HANDOUTS: SDS: Welder (5 pages) Skill Builders: Key Words & Phrases, Tables & Lists

IN THE WORKPLACE: According to the WCB (Workers' Compensation Board), it is each worker's responsibility to learn about hazardous products they use and to follow safe work procedures. Detailed information about hazardous products is provided in Safety Data Sheets, usually called SDS.

**PART 1**: SDS standards are set by law. Every SDS must contain information on the following 16 sections.

1. **Product and Company Information:** Includes product name, what the product is used for, the chemical name, the name of the manufacturer or suppliers with contact information.

2. **Hazardous Identification:** The related hazard classifications (with pictograms) and the potential health effects of each hazard associated with the product.

3. Composition/Ingredients: Chemical and common names of hazardousingredients.

4. First aid measures: Immediate treatment and information for medical professionals.

5. Fire-fighting measures: Suitable extinguishers and instructions to fire-fighters.

6. Accidental release measures: What to do if the product spills out of its container.

7. Handling and Storage: Precautions for safe handling.

8. **Exposure Controls/Personal Protection:** Guidelines for safe use and required personal protective equipment (PPE).

9. **Physical and Chemical Properties:** Information such as product colour and smell and details related to the product's chemicals' effects on health, safety and theenvironment.

10. **Stability and Reactivity:** What happens to the product if it comes into contact withanother product.

**11**. **Toxicological information:** How health can be affected by short-term andlong-term exposure to the product.

12. **Ecological information:** Information on the environmental impact of the product.

13. **Disposal Considerations:** Information on safe waste disposal including packaging.

14. **Transport Information:** Shipping information such as the shipping classification and the Transport Canada PIN (Product Information Number) for the whole product.

15. **Regulatory Information:** Safety, health and environmental regulations specific to the product

16. **Other information**: Details of any changes to the SDS since the last revision.



On the job you will need to look up information in the SDS. You want to be efficient and start with the section that will most likely have the answers you are looking for.

- Decide which of the 16 section of the SDS you would scan **first** to find the answer to each of the search questions below.
- Search Questions Section (1-16) 1. What is the name of the product? 2. What is the product made of? 3. Where should the product be stored when not in use? 4. What should you do if this product splashes in your eyes? 5. Is the product made in Canada? 6. If this product catches fire, how do you put it out? 7. What sort of PPE should be worn when using this product? 8. What should the product smell like? 9. How can you dispose of leftover product? 10. What are the US shipping codes for this product? 11. What is the product used for? 12. What hazards are associated with this product? 13. What changes if any have been made since the last revision? 14. Are there potential long term risks associated with using this product?
- Enter the section number of the section in the space provided.



**PART 2**: Locate the answers to the following sections of the SDS. Highlight the answers or write the in the space provided below.

- 1. What is the product?
- 2. How many hazard types are identified? List them.

3. What day and month was the SDS last updated? How could it be written to make it clearer?

- 4. What should you do if the product, when hot, gets on your skin?
- 5. What component of the product causes the greatest health hazard? What disease can it cause?
- 6. Where can you find more information on what personal protection to use whenhandling spills?
- 7. How should the product be stored?



- 1. One hazard of the product is contact with its fumes. What part of the body can be affected by long-term overexposure to fumes? Identify 1 way you can reduce that risk.
- 2. Identify 2 ways the product can harm your eyes.
- 3. How many pages are in the complete SDS?



# **SDS: WELDER – ACTIVITY**

# SAFETY DATA SHEET

Page: 1(6) SDS Number: CAN324-D Date Revised: 05/01/2014

# **1. PRODUCT AND COMPANY IDENTIFICATION**

ESAB OK® BARE STAINLESS STEEL WELDING ELECTRODES AND RODS Arc Welding
AWS A5.9
ESAB GROUP CANADA, INC., 6010 Tomken Road, Mississauga, ON L5T 1X9
(905) 670-0220, 1-877-935-3226
www.esab.ca

## 2. HAZARDS IDENTIFICATION

**Emergency Overview**: Metal wires or rods in varying colors. These products are normally not considered hazardous as shipped. Gloves should be worn when handling to prevent cuts and abrasions.

These products contain nickel, which is classified as toxic by prolonged inhalation, a skin sensitizer and a suspect carcinogen. In the form that nickel is present in these products it does not contribute to a hazard classification of the products.

Skin contact is normally no hazard but should be avoided to prevent possible allergic reactions.

Persons with a pacemaker should not go near welding or cutting operations until they have consulted their doctor and obtained information from the manufacturer of the device.

When these products are used in a welding process, the most important hazards are heat, radiation,

electric shock and welding fumes.

Heat: Spatter and melting metal can cause burn injuries and start fires.

Radiation: Arc rays can severely damage

eyes orskin. Electricity: Electric shock can kill.

Fumes: Overexposure to welding fumes may result in symptoms like metal fume fever, dizziness, nausea, dryness or irritation of the nose, throat or eyes. Chronic overexposure to welding fumes may affect pulmonary function. Prolonged inhalation of nickel and chromium compounds above safe exposure limits can cause cancer. Overexposure to manganese and manganese compounds above safe exposure limits can cause irreversible damage to the central nervous system, including the brain, symptoms of which may include slurred speech, lethargy, tremor, muscular weakness, psychological disturbances and spastic gait.

#### 4. FIRST AID MEASURES

Inhalation: If breathing has stopped, perform artificial respiration and obtain medical assistance immediately! If breathing is difficult, provide fresh air and call physician.

Eye contact: For radiation burns due to arc flash, see physician. To remove dusts or fumes flush with water for at least fifteen minutes. If irritation persists, obtain medical assistance.

Skin contact: For skin burns from arc radiation, promptly flush with cold water. Get medical attention for burns or irritations that persist. To remove dust or particles wash with mild soap and water.

Electric shock: Disconnect and turn off the power. Use a nonconductive material to pull victim away from contact with live parts or wires. If not breathing, begin artificial respiration, preferably mouth-to-mouth. If no detectable pulse, begin Cardio Pulmonary Resuscitation (CPR). Immediately call a physician.

General: Move to fresh air and call for medical aid.



# 5. FIRE FIGHTING MEASURES

No specific recommendations for welding consumables. Welding arcs and sparks can ignite combustible and flammable materials. Use the extinguishing media recommended for the burning materials and fire situation. Wear self-contained breathing apparatus as fumes or vapors may be harmful.

### 6. ACCIDENTAL RELEASE MEASURES

Solid objects may be picked up and placed into a container. Liquids or pastes should be scooped up and placed into a container. Wear proper protective equipment while handling these materials. Do not discard as refuse.

Personal precautions: refer to Section 8.

Environmental precautions: refer to Section 13.

# 7. HANDLING AND STORAGE

Handling:

Handle with care to avoid stings and cuts. Wear gloves when handling welding consumables. Avoid exposure to dust. Do not ingest. Some individuals can develop an allergic reaction to certain materials. Retain all warning and identity labels.

Storage:

Keep separate from chemical substances like acids and strong bases, which could cause chemical reactions.

ESAB (2014). ESAB OK<sup>®</sup> bare stainless steel welding electrodes and rods. (Safety Data Sheet). <u>https://www.esab.ca/ca/en/support/documentation/upload/can324.pdf</u>

This document has been modified. Sections 3 and 8-16 (inclusive) are not included here. This document is not an official version.

