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T Data Sheet to Federal Register / Vol. 77, No. 58 / Monday, March 26, ue: 01/30/2015 Revision date: 03/14/2014 Stance/mixture and of the company/un * Mixture * Aluminum Alloy 900/1000/8000 Series 990A, 1050, 1060, 1070, 1080, 1100, 1111, 118 * GROUP III A-METALS ance or mixture and uses advised against ata sheet * (770) 832-4242 xture	V# 00 7480 2012 / Rules and Regulations Supersedes: 04/10/1996 Idertaking 30, 1188, 1235, 1350, 1350Z, 1	1096137 971236 3176, 8030, 8889
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Mixture Mixture Aluminum Alloy 900/1000/8000 Series 990A, 1050, 1060, 1070, 1080, 1100, 1111, 118 GROUP III A-METALS ance or mixture and uses advised against ata sheet (770) 832-4242 xture	оселакілд	3176, 8030, 8889
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 Aluminum Alloy 900/1000/8000 Series 990A, 1050, 1060, 1070, 1080, 1100, 1111, 118 GROUP III A-METALS ance or mixture and uses advised against ata sheet (770) 832-4242 xture 	30, 1188, 1235, 1350, 1350Z, 4	3176, 8030, 8889
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GHS08		
: Danger		
: H350 - May cause cancer (Innalation)		
P202 - Do not handle until all safety precautions P308+P313 - IF exposed or concerned: Get me P405 - Store locked up	s have been read and understo dical advice/attention	bod
: Under normal use, no hazards are associated v	with use of this product.	
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i on ingredients		
	and the second second	
	 GHS08 Danger H350 - May cause cancer (Inhalation) P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions P308+P313 - IF exposed or concerned: Get me P405 - Store locked up Under normal use, no hazards are associated with the oningredients 	 GHS08 Danger H350 - May cause cancer (Inhalation) P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and underster P308+P313 - IF exposed or concerned: Get medical advice/attention P405 - Store locked up Under normal use, no hazards are associated with use of this product.

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Name	Product identifier	%	GHS-US classification
Aluminum	(CAS No) 7429-90-5	98 - 99.8	Flam, Sol. 1, H228 Water-react. 2, H261
iron	(CAS No) 7439-89-6	0.655	Not classified
Magnesium	(CAS No) 7439-95-4	0.6	Water-react. 1, H260 Pyr. Sol. 1, H250
Zinc	(CAS No) 7440-66-6	0.255	Not classified
Copper	(CAS No) 7440-50-8	0.25	Not classified
Manganese	(CAS No) 7439-96-5	0.205	Not classified
lexavalent Chromium	(CAS No) 18540-29-9	0.105	Skin Sens. 1, H317 Carc. 1A, H350 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Nickel	(CAS No) 7440-02-0	0.055	Skin Sens. 1, H317 Carc. 2, H351 STOT RE 1, H372
Titanium	(CAS No) 7440-32-6	0.055	Not classified

OLOI	ion 4. I not did medodies			
4.1.	Description of first aid measures			
First-aid	l measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).		
First-aid measures after inhalation		: Assure fresh air breathing. Allow the victim to rest. If breathing has stopped, perform CPR. Get medical attention.		
First-aid measures after skin contact		: Remove dust particles. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.		
First-aid measures after eye contact		 Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist. 		
First-aid	measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.		
4.2.	Most important symptoms and eff	ects, both acute and delayed		
Sympto	ms/injuries	: Not expected to present a significant hazard under anticipated conditions of normal use.		
4.3.	Indication of any Immediate medic	al attention and special treatment needed		
No add	itional information available			
SECT	ION 5: Firefighting measures			
5.1.	Extinguishing media			
Suitable	e extinguishing media	: Foam. Dry powder. Carbon dioxide. Sand.		
Unsuitable extinguishing media		: Do not use a heavy water stream.		
5.2.	Special hazards arising from the s	ubstance or mixture		
Explosi	on hazard	: High concentrations of finely divided Aluminum Dust (40-80 m ³) can explode in air when exposed to heat or by chemical reactions.		
Reactiv	ity	: Stable under normal conditions.		
5.3.	Advice for firefighters			
Firefigh	ting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.		
Protecti	on during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.		
SECT	ION 6: Accidental release me	asures		
6.1.	Personal precautions, protective e	equipment and emergency procedures		
6.1.1.	For non-emergency personnel			
Emerge	ency procedures	: Evacuate unnecessary personnel.		
