

FICHE DE DONNÉES DE SÉCURITÉ (FDS)

Pour les consommables de soudage et les produits connexes
Conforme aux critères du Système général harmonisé de classification et d'étiquetage des produits chimiques (SGH), OSHA Hazard Communication Standard 29CFR 1910.1200
La norme doit être consultée pour les exigences spécifiques

FDS NO: 301
DATE DE RÉVISION : AVRIL 2017
EXAMINÉ : JUIN 2020

SECTION I – IDENTIFICATION of Produit et Société

Fabricant/Fournisseur : Welding Material Sales	Utilisation recommandée : Soudage à l'arc en métal blindé	Restriction d'utilisation : Inconnu	N ° de téléphone: 630-232-6421
Adresse: 1340 Reed Road Geneva, IL 60134			Numéro d'urgence : 800-424-9300
Nom du produit: E4043/BD6000	Spécification: AWS AS.3 (Électrodes) Tiges revêtues d'aluminium		E-mail: info@weldingmaterialsales.com

SECTION II - COMPOSITION I INFORMATIONS SUR LES COMPOSANTS

Classification des dangers SGH: Non classé I Éléments d'étiquetage - Symbole de danger et mention d'avertissement = Aucun symbole ni mention d'avertissement

Mention de danger et Conseil de prudence = Non applicable

Autres dangers qui n'entraînent pas la classification et la vue d'ensemble du SGH: Les chocs électriques peuvent tuer. Portez une protection approuvée pour la tête, les mains et le corps, qui aide à prévenir les blessures causées par les radiations, les étincelles et les chocs électriques. L'arc de soudage et les étincelles peuvent enflammer des matériaux combustibles ou inflammables. Voir ANSI Z-49.1. Cela comprend le port de gants de soudeur et d'un écran facial protecteur et peut inclure des protège-bras, un tablier, des chapeaux, des protections pour les épaules, ainsi que des vêtements sombres et substantiels. Les soudeurs doivent être formés pour ne pas laisser des pièces sous tension se contracter avec la peau ou des vêtements et des gants mouillés. Les soudeurs doivent s'isoler du travail et du sol. Les rayons d'arc peuvent blesser les yeux et brûler la peau. Lisez et comprenez les instructions du fabricant et l'étiquette de précaution sur ce produit et les pratiques de sécurité de votre employeur. Voir Section XIII.

Tels qu'ils sont expédiés, il s'agit de tiges solides inodores qui sont ininflammables, non explosives, non réactives et non dangereuses et peuvent être recouvertes de cuivre. Substance : Les fumées et les gaz de soudage ne peuvent pas être classés simplement. La réaction et la quantité de ces fumées et gaz dépendent du métal à souder, des procédures suivies et des électrodes utilisées. Les vapeurs peuvent affecter les yeux, la peau, le système respiratoire ainsi que le pancréas et le foie. Les travailleurs doivent être conscients que la composition et la quantité des fumées et des gaz auxquels ils peuvent être exposés sont influencées par : les revêtements qui peuvent être présents sur le métal à souder (comme la peinture, le placage ou la galvanisation), le nombre de soudeurs dans fonctionnement et le volume de la zone de travail, la qualité et la quantité de ventilation, la position de la tête du soudeur par rapport au panache de fumée, ainsi que la présence de contaminants dans l'atmosphère

(telles que les vapeurs d'hydrocarbures chlorés provenant de la procédure de nettoyage et de dégraissage). Lorsque la charge est consommée, les fumées et les produits de décomposition des gaz générés sont différents en pourcentage et en forme des ingrédients énumérés dans la section III, La composition de ces fumées et gaz est la matière concernée et non la composition de l'électrode elle-même. Les produits de décomposition comprennent ceux provenant de la volatilisation, de la réaction ou de l'oxydation des ingrédients indiqués dans la section III, ainsi que ceux provenant du métal de base, du revêtement et des autres facteurs mentionnés ci-dessus.

Les constituants raisonnablement attendus des fumées de ce produit incluraient: Des oxydes complexes ou des composés de fer, de manganèse, de silicium, de cuivre, d'aluminium, de titane et de zirconium. (D'autres oxydes complexes peuvent être présents lors de l'utilisation de flux).

