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<b>ECOREL FREE HT 245-16</b>		<b>050434700</b>

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

### 1.1. Product identifier

Trade name : ECOREL FREE HT 245-16

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

1.2.1 Relevant identified uses : Solderpaste for the soldering of electronic components

1.3. Details of the supplier of the safety data sheet : INVENTEC PERFORMANCE CHEMICALS SA  
20 rue de Bourgogne  
BP 211  
69802 SAINT-PRIEST Cedex France  
Tel : +33 (0) 4 72 28 13 00  
Fax : +33 (0) 4 72 28 13 41

DISTRIBUTOR :  
: SPAIN: Perez Pujol, 4 - 2º 46002 Valencia - Tel : (34) 96 353 51 93.  
ITALIA: Via Pusterla, 8 - I - 20013 Magenta - Milano - Tel : (39) 02 48 40 12 06.  
GERMANY: Robert-Bosch-Str.14 D 40668 Meerbusch - Tel : +49 (0)21 50 70 73 00.  
SUISSE: Z.I. Petits Champs 15 CH-1400 Yverdon-les-Bains - Tel : +41(0) 24 424 80 90  
HUNGARY: Climalife Kft. 1118 Budapest, Villányi út 47 - Tel: (36) 23 431 660.  
NEDERLAND: Van Konijnenburgweg 84 NL-4612PL Bergen op zoom- Tel : (31) 164 212 840

e-mail : ContactFDS@inventec.dehon.com

1.4 Emergency telephone number : EMERGENCY TELEPHONE NUMBER (24h/24) : + 33 (0) 1 72 11 00 03  
Anti-poison Center : INRS/ORFILA (France) : +33 (0) 1 45 42 59 59  
Anti-poison Centre (Belgium) : +32 70 245 245  
Anti-poison Centre (Netherlands) : +31 30 274 8888  
Anti-poison Centre (Spain) : +34 91 562 04 20  
Anti-poison Centre (United Kingdom) : +44 870 600 6266  
Poisons Information Centre (Hungary) : +36 80 201 199  
Anti-poison Centre (Switzerland) : 145 (from Switzerland) or +41 44 251 51 51

## SECTION 2 Hazards identification

### 2.1. Classification of the substance or mixture

#### 2.1.1. Regulation (EC) No 1272/2008 (CLP)

Health hazards : Eye irritation - Category 2 (Eye Irrit. 2) - H319

### 2.2. Label elements

#### 2.2.1 Labelling EC 1272/2008 (CLP)

#### Hazard pictograms



Signal words : Warning

Hazard statements : H319 : Causes serious eye irritation


#### Precautionary statements :

- Prevention : P280 : Wear protective gloves/protective clothing/eye protection/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  
P337 + P313 : If eye irritation persists: Get medical advice/attention

2.3. Other hazards : None under normal conditions

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## SECTION 2 Hazards identification (continued)

## SECTION 3 Composition/information on ingredients

3.1./3.2. Substance / Preparation : Preparation  
 \* Components contributing to the hazard :

Substance name	Contents	CAS No	EC No	Index No	Ref REACH	Classification
Complex reaction mass of Chinese gum rosin post reacted with acrylic acid	< 5 %	144413-22-9	434-230-1	----	----	Not classified. (DSD/DPD) Aquatic Chronic 4;H413
2-ethylhexane-1,3-diol	< 5 %	94-96-2	202-377-9	603-087-00-9	----	Xi; R41 Eye Dam. 1;H318
Reaction product of decanoic acid, 12-hydroxystearic acid and 1,2-ethanediamine	< 1 %	-----	907-495-0	-----	01-2119545465-35	Not classified. (DSD/DPD) Not classified. (GHS)
Adipic acid	< 1 %	124-04-9	204-673-3	607-144-00-9	----	Xi; R36 Eye Irrit. 2;H319
Alloy SnSb :	87.5 88.5 %	-----	-----	-----	----	Not classified. (DSD/DPD) Not classified. (GHS)
Tin	91.5 %	7440-31-5	231-141-8	-----	----	Not classified. (DSD/DPD) Not classified. (GHS)
Antimony	8.5 %	7440-36-0	231-146-5	-----	----	Not classified. (DSD/DPD) Not classified. (GHS)

## SECTION 4 First aid measures


### 4.1. Description of first aid measures

**Inhalation** : Not specifically applicable  
**Skin contact** : Immediately rinse with plenty of water  
**Eye contact** : IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists : Get medical advice.  
**Ingestion** : Never attempt to induce vomiting  
 Rinse mouth out with water  
 Call a doctor immediately  
 If possible show him this sheet. Failing this, show him the packaging or label

**4.2. Most important symptoms and effects, both acute and delayed** : No information available

**4.3. Indication of any immediate medical attention and special treatment needed** : No information available

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## SECTION 5 Fire-fighting measures