6.1.2.	For emergency responders			
Protecti	ve equipment	: Equip cleanup crew with proper protection.		
Emerge	ency procedures	: Ventilate area.		
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3.2. Environmental p Prevent entry to sewers and	recautions	authorities if liquid enters sev	vers or public waters.		
Methods and me	torial for containmon	t and cleaning up			
Methods for cleaning up		: On land, sweep or shovel other materials.	into suitable containers. Minimize generation of dust. Store away from		
.4. Reference to oth	er sections	The American States of the			
See Heading 8. Exposure c	ontrols and personal p	rotection.			
SECTION 7: Handling	g and storage				
.1. Precautions for	safe handling				
Additional hazards when processed :		If fumes or dust are generated as a result of burning, welding, cutting or grinding, hazardous conditions could exist, thus appropriate industrial hygiene protection including personal protection equipment and ventilation should be used.			
Precautions for safe handling :		Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.			
.2. Conditions for s	afe storage, Including	any incompatibilities			
Storage conditions		: Keep only in the original of Keep container closed who	ontainer in a cool, well ventilated place away from : Heat sources. en not in use.		
ncompatible products		: Strong bases. Strong acid	s.		
ncompatible products		: Sources of ignition. Direct	sunlight.		
.3. Specific end use	e(s)	and the second second for			
No additional information av	vailable				
Aluminum (7429-90-5)	ers				
USA ACGIH	ACGIH TWA (m	g/m³)	1 mg/m ³ (respirable fraction)		
USA ACGIH	Remark (ACGIH)	Pneumoconiosis; LRT irr		
USA OSHA	OSHA PEL (TW	A) (mg/m ³)	5 mg/m ³ (respirable perticulate)		
USA OSHA	Remark (US OS	HA)	15 mg/m³ (total dust)		
Iron (7439-89-8)					
USA OSHA	OSHA PEL (TW	A) (mg/m ³)	15 mg/m ³ (total dust)		
USA OSHA	Remark (US OS	HA)	5 mg/m ³ (respirable particulate)		
		,			
Zinc (7440-66-8)					
USA OSHA	Remark (US OSHA)		The OSHA PELs (TWA) for zinc oxide are 5 mg/m ³ (fume), 15 mg/m ³ (total dust), and 5 mg/m ³ (respirable dust)		
Copper (7440-50-8)					
USA OSHA	OSHA PEL (TW	A) (mg/m³)	0.1 mg/m³		
USA OSHA	Remark (US OS	HA)	Copper fume PEL: 0.1 mg/m ³		
Manganese (7439-96-5)	The second s		No. No. Contraction of the second second		
USA ACGIH	ACGIH TWA (m	g/m³)	0.02 mg/m ³ (respirable particulate) 0.1 mg/m ³ (total dust)		
USA ACGIH	Remark (ACGIH)	CNS impair; A4		
USA OSHA	OSHA PEL (Cei	ing) (mg/m³)	5 mg/m ³		
Hexavalent Chromium (1	18540-29-9)				
USA ACGIH	ACGIH TWA (m	g/m³)	0.01 mg/m³ (as Cr)		
USA OSHA	OSHA PEL (TW	A) (mg/m³)	0.005 mg/m ³ (See Appendix C of the NIOSH Pecket		

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USA ACGIH	Remark (ACGIH)	Titanium Dioxide TWA: 10 mg/m ³
USA OSHA	Remark (US OSHA)	Titanium Dioxide OSHA PEL: 15 mg/m ³ (total dust)
Nickel (7440-02-0)	and the second second	
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1 mg/m³
3.2. Exposure controls	at a second s	
Appropriate engineering controls	: Local exhaust recomm	nended if PEL's are exceeded.
Personal protective equipment	: Avoid all unnecessary and Respiratory protect PEL during welding, co	exposure: Face shield, Gloves, Heatproof clothing, Protective goggles, ction of the dependent type when exposures are at or exceed the OSHA utting, or grinding.
Hand protection	: Wear protective glove:	S.
Eye protection	: Face shield/ Safety gla	asses when welding, cutting, or grinding.
Respiratory protection	: Wear appropriate mas	k when welding, cutting, or grinding.
Other information	: Do not eat, drink or sn	noke during use.
SECTION 9: Physical and	d chemical properties	
9.1. Information on basic	physical and chemical properties	
Physical state	: Solid	
Appearance	: Solid - Metallic Silver	Color.