Identité chimique	N ° CAS.	EINECS#
Gaz carbonique	124-38-9	204-696-9
Monoxyde de carbone	630-8-0	211-128-3
Dioxyde d'azote	10102-44-0	233-272-6
Ozone	10028-15-6	233-069-2

SECTION III – COMPOSITION I INFORMATIONS SUR LES COMPOSANTS

*Le terme « MATIÈRES DANGEREUSES » doit être interprété comme un terme requis et défini dans OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200, cependant l'utilisation de ce terme n'implique pas nécessairement l'existence d'un danger.

Identité chimique Ingrédients	N ° CAS.	EINECS#	Identité chimique Ingrédients	N ° CAS.	EINECS#
Fer (Fe) (limites sous forme de fumées d'oxyde)	7439-89-6	231-096-4	Potassium Oxide	12136-45-7	235-227-6
Aluminium (Al)	7429-90-5	231-072-3	Lithium Fluoride	7789-24-4	232-152-0
Silicium (Si)	7440-21-3	231-130-8	Talc	14807-96-6	238-877-9
Chlorure de sodium	7647-14-5	231-598-3	Potassium Chloride	7447-40-7	231-211-8

Composition chimique Pourcentage en poids de métal fondu

Classification AWS	Al	Si	Fe	Cu	Mn	Mg	Zn	Ti	Be
E4043	Équilibre	4.5-6.0	0.8	0.30	0.05	0.05	0.10	0.20	0.0008

Flux coating listed below - not included In above weld metal percent

Identité chimique	% par poids	N ° CAS.	EINECS#	Identité chimique	% par poids	N ° CAS.	EINECS#
Chlorure de sodium	5.0-25.0	7647-14-5	231-598-3	Silicate de sodium	< 6.0	1344-09-8	239-981-7
Chlorure de potassium	3.0-20.0	7447-40-7	231-211-8	Oxyde de potassium	< 2%	12136-45-7	235-227-6
Fluorure de calcium	< 6.0	7789-75-5	232-188-7	Talc	< 2%	14807-96-6	238-877-9
Fluorure de lithium	< 6.0	7789-24-4	232-152-0				

D'autres éléments ou ingrédients peuvent être présents mais en quantités bien inférieures à 1% ⁽¹⁾ Sous réserve des exigences de déclaration des sections 302, 304, 311, 312 et 313 de la loi de 1986 sur la planification d'urgence et le droit à l'information communautaire et 40CFR 370 et 372 ; (Resp)= Respiratoire/Respiration : Le soudage et l'élimination de produits contenant du chrome peuvent produire du chrome hexavalent et VOUS devez lire et suivre les règles finales de l'OSHA Fed Register # :71 : 10099-10385 datées du 28/02/2006. Administration de la sécurité et de la santé au travail 29 CFR 1910.1000 Limite d'exposition admissible (PEL). Valeur limite de seuil (TLV[R]) de la Conférence américaine des hygiénistes industriels gouvernementaux (ACGIH). *Limite de plafond **Limite d'exposition à court terme Les valeurs uniques sont maximales

SECTION IV – MESURES DE PREMIERS SECOURS

Le contact avec la peau, les yeux, l'ingestion ou l'injection ne devrait pas être une source d'exposition avec une protection appropriée.

Ingestion: Éviter le contact avec des vapeurs métalliques ou des puissances pouvant entraîner une ingestion

Inhalation: En cas d'arrêt de la respiration ou de difficulté à aller à l'air frais et, au besoin, pratiquer la respiration artificielle. Appeler une assistance médicale ou un médecin.

Contact avec la peau: Enlevez tout vêtement, gants ou autre équipement du personnel contaminé et lavez/rincez rapidement avec de l'eau et du savon doux. Pour une peau rougeâtre ou boursouflée due au rayonnement thermique/à l'arc, laver/rincer rapidement à l'eau. Obtenez une assistance médicale ou l'aide d'un médecin au besoin.