- 5.1. Extinguishing media**  
**Suitable extinguishing media** : All extinguishing agents can be used
- 5.2. Special hazards arising from the substance or mixture**  
**Specific hazards** : On heating : Toxic fumes may be released
- 5.3. Advice for firefighters**  
**Specific fire fighting methods** : Do not dispose of fire-fighting water in the environment  
Cool down the containers exposed to heat with a water spray  
Do not breathe fumes  
Do not attempt to fight the fire without suitable protective equipment
- Protection of fire-fighters** : Complete protective clothing  
Self-contained breathing apparatus

## SECTION 6 Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures** : Avoid contact with skin and eyes  
Do not breathe fumes.
- 6.2. Environmental precautions** : Do not allow product to spread into the environment
- 6.3. Methods and material for containment and cleaning up**  
- **Recovery** : Recover as much product as possible  
Recover the product by scraping with a spatula or with a similar instrument
- **Cleaning/decontamination** : To clean the floor or objects contaminated by this product, use :  
- Isopropyl alcohol  
- Ethanol
- **Disposal** : For disposal of contaminated materials refer to section 13 : "Disposal considerations"  
Do not discharge into drains
- 6.4 Reference to other sections** : For further information refer to section 8 "Exposure controls/personal protection"

## SECTION 7 Handling and storage

- 7.1. Precautions for safe handling**  
**Technical measures** : During brazing operations :  
Vapour extraction at source
- Precautions** : Work in a well-ventilated area  
Do not handle with bare hands
- Industrial hygiene** : Always wash your hands immediately after handling this product, and once again before leaving the workplace  
Do not eat, drink or smoke during use
- 7.2. Conditions for safe storage, including any incompatibilities**  
**Storage conditions**  
- **Recommended** : Store :  
- protected from humidity  
- at temperature between 0 °C and 10 °C
- Incompatible products** : None, to our knowledge
- Packaging materials**  
- **Recommended** : Polypropylene  
Polyethylene  
Glass

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### SECTION 7 Handling and storage (continued)

- Not suitable : Aluminium and its alloys  
Copper and its alloys
- 7.3. Specific end use(s) : No data

### SECTION 8 Exposure controls/personal protection

#### 8.1. Control parameters

Engineering measures : Ensure good ventilation of the work station

- 8.1.1. Occupational Exposure Limits : Tin : USA (OSHA) : PEL - TWA (8h; mg/m<sup>3</sup>) : 2  
Tin : Belgium : GWBB - TWA (8h; mg/m<sup>3</sup>) : 2  
Reaction product of decanoic acid,  
12-hydroxystearic acid and 1,2-ethanediamine : France : LEP - VME (8h; mg/m<sup>3</sup>) : 10  
Reaction product of decanoic acid,  
12-hydroxystearic acid and 1,2-ethanediamine : USA (ACGIH) : TLV - TWA (8h; mg/m<sup>3</sup>) : 10  
Adipic acid : Belgium : GWBB - TWA (8h; mg/m<sup>3</sup>) : 5

#### Personal protection :

- Respiratory protection : If the ventilation is suitable, it is not essential to wear respiratory equipment  
Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.
- Hand protection : Protective gloves made of latex
- Eye protection : Safety goggles
- Skin protection : Protective clothing

### SECTION 9 Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

##### 9.1.a. Appearance

- Physical state : Paste  
Colour : grey  
9.1.b. Odour : sweet  
9.1.c. Odour threshold : No information available  
9.1.d. pH : Not applicable  
9.1.e. Melting point / Freezing point : 241 at 248 °C  
9.1.f. Initial boiling point - boiling range : Tin : 2270 °C  
9.1.g. Flash point : Not applicable  
9.1.h. Evaporation rate : No information available  
9.1.i. Flammability : Non flammable.  
9.1.j. Explosion limits (lower - upper) : Not applicable  
9.1.k. Vapour pressure : No information available  
9.1.l. Vapour density : No information available  
9.1.m. Density : > 4.0 g/cm<sup>3</sup>  
9.1.n. Solubility  
-in water : Not miscible  
9.1.o. Partition coefficient : n-octanol / water : No information available

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### SECTION 9 Physical and chemical properties (continued)

9.1.p. Auto-ignition temperature	: No information available
9.1.q. Thermal decomposition	: No information available
9.1.r. Viscosity	
Dynamic viscosity	: 750 - 950 Pa.s at 20 °C
9.1.s. Explosive Properties	: Not explosive material according to EC criteria
9.1.t. Oxidising properties	: Non oxidizing material according to EC criteria
9.2. Other information	: -

### SECTION 10 Stability and reactivity


10.1. Reactivity	: None under normal conditions
10.2. Chemical stability	: Stable at room temperature
10.3. Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use
10.4. Conditions to avoid	: No information available
10.5. Incompatible materials	: No information available
10.6. Hazardous decomposition products	: On thermal decomposition (pyrolysis), releases : Carbon oxydes (CO, CO2) Carboxylic acids Métallic oxides

