

CODE: SW 18 C

MATERIAL SAFETY DATA SHEET

Print date: 04/11/2019

Edition 5 - Revision of: 04/11/2019

1. Identification of the substance/mixture and of the Company/undertaking

1.1 PRODUCT IDENTIFIERS / PRODUCT NAME SW 18C

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Master alloy in drops, for white gold production

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET GALLORINI ALLOYS SRL VIA LA CASELLA 2/C, CAPOLONA (AR) - ITALY

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1.4 EMERGENCY TELEPHONE NUMBER CENTRO ANTIVELENI - U.O. TOSSICOLOGIA MEDICA AZIENZA OSPEDALIERA CAREGGI VIALE G.B. MORGAGNI, 65 – FIRENZE TEL. 055 4277238



SECTION 2: Hazards identification

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

CLASSIFICATION ACCORDING TO REGULATION (EC) NO 1272/2008 The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

2.2. LABEL ELEMENTS

PICTOGRAMS Labelling unnecessary in accordance with Regulation (CE) 1272/2008 - Annex I - 1.3.4.

CONTAINS Nichel

SIGNAL WORD WARNING

HAZARD H351 Suspected of causing cancer

STATEMENTS H372 Causes damage to organs through prolonged or repeated exposure

H317 May cause and allergic skin reaction

PRECAUTIONARY STATEMENTS Avoid breathing dust/fume

2.3. OTHER HAZARDS

PBT OR VPVB Mixture doesn't meet the criteria for PBT or vPvB in accordance with Annex XIII

OTHER HAZARDS Dust and fume from processing: may cause eye, skin and respiratory tract irritation and

metal fume fever.

Finely dispersed particles form explosive mixtures in air.

SECTION 3: Composition/information on ingredients

3.1 SUBSTANCE Not applicable. This product is regulated as mixture.

3.2. MIXTURE Contains Nichel

CAS 7440-02-0 Carc.2 H351, STOT RE 1 H372, Skin Sens. 1 H317

EC 231-111-4 INDEX 028-002-00-7

Reg. no. 01-2119438727-29-0003 The full wording of hazard (H) phrases is given in

section 16 of the sheet.



SECTION 4: First aid measures

4.1 DESCRIPTION OF FIRST AID MEASURES

GENERAL ADVICE Consult a physician. Show this safety data sheet to the doctor in attendance

INHALATION If overcome by an excessive fume exposure, remove victim to fresh air. Keep at rest.

Get medical attention.

SKIN CONTACT Flush contaminated skin with soap and water. Remove contaminated clothing. Wash

clothing before reuse. Get medical attention if symptoms occur

EYE CONTACT Flush eyes with water, occasionally lifting the upper and lower eyelids. Continue to

rinse for at least 15 minutes. Get medical attention if irritation occurs

INGESTION Swallowing small amounts may cause nausea, discomfort and gastric nuisance.

Ingestion of large amounts is unlikely due to the organoleptic characteristic of this

product. Get medical attention if irritation occurs.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED Inhalation of soldering fumes will result in irritation of the respiratory tract, irritation of

the mucous membranes of the nose and throat

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT Treat symptomatically.

SECTION 5: Firefighting measures

5.1 EXTINGUISHING MEDIA

EXTINGUISHING

MEDIA:

NEEDED

Not combustible. Finely dispersed particles form explosive mixtures in air.

Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Suitable extinguishing media: dry chemical, CO2.

UNSUITABLE EXTINGUISHING MEDIA Avoid using straight water streams.

5.2 SPECIAL HAZARDS Ambient fire may liberate hazardous vapours: carbon oxides (CO, CO₂), metal vapours

ZARDS and their oxides



THE SUBSTANCE OR MIXTURE

5.3 ADVICE FOR **FIREFIGHTERS**

Stay in danger area only with self-contained breathing apparatus

SECTION 6: Accidental release measures

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

ADVICE FOR NON-**EMERGENCY** PERSONNEL

Evacuate the danger area to safe areas. Ensure adequate ventilation. Observe

emergency procedures.

ADVICE FOR **EMERGENCY** RESPONDERS Wear suitable protective equipment

ENVIRONMENTAL PRECAUTIONS

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

For small spills wet and wipe up with paper towel and place in container for disposal. For larger spills, cover with sand or other inert absorbent material (peat, sawdust, etc.) and collect in suitable container for disposal. Disposal of contaminated material in accordance with section 13.

Wash spillage site thoroughly with soap and water or detergent solution.