Contact avec les yeux: le rayonnement de l'arc peut blesser les yeux et également provoquer un arc électrique - si cela se produit, déplacez-vous dans une pièce sombre pour retirer les lentilles au besoin, reposez-vous et couvrez les yeux avec des pansements antiadhésifs (pansement rembourré). quantités abondantes d'eau propre pendant au moins 15 minutes. Obtenez une assistance médicale ou l'aide d'un médecin au besoin ou si les problèmes persistent.

Symptômes/effets les plus importants, aigus et différés:

Symptômes: Une surexposition à court terme (aiguë) aux fumées de soudage peut entraîner une gêne telle que la fièvre des fondeurs, des étourdissements, des nausées, une sécheresse ou une irritation du nez, de la gorge ou des yeux. Les problèmes respiratoires préexistants peuvent être regroupés. Une surexposition à long terme (chronique) aux fumées de soudage peut entraîner une sidérose (dépôts de fer dans les poumons) et on pense qu'elle affecte la fonction pulmonaire. Le manganèse et les composés de manganèse dépassant les limites d'exposition sûres peuvent affecter ou causer des dommages irréversibles au système nerveux central, y compris au cerveau : les symptômes peuvent entraîner des troubles de la parole et des mouvements, un manque d'énergie, une raideur des jambes, des pieds, des orteils, une faiblesse musculaire ainsi que troubles psychologiques. Des cas de bronchite et de fibrose pulmonaire ont également été signalés.

Dangers: Les fumées et les gaz de soudage ne peuvent pas être classés simplement. Se référer à la Section II sous Substance

SECTION V – FIRE-FIGHTING MEASURES

As shipped these are odorless, solid rods with a flux coating that are nonflammable, non-explosive, non-reactive and non-hazardous. Welding arcs and sparks can ignite combustibles or flammable materials Read and understand the manufacturer's instructions and precautionary label on this product and your employer's safety practices. Read and understand: American National Standard ANSI Z49.1 *Safety in Welding, Cutting and Allied Processes*, published by the AMERICAN WELDING SOCIETY, 550 N.W. LeJeune Road, Miami, Florida 33126; OSHA *Safety and Health Standards* are published by the U.S. Government Printing Office, 732 North Capitol Street NW, Washington, DC 20401.

Also National Fire Protection Association NFPA 51B, *Standard for Fire Prevention During Welding, Cutting and other Hot Work*

Suitable (and unsuitable) extinguishing media: As shipped these items will not burn however in the event use media recommended for the burning materials and fire situation and surroundings. No unsuitable media known at this time.

Specific hazards arising from the chemicals: Welding arcs and sparks can ignite combustibles or flammable materials

Specific protective equipment and precautions for firefighters: Wear self-contained breathing apparatus and full protective clothing in case of fire or when fumes and vapors are present. Follow general fire-fighting precautions as in the workplace.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Personal Precautions, protective equipment and emergency procedures: With airborne dust and fumes be sure to use adequate engineering ventilation controls and personal protection to prevent overexposure limits recommendations found in Section VIII.

Environment precautions: Control work practices to eliminate environmental release. These products are solid metal rods, with no spill or leak hazards as shipped. If product becomes molten dam up with sand type media until it cools back to a solid and reuse/recycle as scrap.

Methods and Materials for containment and cleaning up: Coated Solid rods can be picked up and placed back in the original container. Clean up immediately while following all safety guidelines as well as using all personal protection safety listed in section VIII. Avoid generating dust and prevent materials from entering and drains, sewers or water sources. Disposal considerations found in Section XIII.

When fumes and vapors are present. Follow general fire-fighting precautions as in the workplace.

SECTION VII – HANDLING AND STORAGE

Precautions for safe handling: Handle with care wearing gloves and keep formation of airborne dust and fumes to a minimum. If needed use adequate engineering ventilation controls and personal protection to prevent overexposure limits recommendations found in Section VIII. Also read American National Standard ANSI Z49.1 *Safety in Welding, Cutting and Allied Processes*, published by the AMERICAN WELDING SOCIETY, 550 N.W. LeJeune Road, Miami, Florida 33126; OSHA *Safety and Health Standards* are published by the U.S. Government Printing Office, 732 North Capitol Street NW, Washington, DC 20401. Do not eat or drink while using these products and ensure proper ventilation is used. Wash hands after use.

