

SAFETY DATA SHEET**TS-81 Flux**

Version 1.03
Date of preparation: 06.01.2010
Update date: 15.12.2015

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

1.1 Product ID TS-81 flux

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

Identified use: Liquid, rosin-free flux designed for soldering of the components made of all kinds of steel (including stainless steel)

Uses advised against: unspecified

1.3 Details of the supplier of the safety data sheet

Manufacturer AG Termopasty Grzegorz Gąsowski
18-218 Sokoly, ul. Kolejowa 33 E, phone/fax (0 86) 274 13 42

Email address
of the person responsible for the safety data sheet: biuro@termopasty.pl

1.4 Emergency phone number 86274 13 42 from 8.00 to 16.00

SECTION 2: Hazard identification**2.1 Classification of the substance or mixture****Classification by 1272/2008:**

Eye Irrit. 2; H319

Skin Irrit. 2; H315

Health hazards

Causes skin and eyes irritation.

Environmental hazards

None.

Physical/ chemical hazards:

None.

The product has to be labelled.

2.2 Label elements:**Pictogram:**

Warning phrase: Caution

Hazards statements:

H315 – causes skin irritation.

H319 – causes eyes irritation.

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Phrases indicating conditions of safe use:

P280 – Wear protective gloves/protective clothing/eye protection/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 remove. Continue rinsing.

2.3 Other hazards:

No other hazards.

No information on meeting the criteria of PBT or vPvB according to annex 13 of the REACH regulation. Appropriate tests have not been performed.

SECTION 3: Composition/ information about components
3.1 Substances:

N/A

3.2. Mixtures:

Hazardous components:

Product identifier	Contents %	CLP classification	
		Hazard class and category codes	Codes of the phrases showing hazards nature
Dimethylamine hydrochloride CAS no.: 660-68-4 EC no.: 211-541-9 Index no.: - REACH no.: the substance is subject to the transitional period regulations	< 20	-	-
Orthophosphoric acid CAS no.: 7664-38-2 EC no.: 231-633-2 Index no.: 015-011-00-6 REACH no.: the substance is subject to the transitional period regulations	< 25	Skin Corr. 1B	H314

Full text of H-phrases is in section 16.

SECTION 4: First Aid Measures
4.1 Description of the first aid measures
In the case of skin contact:

After contact with skin, rinse with plenty of water. If skin irritation persists, provide medical care.

In the case of eyes contact:

Rinse eyes with plenty of water for approx. 15 min., consult the doctor. Avoid strong stream of water due to the risk of mechanical damage to cornea. If irritation persists, provide medical help.

Inhalation exposure:

Move the affected person to fresh air. If not immediately improved, provide medical care.

If swallowed:

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Immediately after ingestion (within 5 minutes) induce vomiting. Provide 1-2 glasses of milk or water to drink. Contact a doctor immediately.

4.2 The most important symptoms and effects, both acute and delayed:

Skin contact: redness, pain, burning.

Eyes contact: lachrymation, irritation.

Respiratory tract: irritation of mucous membranes of the upper respiratory tract.

Gastrointestinal tract: intake can cause chemical irritation of mouth, throat and further esections of the gastrointestinal tract.

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

The decision on how to proceed is taken by the doctor after examination of the injured.

SECTION 5: Actions to be taken in the event of fire

5. Fire-fighting measures

Proper fire-fighting measures

Alcohol-resistant foam, extinguishing powder, carbon dioxide.

Improper fire-fighting measures

Do not use concentrated streams of water.

5.2 Special hazards arising from the substance or mixture:

Possible emergence of carbon monoxide, carbon dioxide, hazardous vapours.

5.3 Information for fire-fighters

Do not allow the fire-fighting measures to enter into sewerage systems and waterways. Notify the environment about the fire. Remove all persons not involved in the fire from the hazardous area. Inform the State Fire Brigade, and where necessary, the State Police, the local authorities and the nearest Chemical Rescue Unit.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

For those not belonging to the team of employees providing help: inform the relevant services about the failure. Remove all persons not involved in liquidation of failure from the hazardous area.

For the rescue teams: Assure adequate ventilation, apply individual protection measures.

6.2 Environmental precautions

In the event of a failure do not allow to discharge to the environment. Protect the product from entering into the sewerage system, surface water, groundwater and soil. If possible, try to collect to the appropriate containers for further disposal.

