-mail (competent person) info@diamant-polymer.de

1.4. Emergency telephone number

Emergency telephone number +49(0)2166-98360

Only available during office hours.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Skin Irrit. 2 / H315

Eye Irrit. 2 / H319

Serious eye damage/eye irritation

Skin Sens. 1 / H317

Muta. 2 / H341

Skin corrosion/irritation

Serious eye damage/eye irritation

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Suspected of causing genetic defects.

Aquatic Chronic 3 / H412 Hazardous to the aquatic environment Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms





Warning

Hazard statements

H315 Causes skin irritation. H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P201 Obtain special instructions before use.

P233 Keep container tightly closed. P261 Avoid breathing vapours.

P264 Wash hands thoroughly after handling. P273 Avoid release to the environment.

P280 Wear protective gloves and eye/face protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P314 Get medical advice/attention if you feel unwell.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P501 Dispose of contents/container to industrial incineration plant.

Hazard components for labelling

Bisphenole A-epoxy resin N,N-Bis(2-3-epoxypropyl)aniline

(Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2))

according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2015/830



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Supplemental hazard information

EUH205 Contains epoxy constituents. May produce an allergic reaction.

2.3. Other hazards

Description

No information available.

SECTION 3: Composition / information on ingredients

32 Mixtures

Epoxyresinmix + Fillers Classification according to Regulation (EC) No 1272/2008 [CLP]

EC No. **REACH No.** CAS No. Designation weight-% Index No. classification // Remark 500-033-5 01-2119456619-26-XXXX 25068-38-6 Bisphenole A-epoxy resin 20 - 25 603-074-00-8 Eye Irrit. 2 H319 / Skin Irrit. 2 H315 / Skin Sens. 1 H317 / Aquatic Chronic 2 H411 Specific concentration limit (SCL): Eye Irrit. 2 H319 >= 5 / Skin Irrit. 2 H315 >= 5 218-259-5 01-2120782027-53-XXXX 2095-06-9 5 - 10 N,N-Bis(2-3-epoxypropyl)aniline Acute Tox. 4 H302 / Skin Sens. 1 H317 / Muta. 2 H341 / Aquatic Chronic 4 H413 231-072-3 01-2119529243-45-XXXX 7429-90-5 aluminium powder (stabilised) 1 - 2,5Water-react. 2 H261 / Flam. Sol. 1 H228 013-002-00-1 618-939-5 01-2119463471-41-XXXX 933999-84-9 (Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2)) 0,5 - 1Skin Irrit. 2 H315 / Eye Irrit. 2 H319 / Skin Sens. 1 H317 / Aquatic Chronic 3 H412

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

Following ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

In all cases of doubt, or when symptoms persist, seek medical advice.

Indication of any immediate medical attention and special treatment needed

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

Extinguishing media 5.1.

according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2015/830



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Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Unsuitable extinguishing media

strong water jet

5.2. Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice for firefighters

Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cleansing agents. Do not use solvents.

6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers, equipment, pumps and ventilation facilities. Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Do not empty containers with pressure no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

Further information

Vapours are heavier than air. Vapours form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRGS 727)".

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 20 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values:

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not applicable

DNEL:

Bisphenole A-epoxy resin

Index No. 603-074-00-8 / EC No. 500-033-5 / CAS No. 25068-38-6 DNEL acute dermal, short-term (systemic), Workers: 8,33 mg/kg

DNEL long-term dermal (systemic), Workers: 8,33 mg/kg

DNEL acute inhalative (systemic), Workers: 12,25 mg/m³

DNEL long-term inhalative (systemic), Workers: 12,25 mg/m³

DNEL short-term oral (acute), Consumer: 0,75 mg/kg DNEL long-term oral (repeated), Consumer: 0,75 mg/kg

DNEL acute dermal, short-term (systemic), Consumer: 3,571 mg/kg

DNEL long-term dermal (systemic), Consumer: 3,571 mg/kg DNEL acute inhalative (systemic), Consumer: 0,75 mg/m³ DNEL long-term inhalative (systemic), Consumer: 0,75 mg/m³