Conditions for safe storage, including any incompatibilities: All employees who handle these products should be trained to handle it safely. Open packages of these products/containers on a safe stable surface and must be properly labeled at all times. Store products in original closed packages, cool dry place, while avoiding extreme temperatures or incompatible items such as acids, oxidizers, halogens or other strong bases. Always follow all regulations in accordance with local/regional/state/national guidelines.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Flux or other ingredients	CAS No.	EINECS#	Exposure Limit (mg/m ³)		
			OSHA PEL	ACGIH TLV	NIOSH REL
Iron (Fe) (limits as oxide fume)	7439-89-6	231-096-4	10	5 (Resp)	5.0
Aluminum (Al) ⁽¹⁾	7429-90-5	231-072-3	15 (total dust) 5 (Resp)	10 (dust) 1 (Resp)	15 (total) 5 (Resp)
Manganese (Mn) (limits as fume) ⁽¹⁾	7439-96-5	231-105-1	1, 3.0** , 5*	0.02 (Resp) 0.1***	1.0, 3.0**
Silicon (Si)	7440-21-3	231-130-8	15 (dust) 5 (Resp)	WITHDRAWN	5 (Resp) 10 (TOTAL)
Copper (Cu) ⁽¹⁾	7440-50-8	231-159-6	1 (dust) 0.1 (fume)	1 (dust) 0.2 (fume)	1.0
Sodium Chloride	7647-14-5	231-598-3	NA	NA	NA
Potassium Chloride	7447-40-7	231-211-8	NA	NA	NA
Calcium Fluoride	7789-75-5	232-188-7	2.5	2.5	2.5
Lithium Fluoride	7789-24-4	232-152-0	2.5	2.5	2.5
Potassium Oxide	12136-45-7	235-227-6	10 (total particulate) 5 (Resp)	15 (total dust) 3 (Resp)	Lowest feasible
Talc	14807-96-6	238-877-9	0.3 (total dust) 0.1 (Resp)	2 (Resp)	2 (Resp)
Sodium Silicate	1344-09-8	239-981-7	NA	NA	NA
Potassium Silicate	1312-76-1	215-199-1	NA	NA	NA
Carbon dioxide (ppm values)	124-38-9	204-696-9	5,000	5,000, 30,000**	5,000, 30,000**
Carbon monoxide (ppm values)	630-8-0	211-128-3	50	25	35, 200*
Nitrogen dioxide (ppm values)	10102-44-0	233-272-6	5	0.2	1**
Ozone (ppm values)	10028-15-6	233-069-2	0.1	0.05	0.1*

ACGIH BEL BIOLOGICAL EXPOSURE LIMITS: FLUORIDES (Urine) Prior to shift 2 mg/g & End of shift 3 mg/g

Other elements or ingredients may be present but in quantities much less than 1%. ⁽¹⁾ Subject to reporting requirements of Section 302, 304, 311, 312, and 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40CFR 370 and 372; (Resp) = Respiratory/ Respiration; ^(C) TLV & PEL for water soluble Cr. III and Cr. VI, Welding and cutting of products that contain Chromium may produce hexavalent chromium and YOU should read and follow OSHA's final rules Fed Register #:71:10099-10385 dated 02-28-2006. Occupational Safety and Health Administration 29 CFR 1910.1000 Permissible Exposure Limit (PEL). American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV[R]). *Ceiling Limit**Short Term Exposure Limit***Inhalable fraction ^(SC) = Soluble compounds ACGIH - American Conference of Governmental Industrial Hygienists, a professional association which establishes exposure limits used as a guideline in control for health hazards but not an indication of safe and dangerous exposure limits TLV - Threshold Limit Value - an airborne concentration of a substance, which represents conditions under which it is generally believed that nearly all workers, may be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour & BEI - Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV. OSHA - U.S. Occupational Safety and Health Administration. PEL - Permissible Exposure Limit - this exposure value means the same as a TLV, except that it is limits guideline by OSHA.