6.3 Methods and materials preventing from containment and applied to clean up:

To remove use sand, sawdust or universal binding substances, store the gathered material in hermetically sealed metal or plastic container (HDPE, PP or PVC). Remove residues from the surface with isopropanol or other equivalent, available organic solvent (e.g. ethanol, denatured alcohol, toluene, hexane).

6.4 Reference to other sections:

Product waste treatment - see section 13 hereof.

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Personal protective equipment - see section 8 hereof.

SECTION 7: Handling and storage of the substances and mixtures

7.1 Precautions for safe handling:

Avoid contact with eyes and skin. Use personal protective equipment. The rooms must be equipped with adequate local and general ventilation. Work in accordance with the principles of safety and hygiene: do not consume food and drinks, do not smoke in the workplace, wash hands after use, remove contaminated clothing and protective equipment before entering the sites intended for eating.

4.5 Conditions for safe storage, including any information about mutual incompatibility:

Store the material in plastic containers (e.g. HDPE, PP or PVC). Store the containers tightly closed in a dry, ventilated room out of the reach of children. Do not store together with oxidizing substances.

7.3 Specific end use(s):

Liquid, resin-less flux designed for soldering of the components made of different types of steel (including stainless steel). The product is intended solely for professional use.

SECTION 8: Exposure control/ personal protective equipment

8.1 Parameters for control:

The Regulation of the Minister of Labour and Social Policy of 29 November 2002 on maximum acceptable concentrations and intensities of factors harmful to health in the working environment. (the Journal of Laws, item 817);

Ingredients for which the exposure standards are applied:

	Substance name	CAS no.:	TLV	TLV-STEL	NDSP
1.	Orthophosphoric acid	7664-38-2	1 mg/m ³	2 mg/m ³	unspecified

Indications in the air in the workplace.

The Regulation of the Minister of Health of 20 April 2005 *on tests and measurements of factors harmful to health in the working environment* (the Journal of Laws, no. 73/2005, item. 645, as amended).

PN-EN 1540:2004 Air in the workplace – Terminology; PN-Z-04008-7:2002 Air purity protection.

Measurements of the concentrations of chemicals and particulate matters in the air in the working environment. The rules of air sampling in the working environment and interpretation of the results.

PN-Z-04008-7:2002/Az1:2004 Amendment to the standard Air purity protection. Measurements of the concentrations of chemicals and particulate matters in the air in the working environment. The rules of air sampling in the working environment and interpretation of the results.

8.2 Exposure control:

Applied technical controls measures:

It is necessary to apply effective local exhausting ventilation and general ventilation of the room.

Individual protection measures, such as personal protective equipment:

Eyes or face protection:

Avoid contact with eyes. When handling the product, if there is a possibility of exposure, wear safety glasses with side shields or safety non-fogging goggles (in accordance with the standard EN166).

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Hand protection: wear protective gloves made of natural, nitrile, butyl rubber (EN375).

The material used to make the gloves:

Selection of suitable gloves does not only depend on the material, but also the brand and quality resulting from differences between the manufacturers. The resistance of the material used to make the gloves can be determined after testing. The exact time of destruction of the gloves must be determined by the manufacturer.

Other: avoid skin contact.

Respiratory tract protection

When the concentration of the substance is fixed and known, when selecting personal protective equipment take into account the concentrations of the substances at the work place, exposure time, activities performed by the employee and the instructions provided by the manufacturer of personal protective equipment. In emergencies, use organic vapour absorber provided with a mask or a half-mask.

Thermal hazards:

N/A

Biomonitoring

unspecified

Environmental exposure control

The maximum level of the substance in the air - the Regulation of the Minister of the Environment of 24 August 2012 on the levels of certain substances in the air (the Journal of Laws, 2012, no. 0, item 1031): unspecified

SECTION 9: Physical and chemical properties**9.1 Information about the basic physical and chemical properties**

Appearance:	viscous, transparent liquid
Odour:	sharp, irritating
Odour threshold:	unspecified
pH:	N/A
Melting point:	unspecified
Boiling point:	unspecified
Ignition temperature:	unspecified
Evaporation rate:	unspecified
Flammability (solid, gas):	N/A
Lower explosion limit:	unspecified
Upper explosion limit:	unspecified
Vapour tension:	unspecified
Relative vapour density:	unspecified
Density:	approx. 1.270 g/cm ³ (20°C)
Solubility:	insoluble in water
Coefficient of division: n-octanol/water:	unspecified
Auto ignition point:	unspecified
Decomposition temperature:	unspecified
Dynamic viscosity at 20°C:	unspecified
Kinematic viscosity:	unspecified
Explosive properties:	not shown
Oxidising properties:	not shown

9.2 Other information:

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No additional test results.