Do not use compressed air, brooms, or conventional vacuum cleaners to remove particulate from surfaces as this activity can result in elevated exposures to airborne

particulate

6.4 REFERENCES TO OTHER **SECTIONS**

See section 8 for personal protective equipment. For disposal, see section 13

SECTION 7: Handling and storage

7.1 PRECAUTIONS FOR SAFE **HANDLING**

Do not ingest. Avoid contact with eyes, skin and clothing. Good industrial hygiene practices should be observed. These measures include good personal practices and management (i.e. regular cleaning with suitable detergents). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not wear contaminated clothing at home.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY **INCOMPATIBILITIES**

Store in a dry, well ventilated place at room temperature

7.3 SPECIFIC END USE(S)

Production of jewellery



SECTION 8: Exposure controls/personal protection

8.1 CONTROL PARAMETERS

Metallic nichel Normal value in fresh water: 3.6ng/l Normal value in marine water: 8.6ng/l Normal value for the terrestrial compartment: 29.9 mmol/mol

8.2 EXPOSURE CONTROLS

APPROPRIATE ENGINEERING

CONTROLS

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Never use compressed air to clean work clothing or other surfaces.

EYE/ FACE PROTECTION: Safety goggles conform to EN166. Do not wear contact lenses. Eye wash stations should be available

SKIN PROTECTION Handle with gloves. The protective gloves to be used must comply with

the specifications of EC Directive 89/686/EEC and the related standard EN374. Recommended material: nitrile rubber 1 - 4 hours (breakthrough time). Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their

protective properties.

RESPIRATORY PROTECTION: Not necessary in well ventilated areas. Required when fumes are

generated or in confined environments: use a respirator with an approved filter for organic vapours and dust (type B and P3). Use respirators and components tested and approved under appropriate

government standards such as NIOSH (US) or CEN (EU).

8.3. CONTROL OF

ENVIRONMENTAL EXPOSURE

Do not let product enter drains

SECTION 9: Physical and chemical properties

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Solid in grains



ODOUR Odourless

ODOUR THRESHOLD No data available

PH Not applicable

MELTING POINT [°C] >1000

INITIAL BOILING POINT AND

BOILING RANGE [°C]

>1300

FLASH POINT [°C] No data available

EVAPORATION RATE No data available

FLAMMABILITY (SOLID, GAS) Not flammable

UPPER/LOWER FLAMMABILITY

OR EXPLOSIVE LIMITS

No data available

VAPOUR PRESSURE No data available

VAPOUR DENSITY No data available

RELATIVE DENSITY [G/CM³] 7.5-9.0 g/cm³ at 20°C

WATER SOLUBILITY Insoluble

PARTITION COEFFICIENT: N-

OCTANOL/ WATER

No data available

AUTO-IGNITION TEMPERATURE Not flammable

DECOMPOSITION TEMPERATURE No data available

VISCOSITY AT 20°C [CPS] No data available

EXPLOSIVE PROPERTIES Dust clouds may be explosive under certain conditions.

OXIDIZING PROPERTIES No oxidizing properties

SECTION 10: Stability and reactivity

10.1 REACTIVITY Not reactive

10.2 CHEMICAL STABILITY Stable under recommended storage conditions



HAZARDOUS REACTIONS

10.4 CONDITIONS TO AVOID Avoid powder/dust/grain dispersion. Keep away from heat and

moisture.

10.5 INCOMPATIBLE MATERIALS Strong acids

10.6 HAZARDOUS

DECOMPOSITION PRODUCTS

In case of fire may be developed: Carbon oxides (CO, CO₂)

SECTION 11: Toxicological information

11.1 INFORMATIONS ON Exposure can occur through inhalation, in contact with skin or eyes and

TOXICOLOGICAL EFFECTS accidental ingestion

ACUTE DERMAL TOXICITY Not classified

ACUTE INHALATIVE TOXICITY Fumes can cause respiratory irritation, coughing, breathing difficulties

ACUTE TOXICITY Nichel: LD50(oral) >9000mg/Kg Ratto

SKIN CORROSION/IRRITATION Not classified

SERIOUS EYE DAMAGE/EYE

IRRITATION

Not classified

RESPIRATORY OR SKIN

SENSITISATION

Sensitizing for the skin

GERM CELL MUTAGENICITY Not classified (Based on available data, the classification criteria are

not met)

CARCINOGENICITY Suspected of causing cancer

REPRODUCTIVE TOXICITY Not classified (Based on available data, the classification criteria are

not met)

SPECIFIC TARGET ORGAN

TOXICITY - SINGLE EXPOSURE

Not expected to cause organ damage from a single exposure.

SPECIFIC TARGET ORGAN TOXICITY - REPEATED

EXPOSURE

Causes damages to organs

ASPIRATION HAZARD Not classified (Based on available data, the classification criteria are

not met)

SECTION 12: Ecological information



12.1 TOXICITY Use this product according to good working practices. Avoid littering.

Inform the competent authorities, should the product reach waterways

or contaminate soil or vegetation.

