Supplier: TGK (Deutschland) GmbH Safety-data-sheet 91/155 EWG Page 1 of 5 last saved:17.09.2005 Level:31.03.05





Safety data sheet/ EG-Sicherheitsdatenblatt

Date of establishment: 06/02/03 Revision date: 31/03/05

Product/ Product group: Soft soldering and tinning paste

1.1 Substance/Preparation and Company Name

1.2 Information on the product

1.3 Information on manufacturer/Supplier

Supplier: Tiffany Glaskunst GmbH Street: Helleforthstr. 18-20

UIP Code/town: D-33758 Schloß Holte Stukenbrock

Tel.: +49 5207 91280
Fax.: +49 5207 912840
e-mail: tgk@tgk.de
Internet: http://www.tgk.de

Telephone number in emergency cases: 05207-9128-0

2. Composition/Information on Ingredients:

Chemical characteristics:

Suspension of metal powder of tin/lead alloy in watery zinc chloride and ammonium chloride solution with addition of surfactants.

Dangerous ingredients	Classification	Weight %	CAS-No.:
Zinc chloride	C-corrosive N-dangerous for the environment	< 10	7646-85-7
Ammonium chloride	Xn-dangerous for the health	< 5	12125-02-9
Surfactant mixture	Xi-irritating	< 12	
Lead	_	60 %	7439-92-1

3. Possible hazards:

According to TRGS 200, no. 1(2) lead and lead/tin alloys belong to those products that are not classified as dangerous, but at their utilisation dangerous products can be generated or released.

Fluxing agents irritate eyes and skin.

Toxic for water organisms. Can have long-term noxious effects in waters.

4. First Aid Measures:

Immediate emergency measures:

Application of the usual first-aid measures in case of burn.

Inhalation:

Fresh air, seek medical attention.

Supplier: TGK (Deutschland) GmbH Safety-data-sheet 91/155 EWG Page 2 of 5 last saved:17.09.2005 Level:31.03.05

Eye contact:

Rinse with plenty of water with opened palpebral fissure for at least 10 min. Seek medical attention.

Skin contact:

Wash away with plenty of water, remove contaminated clothing immediately.

Ingestion:

Drink plenty of water. Avoid vomiting (danger of perforation). Seek medical attention immediately.

5. <u>Fire fighting measures:</u>

Appropriate extinguishing media:

No limitation, in case of liquid soldering alloy let dry.

Unadequate extinguising media for safety reasons:

Special hazards caused by the material, its combustion products or flue gases:

In case of fire, dangerous fumes can be generated (chlorine, HCI, CO and lead oxide fume)

Special protection equipment for fire fighting:

Independent respiratory protection device.

6. <u>Accidental release measures</u>:

Personal precaution measures:

Avoid skin contact.

Environmental protection measures:

Lead, lead alloys and zinc choride are not biologically degradable and may not be passed in the environment.

Measures for cleaning up/collecting;

Take up paste mechanically and pass into special waste disposal system.

7. Handling and storage:

Handling:

Information for secure handling:

Avoid contact with skin and eyes.

Storage:

Requirements for storage rooms and containers:

Store in firmly locked containers at dry and well-ventilated place.

8. Expose controls and personal protection:

Additional information on the design of technical plants:

Exhaust device in case of generation of fumes.

Breathing equipment:

Protection of hands:

Material:

Nitril

e.g. KCL-dermatril (740) Permeation time: 480 min.

Supplier: TGK (Deutschland) GmbH Safety-data-sheet 91/155 EWG

Page 3 of 5 last saved:17.09.2005 Level:31.03.05

Material:

Butyl

e.g.

KCL-butoject (898) Permeation time: 480 min.

Eye protection:

Protection goggles.

Body protection:

Wear appropriate working clothes.

Additional information:

Remove soaked or contaminated clothing immediately.

9. Physical and chemical properties:

• Form: pasty Colour: metal grey Odour: weak Boiling point/Boiling range (in °C): > 100° C Melting/Melting range (in °C): ca. 183 -235° C Flash point: not applicable Solubility in water at 20° C: partly miscible Explosion danger: not explosive Density (at 20°C): ca. 5-7 g/cm³ Steam pressure (at 20° C): 20 mbar

Viscosity (at 100° C): not applicable
 PH-value: 4.1

10. Stability and reactivity:

Conditions to avoid:

Overheating to redglow at air (e.g. formation of PbO/Pb steam)

Products to avoid:

Strong oxidating agents.

Dangerous decompositon products

Ammonia, hydrogen chlorine

Thermic decomposition:

300° C

11. <u>Toxicological information:</u>

TRGS: 900: pregnancy group B

Acute toxicity:

Skin:

Irritates skin.

Eyes:

Irritates eyes.

Ingestion:

After ingestion of greater quantities symptoms of poisoning.

12. Ecological information:

Supplier: TGK (Deutschland) GmbH Safety-data-sheet 91/155 EWG Page 4 of 5 last saved:17.09.2005 Level:31.03.05

Lead/lead alloys and zinc chloride are biologically not degradable and may not be passed in the environment.

Zinc chloride:

Acute fish toxicity: 0.1 - 1 g/ltr. Fish nuisance limit: 0.1 - 2 mg/ltr.

13. <u>Disposal considerations:</u>

For the material/residues

Recommendation:

Residue is special waste and has to be passed to a special waste deposit according to

special waste guidelines.

EAK-code number	EAK-designation	EAK-Group	Disposal method
120111	Fabrication sludges	Waste of mechanical shaping (forging, welding, pressing, pulling, spinning, drilling, cutting, sawing and filing.	Special waste deposit
110204	Other sludges	Waste and sludges of processes of the non-ferrous hydro-metallurgy	

For contaminated packing:

According to official regulations.

14. Transport information:

Dangerous good according to transport regulations.

Exception:

LIMITED QUANTITIES:

Under this limit the product is classified as not dangerous for transport:

3 Ltrs. (noch prüfen!)

UN-No. 3077

> Road ADR/RID and GGVS/GGVE - Classification:

GGVS/GGVE-class: 9
Packing group: III
Classification code: M7
LQ: 27

Shipping name: Environmentally hazardous substance, solid, n.o.s.

contains zinc chloride

Sea transport IMGD/GGVSea - Classification:

UN-No. 3077

Shipping name: Substance dangerous for the environment, solid,

n.o.s., contains zinc chloride

IMDG/GGVSea class:9Packing group:IIIEmS:F-A/S-F

Proper shipping name: Environmentally hazardous substance, solid, n.o.s.

contains zinc chloride

Marine pollutant: can be marine pollutant

Air transport ICAO-IATA and IATA-DGR - Classification:

No information available.

15. Regulatory information:

Designation according to EC guidelines:

Supplier: TGK (Deutschland) GmbH Safety-data-sheet 91/155 EWG Page 5 of 5 last saved:17.09.2005 Level:31.03.05

Code letter and hazard designation of the product:

Xi irritating

N hazardous for the environment

Risk phrases:

36/38 irritates the eyes and skin

51/53 toxic for water organisms, can have long-term noxious effects in

waters

Safety phrases:

1 / 2 Keep firmly locked and out of reach of children

26 / 28 In case of contact with skin and eyes rinse with plenty of water immediately

and seek medical attention if necessary.

In case of ingestion, seek medical attention and show packing or label

61 Avoid release in the environment. Obtain special instructions/consult safety

data sheet

National regulations:

Classification according to VbF:

Not applicable

Water hazard class:

2

16. <u>Additional Information</u>:

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. Recipients of our product must take responsibility for observing existing laws and regulations.