SECTION 10: Stability and reactivity**10.1 Reactivity**

Unknown.

10.2 Chemical stability

Stable while maintaining appropriate conditions of storage and use.

10.3 Possibility of hazardous reactions:

There are no instances of hazardous polymerization.

10.4 Conditions to be avoided

Avoid high temperature, direct sunlight, hot surfaces and open fire.

10.5 Incompatible materials:

Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products:

Carbon oxides

SECTION 11: Toxicological information**11.1 Information about toxicological effects**

a) acute toxicity: no

Phosphoric acid

LD50: 1530 mg/kg,

LD50: 0.85 mg/kg

b) skin corrosion/irritation: irritating to skin

c) serious eye damage/irritation: irritating to eyes

d) respiratory tract or skin sensitisation;

e) germ cells mutagenicity: no

f) carcinogenicity: no

g) harmful for reproduction: not shown

h) toxic effects on target organs - single exposure: not shown

i) toxic effects on target organs - repeated exposure: not shown

j) aspiration hazard: no

Information about likely routes of exposure:**Inhalation exposure**

It can irritate mucous membranes of the upper respiratory tract.

Skin contact

Avoid skin contact. Causes eyes irritation.

Eyes contact

Avoid contact with eyes. Causes eyes irritation.

Swallowing

Ingestion can cause severe irritation to the gastrointestinal tract, severe abdominal pain, nausea, vomiting.

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

No available data.

Interactive effects:

No available data.

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SECTION 12: Ecological information

Detailed tests were not executed, in view of the above, there is no more data. The mixture has not been classified as dangerous for the environment. Do not allow to enter and spread in soil, sewerage systems, groundwater and waterways.

12.1 Toxicity:

No available data.

12.2 Durability and degradability:

No available data.

12.3 Bioaccumulative potential

No available data.

12.4 Mobility in soil

No available data.

12.5 Results of PBT and vPvB assessment:

No available data.

12.6 Other adverse effects:

No available data.

SECTION 13: Waste treatment**13.1 Waste treatment methods****Worn product**

Do not dispose into the sewage system. Prevent from pollution of surface water and groundwater. Do not dispose with municipal waste. Burn in the incineration plant of hazardous waste in the presence of flammable materials. The method of elimination of gathered waste to be agreed with the Department of Environmental Protection of the Voivodeship Office or the Starost's Office.

Dispose as hazardous waste, code: 11 05 04 worn flux

Contaminated packaging

Provide empty disposable packaging to the authorised consignee.

Packaging code: Packaging containing residues of or contaminated by hazardous substances.

The Regulation of the Minister of Environment of 9 September 2014 on the waste catalogue (the Journal of Laws item 1923).

The community legislation on waste:

The Directive of the Council, no. 75/442/EEC on waste, the Directive of the Council no. 91/689/EEC on hazardous waste, the Decision of the Commission no. 2000/532/EC of 3 May 2000 stating the list of waste, the Official Journal no. L 226/3 of 6 September 2000, with the amending decisions.

SECTION 14: Transport information

14.1 UN number (ONZ number): No applicable, the product is not classified as hazardous during transport.

14.2 UN proper transport name: No applicable, the product is not classified as hazardous during transport.

14.3 Class(es) of hazards in transport: No applicable, the product is not classified as hazardous during transport.

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14.4 Packing group: No applicable, the product is not classified as hazardous during transport.

14.5 Environmental hazards: No applicable, the product is not classified as hazardous during transport.

14.6 Specific precautions for users: No applicable, the product is not classified as hazardous during transport.

14.7 Transport in bulk in accordance with annex II to the MARPOL Convention and the IBC Code: No applicable, the product is not classified as hazardous during transport.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations specific for the substance or mixture**

The Regulation (EC) no. 1907/2006 of the European Parliament and the Council of 18 December 2005 on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as amended.

