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MBO

SOLDER FLUX WBF 01 - FLUX WBF 01

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: SOLDER FLUX WBF 01

Product code: FLUX WBF 01.

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

Soft soldering

Use descriptor system (REACH):

SU 3 Industrial uses: uses of substances as such or in preparations at industrial sites PC 38 Welding and soldering products (with flux coatings or flux cores), flux products

1.3. Details of the supplier of the safety data sheet

Registered company name: MBO.

Address: Rue de la Fonderie.21800.Chevigny-Saint-Sauveur.FRANCE.

Telephone: 00 33 3 80 46 12 58. Fax: 00 33 3 80 46 66 59.

admin@mbosolder.com www.mbosolder.com

1.4. Emergency telephone number: +33 (0)1 45 42 59 59.

Association/Organisation: INRS / ORFILA http://www.centres-antipoison.net.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments. $\label{eq:compliance}$

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present a health hazard with the exception of possible occupational exposure thresholds (see paragraphs 3 and 8).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Additional labeling:

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

Fumes during soldering.

It is recommended to wear safety glasses, protective gloves, to wash hands after use and to work with a good ventilation of area, and suitable fumes extraction system locally installed.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition:

Identification	(EC) 1272/2008	Note	%
CAS: N/A			> 95.00 %
EC: N/A			
REACH: N/A			
DEIONIZED WATER			



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CAS: 124-04-9 EC: 204-673-3	GHS07 Wng	[1]	< 3.00 %
	Eye Irrit. 2, H319		
ADIPIC ACID			

Information on ingredients:

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation:

Take affected persons into fresh air. If irritation persists, get medical attention.

In the event of splashes or contact with eyes:

Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open.

If it appears pain, redness or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation persists, get medical attention.

If burns should occur from molten metal, treat for burn and get medical assistance if necessary.

Beware of products that may remain between the skin and clothes, the watch, the shoes...

In the event of swallowing:

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use:

- sprayed water or water mist
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO2)

Prevent the effluent of the fight against the fire from entering sewers or waterways.

Unsuitable methods of extinction

In the event of a fire, do not use:

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed:

- carbon monoxide (CO)



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- carbon dioxide (CO2)

5.3. Advice for firefighters

Wear full body protective clothing and appropriate self-contained breathing apparatus.

Cool adjacent containers with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

Avoid skin and eyes contact and inhalation of vapors.

For non first aid worker

Keep persons without protective equipment away from danger area.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

Absorb or retain the liquid with sand, earth or other non-combustible material limiting spreading.

6.4. Reference to other sections

No data available.

SECTION 7: HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Ensure that there is adequate ventilation, especially in confined areas.

The workplace must be ventilated and fumes must be captured at the emission source.

Wear protective shoes and gloves.

Fire prevention:

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

Recommended equipment and procedures:

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures:

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep the container tightly closed in a dry, well-ventilated place.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

On spool, in original cardboard, at room temperature, keep away from inclemency. During 12 months. Do not expose to frost.

Packaging

Always keep in packaging made of an identical material to the original.



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7.3. Specific end use(s)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010):

CAS TWA: STEL: Ceiling: Definition: Criteria: 124-04-9 5 mg/m3 - - - - - -

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

ADIPIC ACID (CAS: 124-04-9)

Final use: Workers.

Exposure method: Inhalation.

Potential health effects: Short term local effects.

DNEL: 5 mg of substance/m3

Predicted no effect concentration (PNEC):

ADIPIC ACID (CAS: 124-04-9)

Environmental compartment: Soil.

PNEC: 0.0228 mg/kg

Environmental compartment: Fresh water. PNEC: 0.126 mg/l

Environmental compartment: Sea water. PNEC: 0.0126 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE):







Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Type of gloves recommended:

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- Butyl Rubber (Isobutylene-isoprene copolymer)

- Body protection

Suitable type of protective clothing:

- protective work clothing
- protective shoes

Work clothing worn by personnel shall be laundered regularly.



