

Safety Data Sheet

acc. to GHS

Printing date 01/15/2016

Reviewed on 01/15/2016

1 Identification

- **Product identifier**
- **Trade name: RECORD NICRW 412**
- **Application of the substance / the mixture** Flux for Submerged Arc Welding
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
voestalpine Böhler Welding Belgium s.a.
Rue de l'Yser, 2
B-7180 SENEFFE
-
- Tel.: +32 (0) 64 52 00 06
Fax.: +32 (0) 64 52 00 01
- **Information department:**
R&D
-
- Nicolas Turomsza
-
- nicolas.turomsza@voestalpine.com
- **Emergency telephone number:** Tel.: +32(0)64 52 00 06

2 Hazard identification

- **Classification of the substance or mixture**
The product is not classified according to the Globally Harmonized System (GHS).
- **Label elements -**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Hazard description:**
- **WHMIS-symbols:**
D2B - Toxic material causing other toxic effects



- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

CA

(Contd. on page 2)

Safety Data Sheet

acc. to GHS

Printing date 01/15/2016

Reviewed on 01/15/2016


Trade name: RECORD NICRW 412

(Contd. of page 1)

3 Composition/Information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

7789-75-5	calcium fluoride	12.5-25% w/w
7439-96-5	manganese	5-12.5% w/w
1344-09-8	Silicic acid, sodium salt	2.5-5% w/w
 Acute Toxicity (Oral) - Category 4, H302; Skin Irritation - Category 2, H315; Specific Target Organ Toxicity - Single Exposure - Category 3, H335		

· **nonhazardous components:**

65997-16-2	Secar	50-100% w/w
	Kaliwasserglas	

4 First aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
Rinse opened eye for several minutes under running water.
- **After swallowing:** Seek medical treatment.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Suitable to surrounding conditions
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters -**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Use respiratory protective device against the effects of fumes/dust/aerosol.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Ensure that suitable extractors are available on processing machines

(Contd. on page 3)

Safety Data Sheet

acc. to GHS

Printing date 01/15/2016

Reviewed on 01/15/2016

Trade name: RECORD NICRW 412

(Contd. of page 2)

- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/ Personal protection

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

7789-75-5 calcium fluoride

EL Long-term value: 2.5 mg/m³
as F

7439-96-5 manganese

EL Long-term value: 0.2 mg/m³
as Mn; R

EV Long-term value: 0.2 mg/m³
as manganese

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes.
- Avoid contact with the eyes and skin.

- **Breathing equipment:** Filter P2

- **Protection of hands:**



Protective gloves

Heat protection gloves (non-combustible)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

- **Body protection:**

Protective work clothing

(Contd. on page 4)

CA

Safety Data Sheet

acc. to GHS

Printing date 01/15/2016

Reviewed on 01/15/2016

Trade name: RECORD NICRW 412

(Contd. of page 3)

Wear hand, head, and body protection which help to prevent injury from radiation, sparks, and electrical shock. See ANSI Z49.1. At a minimum this includes welder's gloves and a protective face shield, and may include arm protectors, aprons, hats, shoulder protection, and well as dark substantial clothing. Train the welder not to touch live electrical parts and to insulate himself from work and ground.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Powder

Color: Grey

· **Odor:** Odorless

· **Odor threshold:** Not determined.

· **pH-value:** Not applicable.

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not determined.

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· Explosion limits:

Lower: Not determined.

Upper: Not determined.

Relative density Not determined.

Vapor density Not applicable.

Evaporation rate Not applicable.

Water: Insoluble.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Dynamic:** Not applicable.

· **Kinematic:** Not applicable.

· **Organic solvents:** 0.0 %

· **Other information** No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.

· Chemical stability

· Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· **Possibility of hazardous reactions** Attacks materials containing glass and silicate.

· **Conditions to avoid** No further relevant information available.

· **Incompatible materials:** No further relevant information available.

· **Hazardous decomposition products:** No dangerous decomposition products known.

CA

(Contd. on page 5)

Safety Data Sheet

acc. to GHS

Printing date 01/15/2016

Reviewed on 01/15/2016

Trade name: RECORD NICRW 412

(Contd. of page 4)

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **Primary irritant effect:**

- **on the eye:** Irritating effect.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

7789-75-5 calcium fluoride

3

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:** Must be specially treated adhering to official regulations.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**

- **DOT, TDG, ADN, IMDG, IATA** Void

- **UN proper shipping name**

- **DOT, TDG, ADN, IMDG, IATA** Void

(Contd. on page 6)

CA

Safety Data Sheet

acc. to GHS

Printing date 01/15/2016

Reviewed on 01/15/2016

Trade name: RECORD NICRW 412

(Contd. of page 5)

· Transport hazard class(es)	
· DOT, TDG, ADN, IMDG	
· Class	Void
· Class	Void
	-
· Packing group	
· DOT, TDG, IMDG, IATA	Void
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	-
	Void

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.

- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredient is listed

- **Section 313 (Specific toxic chemical listings):**

7439-96-5 manganese

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogeny categories**

- **EPA (Environmental Protection Agency)**

7439-96-5 manganese

D

- **TLV (Threshold Limit Value established by ACGIH)**

7789-75-5 calcium fluoride

A4

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

(Contd. on page 7)

CA

Safety Data Sheet

acc. to GHS

Printing date 01/15/2016

Reviewed on 01/15/2016

Trade name: RECORD NICRW 412

(Contd. of page 6)

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

7439-96-5 manganese

· **GHS label elements** Void

· **Hazard pictograms** Void

· **Signal word** Void

· **Hazard statements** Void

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing MSDS:** R&D

· **Contact:** Nicolas Turomsza

· **Date of preparation / last revision** 01/15/2016 / -

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Dangerous Substances, BAuA, Germany)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

Acute Toxicity (Oral) - Category 4: Acute toxicity, Hazard Category 4

Skin Irritation - Category 2: Skin corrosion/irritation, Hazard Category 2

Specific Target Organ Toxicity - Single Exposure - Category 3: Specific target organ toxicity - Single exposure, Hazard Category 3

· *** Data compared to the previous version altered.**

CA