The Regulation of the Commission (EU) 2015/830 of 28 May 2015 amending the Regulation (EC) 1907/2006 of the European Parliament and the Council on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

The Regulation of the European Parliament and the Council of 16 December 2008 no. 1272/2008 (CLP), as amended.

The Act of 25 February 2011 on chemicals and their mixtures (the Journal of Laws no. 63, item 322, as amended).

The Regulation of the Minister of Health on 10 October 2013 amending the Regulation on the categories of hazardous substances and mixtures, the packagings of which are equipped with closures preventing from opening by children and tactile warning of hazard (the Journal of Laws of 2013, no. 0, item 1225).

Te Act of 14 December 2012 on waste (the Journal of Laws of 2013, no. 0, item 21).

The Act of 13 June 2013 on management of packagings and packagings waste (the Journal of Laws of 2013, item 888).

The Regulation of the Minister of Environment of 9 September 2014 on the waste catalogue (the Journal of Laws item 1923).

The Directive of the Council, no. 75/442/EEC on waste, the Directive of the Council no. 91/689/EEC on hazardous waste, the Decision of the Commission no. 2000/532/EC of 3 May 2000 stating the list of waste, the Official Journal no. L 226/3 of 6 September 2000, with the amending decisions.

The Act of 19 August 2011 on transport of hazardous goods (the Journal of Laws, no. 227, item 1367).

The Government Statement of 23 March 2011 on the entry into force of the amendments to annexes A and B of the European Agreement concerning the international transport of hazardous goods by road (ADR), drawn up in Geneva on 30 September 1957 (the Journal of Laws no. 110, item 641).

The Regulation of the Minister of Labour and Social Policy of 6 July 2014 on the maximum acceptable concentrations and intensities of factors harmful to health in the working environment (the Journal of Laws item 817).

The Regulation of the Minister of Health of 30 December 2004 on occupational health and safety related to existence of chemical agents in the work place (the Journal of Laws 2005, no. 11, item. 86, as amended).

The Regulation of the Minister of Environment of 9 December 2003 on substances posing particular threat to the environment (the Journal of Laws no. 217, item 2141).

15.2 Chemical safety assessment

No data on the chemical safety assessment for the substance contained in the mixture and the mixture itself.

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All data are based on our present knowledge. The safety data sheet was developed based on the SDS and the data obtained from the manufacturer. Recipients of our product must take into account the existing laws and other regulations.

Other sources of key data used to update hereof:

- The legislation referred to in section 15 hereof.
- The annex to the Regulation of the Commission (EU) 2015/830 of 28 May 2015.
- Information of the Office for Chemicals, the Main Sanitary Inspector, the Institute of Occupational Medicine named after prof. J. Nofer, the Institute of Occupational Medicine and Environmental Health.

H-Phrases:

H314 – causes severe skin burns and eye damage.

H315 – causes skin irritation.

H319 – causes eyes irritation.

Description of used abbreviations, acronyms and symbols:

Skin Corr. 1B – Skin corrosion effect, cat. 1B

Eye Irrit. 2 – Irritant to eyes, cat. 2

Skin Irrit. 2 – Irritant to skin, cat. 2

MEL – Maximum exposure limit.

STEL – Short-term exposure limit.

TLV – Threshold Limit Value.

Trainings:

Prior to starting work with the product, the employees must be provided with the occupational health and safety training in connection with chemical agents present in the work environment. Perform, document and familiarize the employees with the results of risk assessment in the work place associated with presence of chemical agents.

Classification basis:

3. The product is subject to the classification of Eye Irrit. 2; H319; Skin Irrit. 2; H315; in accordance with the limit concentration and the contents of phosphoric acid in the mixture (Skin Irrit. 2; H315: $10\% \leq C < 25\%$; Eye Irrit. 2; H319: $10\% \leq C < 25\%$).

There have been changes in the safety data sheet in accordance with the COMMISSION REGULATION (EU) No. 2015/830 of 28 May 2015.

Changes in sections: 2, 3, 8, 9, 11, 15

Informing the Inspector for Chemical Substances about marketing on Polish territory of the product is required in accordance with the requirements of Art. 15 of the Act of 25 February 2011 on chemical substances and mixtures (the Journal of Laws no. 63, item 322), because the mixture is classified as hazardous.