Eye Protection: Wear a helmet or face shield with a filter lens shade number 12-14 or darker for arc welding. Shield other workers by providing screens and flash goggles. Use face-shield with filter lens of appropriate shade number (per ANSI Z49.1-1988, "Safety in Welding and Cutting").

Protective Clothing: Wear approved head, hand and body protection, which help to prevent injury from radiation, sparks and electrical shock. See ANSI Z-49.1. This would include wearing welder's gloves and a protective face shield and may include arm protectors, apron, hats, shoulder protection, as well as dark substantial clothing. Welders should be trained not to allow electrically live parts to contract the skin or wet clothing and gloves. The welders should insulate themselves from the work and ground.

Ventilation: Use plenty of ventilation and/or local exhaust at the arc, to keep the fumes and gases below the threshold limit value within the worker's breathing zone and the general work area. Welders should be advised to keep their head out of the fumes.

Respiratory Protection: Use respirable fume respirator or air supplied respirator when welding in a confined space or general work area where local exhaust and/or ventilation does not keep exposure below the threshold limit value.

HYGIENE/ WORK PRACTICES: With all chemicals/materials, avoid getting these products ON YOU or IN YOU. Wash hands after handling these products. Do not eat or drink while handling these products. Use ventilation and other engineering controls to minimize potential exposure to these products.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

Appearance / Color / Odor / Physical state / Form: Silver to gray round solid welding rods that are odorless with flux coating varying in color typically white
Odor Threshold / pH / Flash Point / Evaporation Rate / Flammability (Solid, Gas) / Upper & Lower Flammability or Explosive Limits: No data available
Vapor Pressure & Density / Relative Density / Solubility(water/other) / Partition coefficient (n-octanol/water) / Auto-ignition Decomposition temperature : No data available

SECTION X – STABILITY and REACTIVITY

Chemical stability: These products are considered stable as shipped and under normal conditions

Possibility of hazard reactions: No data and will not occur **Conditions to avoid:** Avoid exposure to extreme temperatures, Incompatible materials

Incompatible materials: Incompatible items such as acids, oxidizers and halogens Strong acids, strong oxidizers, mineral acids, and halogens.

Hazardous decomposition products: Read Substance in Section II. Welding and cutting of products that contain Chromium may produce hexavalent chromium and YOU should read and follow OSHA's final rules Fed Register #:71:10099-10385 dated 02-28-2006. Occupational Safety and Health Administration 29 CFR 1910.1000 Permissible Exposure Limit (PEL). The best method to determine the actual composition of generated fumes and gases is to take an air sample from inside the welder's helmet if worn or in breathing zone. For additional information, refer to the American Welding Society Publication, "Fumes and Gases in the Welding Environment".

SECTION XI- TOXICOLOGICAL INFORMATION

Oral/Dermal/inhalation Iron: (Human-child); TDLo: 77 mg/kg. Oral (rat); LD50:30 gm/kg. Intraperitoneal (rabbit); LDLo: 20 mg/kg. Oral (guinea pig); LD50:20 gm/kg. Oral (rat); TDLo: 63 gm/kg/6W-C. Inhalation (rat); 250 mg/m³/6H/4W-I. Intratracheal (rat); TDLo: 450 mg/kg/15W-I. **Silicon:** Acute oral toxicity (LD50): 3160 mg/kg [Rat]. **Copper:** Acute oral LD50:481 mg/kg (rat); **Manganese:** Acute oral toxicity (LD50): 9000 mg/kg [Rat].

