

according Directive EC 1907/2006 and Directive EU 2020/878

HEAT EXCHANGER type REK+, REC+, RSP+, REP+, RED+, RAD+, RSF+, RFK+, RFC+

Date of issue: 19. 8. 2024
Date of revision: Revision: -

Page 1 z 9

SECTION 1.

Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: HEAT EXCHANGER type REK+, REC+, RSP+, REP+, RED+,

RAD+, RSF+, RFK+, RFC+ containing adhesives

Chemical name: -

Registration number: is not assigned, it is about article

UFI code: -

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

Identified uses of the substance or mixture: Air to Air plate heat exchangers

Uses advised against: All other uses different than identified uses.

1.3. Details of the supplier of the safety data sheet

Supplier identification

Trade name: RECUTECH s.r.o.

Address: Fáblovka 592, 533 52 Pardubice

 VAT number:
 CZ28859880

 Phone number:
 +420 467070245

 E-mail:
 info@recutech.com

Responsible person for the safety data sheet
Trade name: EKONOX, s.r.o.
E-mail: info@ekonox.cz

1.4. Emergency telephone number

European Emergency Line 112

+420 602 414 051 or Toxicological information centre, Na Bojišti 1, 128 08 Prague 2, non-stop telephone 224 919 293, 224 915 402, or (only during the day 224 914 575)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

Hazard Class and Not classified as a dangerous

Category Code:

H-statements: None.

For the wording of the listed H-statements, refer to section 16.

The most important adverse physicochemical effects: Not known.

The most important adverse for human health:

Not known.

Inhalation:Not known.Ingestion:Not known.Contact with skin:Not known.Contact with eyes:Not known.

The most important adverse for the environment: Not known.



according Directive EC 1907/2006 and Directive EU 2020/878

HEAT EXCHANGER type REK+, REC+, RSP+, REP+, RED+, RAD+, RSF+, RFK+, RFC+

Date of issue: 19. 8. 2024
Date of revision: Revision: -

Page 2 z 9

2.2. Label elements

Labelling of mixture with classification according Directive 1272/2008/EC (CLP):

Hazard pictogram(s): None.

Signal word: None.

H-statements: None.

P-statements: None.

Contains: -

For the wording of the listed H- and P-statements refer to section 16.

2.3. Other hazard

The product does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation. The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 % by weight.

SECTION 3. Composition/information on ingredients

3.1. Mixture

Product name: HEAT EXCHANGER type REK+, REC+, RSP+, REP+, RED+, RAD+, RSF+,

RFK+, RFC+ containing adhesives

Mixture specification: The product is composed of aluminium or plastic components and adhesives.

Aluminium or plastic components: > 94 % hm

Adhesives: < 6 % hm

Other identification data of substances:

Does not contain dangerous substances in a concentration higher than 0.1% by weight.

	•		, ,
1) Index No 2) CAS No 3) EC No 4) Registration No	Chemical name	Concentration [% by weight]	Classification EC No 1272/2008
1) - 2) - 3) - 4) -	-	-	-

For the wording of the listed H-statements refer to section 16.

SECTION 4. First aid measures

4.1. Description of first aid measures

General information:

Symptomatic treatment. In case of health problems or in doubt seek medical treatment.

Inhalation:

Remove to fresh air. Keep the victim war, calm and in a position comfortable for breathing.



according Directive EC 1907/2006 and Directive EU 2020/878

HEAT EXCHANGER type REK+, REC+, RSP+, REP+, RED+, RAD+, RSF+, RFK+, RFC+

Date of issue: 19. 8. 2024
Date of revision: Revision: -

Page 3 z 9

Skin contact:

Wash with plenty of water and soap.

Contact with eyes:

A few minutes gently rinse with water. Remove the contact lenses when they are deployed, and if it can be removed easily. Continue rinsing with water for at least 15 minutes.

Ingestion:

Rinse mouth thoroughly immediately by water. Do not induce vomiting! Seek physician immediately.

Personal protective equipment for first aid responders

Ensure the safety of the rescuer. When entering an infested area, it is necessary to have adequate protective equipment and safeguarding by other workers. Always use protective gloves. Wash carefully hands after first aid.

Other data:

Other information concerning the delivery of first aid measures, especially in serious cases of health damage, the attending physician can consult the procedure with Toxikologické informační středisko, Praha, Czech Republic, **phone (continually):** +420 224 919 293, 224 915 402, fax 224 914 570.

4.2. Most important symptoms and effects, both acute and delayed

Not known.

Danger to eyes:

Not known.

Risk of skin contact:

Not known.

Risk of ingestion:

Not known.

Risk of inhalation:

Not known.

4.3. Indication of any immediate medical attention and special treatment needed

See section 4.1

SECTION 5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Dry chemical powder, foam, carbon dioxide, water mist spray.