LC50 (FISH-96H) 100 mg/l/96h

EC50 (DAPHNIA-48H) 100 mg/l/48h

EC50 (ALGAE-72H) 0.18 mg/l/72h

12.2 PERSISTENCE AND

DEGRADABILITY

Methods for determining the biological degradability are not applicable

to inorganic substances.

12.3 BIOACCUMULATIVE

POTENTIAL

No data available

12.4 MOBILITY IN SOIL No data available

SECTION 13: Disposal considerations

13.1 WASTE TREATMENT METHODS

PRODUCT: The material should be recovered for recycling where possible.

Disposal of this product should always comply with the requirements of environmental protection and waste disposal legislation and any

regional local authority requirements.

CONTAMINATED PACKAGING Drain container thoroughly after use and dispose of the contaminated

containers as unused product

SECTION 14: Transport information

14.1 UN NUMBER ///

14.2 UN PROPER SHIPPING

NAME

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not

dangerous goods

14.3 TRANSPORT HAZARD

CLASS(ES)

///

14.4 PACKING GROUP ///

14.5 ENVIRONMENTAL HAZARDS ///

14.6 SPECIAL PRECAUTIONS

FOR USERS

No data available



ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

SECTION 15: Regulatory information

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

RELEVANT EU LEGISLATION

AUTHORISATIONS Not required

SVHC LIST No ingredients are included in the list

RESTRICTIONS ON USE: Product

Point: 40

Contained substance: Nichel

Point: 27

SEVESO III CATEGORY DIR.

2012/18/EU

No category

OTHER EU REGULATIONS: The product does not contain a substance harmful to the ozone layer,

or a POP substance (Persistent Organic Pollutant).

WATER HAZARD CLASS (WGK)

(D)

Water hazard class NWG: non-hazardous (WGK, Germany) (Self-

classification)

GENERAL LEGISLATION Regulation (EC) No. 1907/2006 of the European Parliament and of the

Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). (et sequens). 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending

Regulation (EC) No. 1907/2006 (et sequens).

Directives 89/391/CEE, 89/654/CEE, 89/655/CEE, 89/656/CEE, 90/269/CEE, 90/270/CEE, 90/394/CEE, 90/679/CEE, 93/88/CEE, 95/63/CE, 97/42/CE, 98/24/CE, 99/38/CE, 99/92/CE, 2001/45/CE, 2003/10/CE, 2003/18/CE (Health and safety on the workplace)

Directive 98/24/EC (protection of the health and safety of workers from

the risks related to chemical agents at work).

Directive 92/85/CE (measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently

given birth or are breastfeeding).

Directives 96/82/CE, 2003/105/CE and 2012/18/CE (Control of major-

accident hazards involving dangerous substances).

Directive 2004/42/CE (Limitation of emissions of Volatile Organic

Compounds ADR ed. 2015

European Agreement concerning the International Carriage of

Dangerous Goods by Rail – RID (UNECE)



IMDG Code - 2014 Edition (Amdt.37) (IMO) Dangerous Goods Regulation 56th edition (IATA)

15.2 CHEMICAL SAFETY ASSESSMENT

A Chemical Safety Assessment has not been carried out for this product

SECTION 16: Other information

REVISION DATE: 04/11/2019 Revision for adaptation to Regulation (EC) No. 1272/2008.

Prepared in CLP-format: new classification and labelling according to Regulation (EC) No. 1272/2008.

Reach registration number added, where applicable in sect. 3.2.

ACRONYMS EC50 Effective Concentration

LC50 Lethal Concentration

LD50 Lethal Dose

IARC International Agency for Research on Cancer RTECS Registry of Toxic Effects of Chemical Substances

PBT Persistent, bio accumulative and toxic vPvB Very persistent and very bio accumulative TSCA US Toxic Substances Control Act

TWA Total Weight Average

SOURCES OF DATA ECDIN Environmental Chem. Data and Information Network

IARC International Agency for Research on Cancer

IUCLID International Uniform Chemical Information Database NIOSH National Institute for Occupational Safety and Health ACGIH American Conference of Governmental Industrial Hygienists

GENERAL INFORMATION ON THE DRAFTING OF THE DOCUMENT

Safety data sheets (SDS) are only required for substances and mixtures that meet the harmonised criteria for physical, health or environmental hazards. Since this product does not meet these criteria,

a SDS according to 453/2010/EC is not issued.

The information and recommendations contained herein are, to the best of our knowledge and belief, accurate and reliable as of the date issued. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. Final determination of suitability of any material is the sole

responsibility of the user.