### SECTION 11 Toxicological information

11.1. Information on toxicological effects	
• Acute toxicity	: No information available
On ingredients	
Adipic acid	: Rat oral LD50 [mg/kg] : 5560 : Rat inhalation LC50 [mg/l/4h] : 7.7
Tin	: Mouse oral LD50 [mg/kg] : 72
Reaction product of decanoic acid, 12-hydroxystearic acid and 1,2-ethanediamine	: Rat inhalation LC50 [mg/l/4h] : 5.1 : Rat dermal LD50 [mg/kg] : 2000 : Rat oral LD50 [mg/kg] : 2000
2-ethylhexane-1,3-diol	: Rat oral LD50 [mg/kg] : 5170 : Rabbit dermal, LD50 [mg/kg] : 8939
• Skin corrosion/irritation	: No information available
• Serious eye damage/irritation	: Causes serious eye irritation
• Respiratory or skin sensitisation	: No information available
• Germ cell mutagenicity	: No information available
• Carcinogenicity	: No information available
• Reproductive toxicity	: No information available
• STOT-single exposure	: No information available
• STOT-repeated exposure	: No information available

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## SECTION 11 Toxicological information (continued)

• Aspiration hazard : No information available

## SECTION 12 Ecological information

12.1. Toxicity : No specific data  
Do not allow the product, as is, to spread into the environment

Effects on the aquatic environment

On ingredients

Adipic acid : 48 Hour - EC50 - Daphnia magna [mg/l] : 85.7  
: 72 Hours - EC50 - Algae [mg/l] : 31.3 (Desmodesmus subspicatus)  
: 96 Hours - LC50 - Fish [mg/l] : 230 (Leuciscus idus melanotus)

Reaction product of decanoic acid, 12-hydroxystearic acid and 1,2-ethanediamine : 48 Hour - EC50 - Daphnia magna [mg/l] : 94.9  
: 72 Hours - EC50 - Algae (Pseudokirchneriella subcapitata) [mg/l] : 43.2  
: 96 Hours - LC50 - Fish (Oncorhynchus mykiss) [mg/l] : > 100

2-ethylhexane-1,3-diol : 24 Hours - EC50 - Daphnia magna [mg/l] : 811

12.2. Persistence and degradability : No information available

12.3. Bioaccumulative potential : No information available

12.4. Mobility in soil : No information available

12.5. Results of PBT and vPvB assessment : No information available

12.6. Other adverse effects : No information available

## SECTION 13 Disposal considerations

13.1. Waste treatment methods

WASTE FROM PRODUCT :

Prohibition : Discharging into rivers and drains is forbidden  
Do not dispose of with domestic waste  
Land-fill is forbidden  
Do not bring to dump

Destruction/Disposal : Dispose of at a licensed waste collection center

CONTAMINATED PACKAGING :


Decontamination/cleaning : Empty the packaging completely prior to disposal

Destruction/Disposal : Entrust the thoroughly decontaminated packaging to a licensed waste-contractor

NOTE : The user's attention is drawn to the possible existence of specific european, national or local regulations regarding disposal

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#### SECTION 14 Transport information

RID/ADR/IMDG/IATA : Not regulated

#### SECTION 15 Regulatory information

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture** : Ensure all national/local regulations are observed.

**France** : Professional diseases(table(s) nr 66) : applicable

**15.2. Chemical safety assessment** : No information available

#### SECTION 16 Other information

**Further information** : Product for industrial use only  
For more information regarding the use of this product, please refer to our technical information or contact the sales department in your region  
This safety data sheet has been written in conformity with the regulation (UE) 453/2010.

**Text of R-Phrases in § 3** : R36 : Irritating to eyes.  
R41 : Risk of serious damage to eyes.

**Text of H-Phrases in § 3** : H318 - Causes serious eye damage  
H319 - Causes serious eye irritation  
H413 - May cause long lasting harmful effects to aquatic life

**\* Update** : Modifications are indicated by an asterisk (\*)

This sheet complements the technical sheets but does not replace them. The information given is based on our knowledge of the product, at the time of publication. It is given in good faith.  
Besides, the attention of the user is drawn to the possible risks incurred by using the product for any other use than that for which it was intended.

In no way does this exempt the user from knowing and applying all the regulations controlling his activity. He alone will take on the responsibility for taking the precautions involved by the use of the product.

The aim of all the mandatory regulations mentioned is just to help the user to fulfil his obligations regarding the use of hazardous products.

This information must not be considered exhaustive. It does not exempt the user from ensuring that other obligations than those mentioned could apply, related to the storage and use of the product, this being his sole responsibility.

**End of document**

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