Unsuitable extinguishing media:

Not known.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: During the fire may produce harmful gases containing carbon monoand di- oxides.

5.3. Advice for firefighters

Use protective clothing and self-breathing apparatus (EN 133).

5.4. Other information

Not available.



according Directive EC 1907/2006 and Directive EU 2020/878

HEAT EXCHANGER type REK+, REC+, RSP+, REP+, RED+, RAD+, RSF+, RFK+, RFC+

Date of issue: 19. 8. 2024
Date of revision: Revision: -

Page 4 z 9

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Protective measures:

Are not required.

Emergency measures:

In the case of fire use suitable personal protective equipment to avoid contact with product.

6.1.2 For emergency responders

Protective equipment: Use suitable personal protective equipment to avoid contact with product.

6.2. Environmental precaution

Prevent leakage to surface/ underground water or sewer.

6.3. Methods and material for containment and cleaning up

6.3.1 Methods of containment of leakage

Prevent damage to the product.

6.3.2 Methods for cleaning up

Collect the product mechanically. Disposal Section 13.

6.4. Reference to other section

See Section 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

7.1.1 Protective precautions

Fire precaution: No smoking. Keep away from flames.

Precaution for elimination of dust and aerosol formation: None.

Environment protection: None.

7.1.2 Advice on general occupational hygiene

Do not eat, drink or smoke while handling the product. After work and always before eating, drinking, smoking and using the toilet, thoroughly wash your hands with soap and water. Use personal protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and conditions of storage:

Store separately from food, beverages and feed.

Incompatible materials: Strong acids a hydroxides.

Storage requirements: Storage areas must comply with the valid legislation.

7.3. Specific end use(s)

See section 1.2.



according Directive EC 1907/2006 and Directive EU 2020/878

HEAT EXCHANGER type REK+, REC+, RSP+, REP+, RED+, RAD+, RSF+, RFK+, RFC+

Date of issue: 19. 8. 2024
Date of revision: Revision: -

Page 5 z 9

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

The adhesives contained in product not contains substances for which the occupational concentration limits are set (Czech Republic NV 361/2007 Coll., as amended) (maximum permissible exposure limit = PEL; maximum permissible concentration = NPK-P).

8.2. Exposure control

8.2.1 Appropriate engineering controls

Measures for the substance / mixture to prevent exposure during specified uses:

Do not smoke, drink and eat. Use personal protective equipment.

Technical measures to prevent exposure: None.

8.2.2 Personal protective equipment

8.2.2.1 Eye/ face protection

Not required. In case of fire use complete face protection.

8.2.2.2 Skin protection

Hand protection: Suitable protective working gloves.

Other skin protection: Not required. In case of fire use protective clothing.

8.2.2.3 Respiratory protection

Not required. In case of fire use self-breathing apparatus.

8.2.2.4 Thermal hazard

Not known.

8.2.3 Environmental exposure controls

Prevent leakage to surface/ underground water or sewer.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Informations below are for adhesives

Appearance: solid, colourless - white

Odour: none

Odour threshold: not determined pH: not determined Melting point/ freezing point: not determined Initial boiling point and boiling range: not determined not determined Flash point: Evaporation rate: not determined Flammability (solid, gas): not determined Upper/lower explosive limits: not determined Vapour pressure: not determined Vapour density: not determined Density: $0.9 - 1.4 \text{ g/cm}^3$ Solubility: insoluble in water Partition coefficient: n-octanol/water: not determined



according Directive EC 1907/2006 and Directive EU 2020/878

HEAT EXCHANGER type REK+, REC+, RSP+, REP+, RED+, RAD+, RSF+, RFK+, RFC+

Date of issue: 19. 8. 2024
Date of revision: Revision: -

Page 6 z 9

Auto-ignition temperature: not determined
Decomposition temperature: not determined
Viscosity (kinetic): not determined
Explosive properties: not determined
Oxidizing properties: not determined

9.2. Other information

Not available.

SECTION 10. Stability and reactivity

10.1. Reactivity

Product is not reactive under normal conditions of use.

10.2. Chemical stability

Product is chemical stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Not known.

10.4. Conditions to avoid

Sources of ignition.

10.5. Incompatibles materials

Strong acids and hydroxides.

10.6. Hazardous decomposition products

No decomposition when it is used as intended. In case of fire, CO₂ and CO are generated.