PNEC:

Bisphenole A-epoxy resin

Index No. 603-074-00-8 / EC No. 500-033-5 / CAS No. 25068-38-6

PNEC aquatic, freshwater: 0,006 mg/L PNEC aquatic, marine water: 0,0006 mg/L PNEC sediment, freshwater: 0,996 mg/kg PNEC sediment, marine water: 0,0996 mg/kg

PNEC, soil: 0,196 mg/kg

PNEC sewage treatment plant (STP): 10 mg/L PNEC Secondary Poisoning: 11 mg/kg

8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Personal protection equipment

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection

For prolonged or repeated handling the following glove material must be used: Nitrile rubber or butyl rubber

Thickness of the glove material > 0,4 mm; Breakthrough time: > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection

Wear closely fitting protective glasses in case of splashes.

Body protection

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Physical state: solid anthracite

Odour: characteristic

Odour threshold: not applicable pH at 20 °C: not applicable

according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2015/830



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Melting point/freezing point: not applicable Initial boiling point and boiling range: not applicable

Flash point: 135 °C

Method: DIN 53213-1

Evaporation rate: not applicable

flammability

Burning time: not applicable

Upper/lower flammability or explosive limits:

Lower explosion limit:

Upper explosion limit:

Vapour pressure at 20 °C:

Vapour density:

not applicable
not applicable
not applicable

Relative density:

Density at 20 °C: 1,95 g/cm³

Solubility(ies):

Water solubility at 20 °C: insoluble
Partition coefficient: n-octanol/water: see section 12

Auto-ignition temperature: 400 °C

Source: aluminium powder (stabilised)

Decomposition temperature: not applicable

Viscosity at °C: Pastös

Explosive properties: not applicable
Oxidising properties: not applicable

9.2. Other information

Solid content: 100,00 weight-%

solvent content:

Organic solvents: 0 weight-% Water: 0 weight-%

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. Conditions to avoid

Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. Incompatible materials

not applicable

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

SECTION 11: Toxicological information

Classification according to Regulation (EC) No 1272/2008 [CLP]

11.1. Information on toxicological effects

Acute toxicity

Bisphenole A-epoxy resin oral, LD50, Rat: > 2000 mg/kg dermal, LD50, Rat: > 2000 mg/kg dermal, LD50, Rabbit: 23 mg/kg

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aluminium powder (stabilised) oral, LD50, Rat: 15900 mg/kg

inhalative (Gases), LC50, Rat: > 888 ppmV (4 h)

N,N-Bis(2-3-epoxypropyl)aniline

oral, LD50, Rat

Skin corrosion/irritation; Serious eye damage/eye irritation

Causes skin irritation.

Causes serious eye irritation.

Bisphenole A-epoxy resin

Skin (4 h)

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Bisphenole A-epoxy resin

Skin:

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Suspected of causing genetic defects.

STOT-single exposure; STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Practical experience/human evidence

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

Overall Assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

SECTION 12: Ecological information

Classification according to Regulation (EC) No 1272/2008 [CLP]

Do not allow to enter into surface water or drains.

12.1. Toxicity

Bisphenole A-epoxy resin

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 1,75 mg/L (96 h)

Daphnia toxicity, EC50: 1,8 mg/L (48 h)

Algae toxicity, ErC50: 11 mg/L N,N-Bis(2-3-epoxypropyl)aniline

Fish toxicity, LC50, Leuciscus idus (golden orfe): 4,2 mg/L (96 h)

Daphnia toxicity, EC50, Daphnia magna: 18 mg/L (48 h)

Long-term Ecotoxicity

Harmful to aquatic life with long lasting effects.

Bisphenole A-epoxy resin Fish toxicity, LC50 (96 h)

12.2. Persistence and degradability

Toxicological data are not available.

12.3. Bioaccumulative potential

Toxicological data are not available.

12.4. Mobility in soil

Toxicological data are not available.