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After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Independent breathing apparatus for respiratory protection:

It is recommended to set up a fumes exhaust system closer to their emission. In case of insufficient ventilation, wear suitable respiratory equipment. In case of formation of vapors, wear suitable respiratory equipment with filter.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information:

Physical state: Fluid liquid.

Color: colorless

Important health, safety and environmental information

pH: Not relevant.

Boiling point/boiling range: Not specified.

Flash point interval: Not relevant.

Vapour pressure (50°C): Below 110 kPa (1.10 bar).

Density: > 1
Water solubility: Soluble.
Melting point/melting range: Not specified.
Self-ignition temperature: Not specified.
Decomposition point/decomposition range: Not specified.

9.2. Other information

No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product is stable under normal conditions of use and storage, but reacts with strong oxidisers.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

Reaction with strong oxidizers.

10.4. Conditions to avoid

Avoid:

- frost

10.5. Incompatible materials

10.6. Hazardous decomposition products

The thermal decomposition may release/form:

- carbon monoxide (CO)
- carbon dioxide (CO2)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Splashes in the eyes may cause irritation and reversible damage

11.1.1. Substances

Acute toxicity:

ADIPIC ACID (CAS: 124-04-9)

Oral route: LD50 = 5560 mg/kg



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Species: Rat

Dermal route : LD50 > 7940 mg/kg

Species: Rabbit

Inhalation route : LC50 > 7.7 mg/l

Species: Rat

11.1.2. Mixture

Acute toxicity:

No adverse health effect is expected under normal conditions of use.

Skin corrosion/skin irritation:

The product may cause sensitization of the skin with prolonged contact.

Serious damage to eyes/eye irritation:

In case of prolonged contact, eyes irritation.

Respiratory or skin sensitisation:

Its use during soldering may produce or release fumes which can be sensitizing for the respiratory system.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

Do not allow product to reach ground water, water source or sewage system.

12.1.1. Substances

ADIPIC ACID (CAS: 124-04-9)

 $Fish \ toxicity: \\ LC50 > 1000 \ mg/l$

Species : Brachydanio rerio Duration of exposure : 96 h

Crustacean toxicity: EC50 = 46 mg/l

Species : Daphnia magna Duration of exposure : 48 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

ADIPIC ACID (CAS: 124-04-9)

Biodegradability: Rapidly degradable.

12.3. Bioaccumulative potential

12.3.1. Substances

ADIPIC ACID (CAS: 124-04-9)

Octanol/water partition coefficient : log Koe = 0.093

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.



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SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste:

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14: TRANSPORT INFORMATION

Exempt from transport classification and labelling.

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2015 - IMDG 2014 - ICAO/IATA 2015).

SECTION 15 : REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.
- Container information:

No data available.

- Particular provisions:

No data available.

15.2. Chemical safety assessment

No data available.

SECTION 16: OTHER INFORMATION

We cannot anticipate any and all conditions and situations under which the information and our products or the combination of both with others will be used. We do not assume any liability in the safety and suitability of our products alone or in combination with others. Users must make their own tests to determine the safety and suitability of each product used alone or with other products for their own use.

Except any previous written agreement, our products are sold without guarantee and customers must assume all liability for any loss or damage suffered by themselves or by third parties, either from handling or use of our products alone or with others. In case of any difference or variation seen during the use of the products we request that you contact our technical department.

Wording of the phrases mentioned in section 3:

H319 Causes serious eye irritation.

Abbreviations:

DNEL: Derived No-Effect Level

PNEC: Predicted No-Effect Concentration

ADR: European agreement concerning the international carriage of dangerous goods by Road.

IMDG: International Maritime Dangerous Goods. IATA: International Air Transport Association. ICAO: International Civil Aviation Organisation

RID: Regulations concerning the International carriage of Dangerous goods by rail.