Fluoride (as F): Acute oral LD50:4250 mg/kg (rat); **Sodium Silicate:** Acute oral LD50:1.1 g/kg (rat); **Potassium Silicate:** Acute oral LD50:1500 g/kg (rat) Inhalation LC50 (rat) >2.06 g/m³ Dermal LD50 (rat) >5000 mg/kg; **Aluminum:** Inhalation LC50 (rat 1 h) :7.6 mg/l;

Skin corrosion or irritation / Serious eye damage or irritation / Respiratory or skin sensitization / Germ cell mutagenicity / Reproductive toxicity /

Specific target organ toxicity – single exposure / Specific target organ toxicity – repeated exposure: Not classified **Carcinogenicity:** Arc Rays can injure eyes and burn skin. Skin cancer has been reported. **Information on the likely routes of exposures:** Ingestion is not a likely route of exposure for this product or expected under normal use. If swallowed call physician immediately! Do not induce vomiting unless directed by medical personnel. Rinse mouth with water if person is conscious. Never give fluids or induce vomiting if person is unconscious, having convulsions, or not breathing. **Inhalation** of welding fumes and gases can be dangerous to your health. **Skin/Eye Contact:** Arc Rays can injure eyes and burn skin. Skin cancer has been reported. **International Agency for Research on Cancer IARC & National Toxicology Program (NTP) & OSHA Specifically Regulated Substances**

No carcinogenic identified

Symptoms related to physical, chemical and toxicological characteristics: **Inhalation:** Short-term (acute) overexposure to welding fumes may result in discomfort such as metal fume fever, dizziness, nausea, dryness or irritation of nose, throat, or eyes. Pre-existing respiratory issues may be aggregated. Long-term (chronic) over-exposure to welding fumes can lead to siderosis (iron deposits in lung) and is believed to affect pulmonary function. Manganese and Manganese compounds above safe exposure limits can affect or cause irreversible damage to the central nervous system, including the brain: symptoms may result in impaired speech and movement, lack of energy, stiffness in legs, feet, toes, muscular weakness as well as psychological disturbances. Reports of bronchitis and lung fibrosis have also been noted. Copper and copper alloy compounds have effects with GASTRO-INTESTINAL system. **Delayed and immediate effects and also chronic effects from short and long term exposure:** There are no immediate health hazards associated with the wire or rod form of this product. Skin, respiratory, pancreas, and liver disorders may be aggravated by prolonged over-exposures to the dusts or fumes generated by these products. Pre-existing respiratory issues may be aggregated. Long-term (chronic) over-exposure to welding fumes can lead to siderosis (iron deposits in lung) and is believed to affect pulmonary function. Manganese and Manganese compounds above safe exposure limits can affect or cause irreversible damage to the central nervous system, including the brain: symptoms may result in impaired speech and movement, lack of energy, stiffness in legs, feet, toes, muscular weakness as well as psychological disturbances. Reports of bronchitis and lung fibrosis have also been noted. Treat symptoms and eliminate overexposure. **Other information during use:** **Inhalation acute toxicity:** Carbon dioxide LC Lo (Human, 5 min): 90000 ppm, Carbon monoxide LC 50 (Rat, 4 h): 1,300 mg/l, Nitrogen dioxide LC 50 (Rat, 4 h): 88 ppm, Ozone LC Lo (Human, 30 min): 50 ppm,

SECTION XII- TOXICOLOGICAL INFORMATION

Ecotoxicity / Persistence and Degradability / Bioaccumulative Potential / Mobility in Soil: **Acute; Fish /Aquatic *Invertebrates* Aquatic Environment = Iron=** LC50 Channel catfish (*Ictalurus punctatus*) > 500 mg/l, 96 hours; **Copper** LC50 Fathead minnows (*Pimephales promelas*) 1.6 mg/l, 96 hours; **EC50 Water flea** (*Daphnia obtusa*) 0.102 mg/l, 48 hours ; **Sodium silicate** LC 50 (Western mosquitofish (*Gambusia affinis*), 96 h): 1,800 mg/l, **EC50 (Water flea (Ceriodaphnia dubia),** 48 h): 22.94 - 49.01 mg/l ; **Manganese = EC 50 (Water flea** (*Daphnia magna*), 48 h): 40 mg/l; **Potassium Silicate = EC50 *Daphnia magna* (*Daphnia*)** > 146 mg/L, 48-hr; **Sodium Silicate;** EC50 *Daphnia magna* (*Daphnia*) = 216 mg/L, 96-hr ; **Environment-Toxicity to Aquatic Plants** LC50(*green algae (scenedesmus dimorphuis)* 3 days) 0.0623 mg/l, **Persistence and Degradability / Mobility in Soil:** No data **Bioaccumulative Potential Accumulation/**The product contains potentially bioaccumulating substances. **Bioaccumulative Potential Bioconcentration Factor (BCF)** Product: No data available. **Specified substance(s):** Copper and/or copper alloys and compounds (as Cu) Blue-green algae (*Anacystis nidulans*), Bioconcentration Factor (BCF): 36.01 (Static);

Other Adverse Effects: Possibly harmful to aquatic life. Do not allow material to be released to the environment without proper governmental permits. No further relevant information available.