SECTION 11. Toxicological information

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

Acute toxicity: not classified Skin corrosion/irritation: not classified Serious eye damage/irritation: not classified not classified Respiratory or skin sensitization: Germ cell mutagenicity: not classified not classified Carcinogenicity: not classified Reproductive toxicity: STOT-single exposure: not classified STOT-repeated exposure: not classified not classified Aspiration hazard:

Information on likely routes of exposure: not known

Symptoms related to the physical, chemical and toxicological characteristics:

not known

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

not known not known not known

Interactive effects
Absence of specific data



according Directive EC 1907/2006 and Directive EU 2020/878

HEAT EXCHANGER type REK+, REC+, RSP+, REP+, RED+, RAD+, RSF+, RFK+, RFC+

Date of issue: 19. 8. 2024
Date of revision: Revision: -

Page 7 z 9

Mixturesnot knownMixture versus substance informationnot known

11.2. Information on other hazards

Data not available.

SECTION 12. Ecological information

12.1. Toxicity

The product is not harmful to the aquatic life.

12.2. Persistence and durability

Data are not available.

12.3. Bioaccumulative potential

Data are not available.

12.4. Mobility in soil

Data are not available.

12.5. Results of PBT and vPvB assessment

Product is not PBT or vPvB.

12.6. Endocrine disrupting properties

The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 % by weight.

12.7. Other adverse effects

Advise authorities if product has entered or may enter watercourses or sewer drains.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

13.1.1 Removing the product / packaging:

Catalogue numbers of waste types have to be assigned by the user upon the product application used and other facts.

Substance treatment methods:

Product has to be disposed as waste. Product has to be disposed in accordance with law of wastes in valid version and with connecting on legal directives.

Legal regulations relating to waste

Directive on waste no. 2006/12/EC and 2008/98/EC. Disposal must be made according to official regulations.

13.1.2 Other information

Waste labelling must correspond with European catalogue of waste.



according Directive EC 1907/2006 and Directive EU 2020/878

HEAT EXCHANGER type REK+, REC+, RSP+, REP+, RED+, RAD+, RSF+, RFK+, RFC+

Date of issue: 19. 8. 2024
Date of revision: Revision: -

Page 8 z 9

SECTION 14. Fransport information

Not dangerous for transport.

14.1. UN number or ID number

Not assigned.

14.2. UN proper shipping name

Not assigned.

14.3. Transport hazard class(es)

Not assigned.

14.4. Packing group

Not assigned.

14.5. Environmental hazards

Not assigned.

14.6. Special precautions for user

Not assigned.

14.7. Maritime transport in bulk according to IMO instruments

Not assigned.

14.8. Other information

Not assigned.

SECTION 15. Regulatory information

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

REGULATION (EC) No 1907/2006 of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

REGULATION (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures

COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

COMMISSION REGULATION (EU) 2020/878, amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and



according Directive EC 1907/2006 and Directive EU 2020/878

HEAT EXCHANGER type REK+, REC+, RSP+, REP+, RED+, RAD+, RSF+, RFK+, RFC+

Date of issue: 19. 8. 2024
Date of revision: Revision: -

Page 9 z 9

Restriction of Chemicals (REACH).

CZECH NATIONAL LEGISLATION (Safety, health and environmental regulations): Act no. 350/2011 Coll., on chemical substances and chemical preparations

15.2. Chemical safety assessment

Not required.

SECTION 16. Other information

16.1. Changes in MSDS

MSDS was carried out in accordance with the Regulation (EC) 1907/2006 as amended by the EU 2020/878 Commission.

16.2. Methods used for the purpose of classification of mixture (EC) No 1272/2008

Classification had been elaborated according with REGULATION (EC) No 1272/2008, information from ECHA website and SAFETY DATA SHEET for adesives.

List of relevant H-statements (Sections 2. and 3.):

-

List of relevant P-statements (Sections 2.):

_

16.3. Advices for training

To acquaint employees with the content of this safety certificate and with the general rules for handling chemicals and mixtures. Repeated training is performed at least once every 2 years. A written record of training and training must be made a written record of a legal entity or a natural person doing business for 3 years.

16.4. Wellspring of information for elaboration of Safety Data Sheet

SAFETY DATA SHEET ISOPOHYBRID 55 Transparent, date of issue 20. 7. 2018 SAFETY DATA SHEET TERMOKOL, revision no. 3.3, date of revision 21. 7. 2020, ECHA database of chemical substances (www.echa.europe.eu)

16.5. Abbreviations

CAS Chemical Abstracts Service
NPK-P Maximal available concentration
PBT Persistent, bio accumulative and toxic

PEL Permissible exposure limit

vPvB Very persistent and very bio accumulative

16.6. Other information

The details in this safety data sheet are based on our status of knowledge and experience at the time of date issue. They are not a contractual assurance of quality properties of the product, and they apply only in conjunction with correct and proper handling of the product under normal conditions, and according to the details of specified use on the packing and/or in the technical instructions. The user himself is fully responsible for every other use of the product such as in combination with other products or with other processes.