12.5. Results of PBT and vPvB assessment

according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2015/830



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The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product

Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

List of proposed waste codes/waste designations in accordance with EWC

Waste paint and varnish containing organic solvents or other dangerous substances

*Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Appropriate disposal / Package

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

No dangerous good in sense of this transport regulation.

14.1. UN number

not applicable

14.2. UN proper shipping name

14.3. Transport hazard class(es)

not applicable

14.4. Packing group

not applicable

not applicable

14.5. Environmental hazards

Marine pollutant

not applicable

14.6. Special precautions for user

Land transport (ADR/RID)

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

Further information

Land transport (ADR/RID)

tunnel restriction code

Sea transport (IMDG)

EmS-No. not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU legislation

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]

VOC-value (in g/L): 0

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

15.2. Chemical Safety Assessment

according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2015/830



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For the following substances of this mixture a chemical safety assessment has been carried out:

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500-033-5 25068-38-6	Bisphenole A-epoxy resin	01-2119456619-26-XXXX
218-259-5 2095-06-9	N,N-Bis(2-3-epoxypropyl)aniline	01-2120782027-53-XXXX
231-072-3 7429-90-5	aluminium powder (stabilised)	01-2119529243-45-XXXX
618-939-5 933999-84-9	(Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1:2))	01-2119463471-41-XXXX

SECTION 16: Other information

Full text of classification in section 3

Eye Irrit. 2 / H319 Serious eye damage/eye irritation Causes serious eye irritation.

Skin Irrit. 2 / H315 Skin corrosion/irritation Causes skin irritation.

Skin Sens. 1 / H317 Respiratory or skin sensitisation May cause an allergic skin reaction.

Aquatic Chronic 2 / H411 Hazardous to the aquatic environment Toxic to aquatic life with long lasting effects.

Acute Tox. 4 / H302 Acute toxicity (oral) Harmful if swallowed.

Muta. 2 / H341 Germ cell mutagenicity Suspected of causing genetic defects (state

route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

Aquatic Chronic 4 / H413 Hazardous to the aquatic environment May cause long lasting harmful effects to

aquatic life.

Water-react. 2 / H261 Substances or mixtures which, in contact In contact with water releases flammable

with water, emit flammable gases gases.

Flam. Sol. 1 / H228 flammable solids Flammable solid.

Aquatic Chronic 3 / H412 Hazardous to the aquatic environment Harmful to aquatic life with long lasting effects.

Classification procedure

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Skin Irrit. 2Skin corrosion/irritationCalculation method.Eye Irrit. 2Serious eye damage/eye irritationCalculation method.Skin Sens. 1Respiratory or skin sensitisationCalculation method.Muta. 2Germ cell mutagenicityCalculation method.Aquatic Chronic 3Hazardous to the aquatic environmentCalculation method.

Abbreviations and acronyms

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

OEL Occupational Exposure Limit Value

BLV Biological Limit Value
CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging CMR Carcinogenic, Mutagenic and Reprotoxic

DIN German Institute for Standardization / German industrial standard

DNEL Derived No-Effect Level

EAKV European Waste Catalogue Directive

EC Effective Concentration
EC European Community
EN European Standard

IATA-DGR International Air Transport Association – Dangerous Goods Regulations

IBC Code International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk ICAO-TI International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous

Goods by Air

IMDG Code International Maritime Code for Dangerous Goods ISO International Organization for Standardization

LC Lethal Concentration

LD Lethal Dose

MARPOL Maritime Pollution: The International Convention for the Prevention of Pollution from Ships

OECD Organisation for Economic Cooperation and Development

PBT persistent, bioaccumulative, toxic PNEC Predicted No Effect Concentration

according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2015/830



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REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Regulations concerning the International Carriage of Dangerous Goods by Rail

UN United Nations

VOC Volatile Organic Compounds

vPvB very persistent and very bioaccumulative

Further information

Classification according to Regulation (EC) No 1272/2008 [CLP]

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in section 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

^{*} Data changed compared with the previous version