SECTION XIII- DISPOSAL CONSIDERATIONS

Disposal Methods: Avoid or minimize generating waste. When possible collect scrap and by-products with proper id for recycling. Waste disposal must be in accordance with appropriate Federal, National, Provincial, State, and local regulations. These products, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

SECTION XIV- TRANSPORT INFORMATION

UN Number / UN Proper shipping name / Transport Hazard class (es)/ Packing group / Marine pollutant / Special Precautions: Not Regulated as Dangerous Good or Not Regulated, No international regulations

SECTION XV- REGULATORY INFORMATION

United States: TSCA INVENTORY STATUS: The components of these products are listed on the TSCA Inventory **CERCLA REPORTABLE QUANTITY (RQ):** Copper = 5000 lbs. (for particulates less than 100 micrometers in size).. Manganese = Reportable quantity: Included in the regulation but with no data values. See regulation (40 CFR 302.4).

EPCRA/SARA Title III 313 Toxic Chemicals The following metallic components are listed as SARA 313 "Toxic Chemicals" and potential subject to annual SARA 313 reporting. See Section 3 for weight percent. Ingredient & Disclosure threshold: Copper 1.0% de minimis concentration; Manganese 1.0% de minimis concentration;

Section 311 Hazard Class: As shipped: Immediate (Acute) In use: Immediate & delayed (Acute)

California Proposition 65: These products may contain or produces chemicals known to the State of California to cause cancer, and/or birth defects (or other reproductive harm). (Health and Safety Code section 25249.5 et seq.)

SAFETY DATA SHEET (SDS)

SDS NO: 301

REVISION DATE: APRIL 2017

REVIEWED: JUNE 2020

US State Regulations list:

Alaska-Designated Toxic and Hazardous Substances:, Manganese.

California-Hazardous Substances Listed substance:, Copper, Manganese, Molybdenum, Silicon, Iron, Iron oxide

Florida-Substance List: Manganese

Illinois-Toxic Substance List: Copper, Manganese and Silicon.

Kansas-Section 302/313 List: Copper, and Manganese.

Massachusetts-Substance List: Copper, Manganese, Silicon

Michigan - Critical Materials Register: Copper.

Minnesota-List of Hazardous Substances: Welding Fumes, Manganese, and Silicon.

Missouri-Employer Information/Toxic Substance List: Copper, Manganese, Silicon,

New Jersey-Right to Know Hazardous Substance List: Copper, Iron, Iron oxide, Manganese, Silicon, Fluoride (as F)

North Dakota-List of Hazardous Chemicals, Reportable Quantities: Copper.

Pennsylvania-Hazardous Substance List: Copper, Manganese, Silicon, Fluoride (as F),

Rhode Island-Hazardous Substance List: Welding Fumes, Manganese, Nickel, Silicon,

Texas-Hazardous Substance List: Manganese

West Virginia-Hazardous Substance List: Manganese.

Wisconsin-Toxic and Hazardous Substances: Manganese.

SECTION XVI- OTHER INFORMATION

Approval Date: 4-13-2016 NEW SDS Number: 022-Alum-Coated

HMIS® ratings Health: 2 Flammability: 0 Physical hazard: 0

NFPA CODES: FIRE: 0 HEALTH: 2 REACTIVITY: 0



U.S. DOT = Material is not hazardous and is not considered as a dangerous item.

Welding Material Sales Inc. Believes that the information contained in this (SDS) Safety Data Sheet is accurate.

Welding Material Sales Inc. does not express or implies any warranty with respect to this information.