Colour	: Silver.	
Odour	: Odorless.	
Odour threshold	: No data available	
рН	: NA	
Relative evaporation rate (butyla	cetate=1) : NA	
Relative evaporation rate (ether=	=1) : NA	
Melting point	: No data available	
Freezing point	: No data available	
Boiling point	: 2450 °C (4442 °F)	
Flash point	: NA	
Auto-ignition temperature	: NA	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: No data available	
Vapour pressure	: Solid	
Relative vapour density at 20 °C	: NA	
Relative density	: No data available	
Solubility	: NIL. Water: NIL	
Log Pow	: No data available	
Log Kow	: No data available	
Viscosity, kinematic	: No data available	
Viscosity, dynamic	: No data available	
Explosive properties : High concentrations of to heat or by chemical		f finely divided Aluminum Dust (40-50 m ³) can explode in air when expose I reaction.
Oxidising properties	: No data available	
Explosive limits	: High concentrations o	f finely divided Aluminum Dust (40-50 m³) can explode in air when chemical reaction.
9.2. Other Information	Are stated to hold of by	
No additional information with	de	

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SECTION 10: Stability and reactivity	
10.1. Reactivity	
Stable.	
10.2. Chemical stability	
Not established.	
40.2 Possibility of bayardous reactions	
If fumes or dust are generated as a result of burr	ning, welding, cutting or grinding: Magnesium powder reacts violenty in water. Aluminum dust can
explode in air when exposed to heat or by chemi	cal reaction. Aluminum powder reacts violently with water.
10.4. Conditions to avoid	
Extremely high or low temperatures.	
10.5. Incompatible materials	
Strong Oxidizers, i.e. chlorates, bromates, perox	ides, nitrates, halons. Strong acids. Strong bases.
10.6. Hazardous decomposition products	
When heated (molten form) or welded, oxides of	metals may be produced. fume. Carbon monoxide. Carbon dioxide.
SECTION 11: Toxicological informat	ion
11.1 Information on toxicological effects	
in the internation on texicological effects	
Acute toxicity	: Not classified
	Not classified
Skin corrosion/irritation	: Not classified
Sorious ave damage/irritation	PR. NA
Senous eye damagerimation	nH' NA
Respiratory or skin sensitisation	· Not classified
Germ cell mutagenicity	· Not classified
Carcinogenicity	: Not classified
Aluminum Allow 1000 Series	
Additional information	Hexavalent Chromium and Nickel are potential human carcinogens.
NICKEI (7440-02-0)	2P. Bessible comissionapie to humana
National Toxicity Program (NTP) Status	3 - Reasonably anticipated to be Human Carcinogen
Reproductive toxicity	* Not classified
Specific target organ toxicity (single exposure)	Not classified
opeone anger eigen texterty (eingle expectato)	
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiretion hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
SECTION 12: Ecological information	
12.1. Toxicity	
No additional information available	
12.2. Persistence and degradability	
Aluminum Alloy 1000 Series	
Persistence and degradability	Not established.
12.2 Disassimulating startist	
12.3. Bloaccumulative potential	
Bioaccumulative estential	Natastablished
	านของสมาเอาชน.
12.4. Nobility in soil	
No additional information available	
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12.5. Other adverse effects	and the second
Other information	: Avoid release to the environment.
SECTION 13: Disposal consideration	ns
13.1. Waste treatment methods	
Waste treatment methods	: Recycle.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.
SECTION 14: Transport information	
In accordance with DOT	
No dangerous good in sense of transport regula	tions
Additional Information	No supplementary information sugilable
Other mormation	. No supprementary mormation available.
ADR	
Transport document description	:
Transport by sea	
No additional information available	
Air transport	
No additional information available	
SECTION 15: Regulatory informatio	n
15.1. US Federal regulations	
Aluminum Alloy 1000 Series	The second se
Not listed on the United States TSCA (Toxic S	ubstances Control Act) inventory
Aluminum (7429-90-5)	
Listed on the United States TSCA (Toxic Subs Listed on SARA Section 313 (Specific toxic ch	tances Control Act) inventory emical listings)
Iron (7439-89-6)	
Listed on the United States TSCA (Toxic Subs	tances Control Act) inventory
Zinc (7440-66-6)	
Listed on the United States TSCA (Toxic Subs Listed on SARA Section 313 (Specific toxic ch	tances Control Act) inventory emical listings)
RQ (Reportable quantity, section 304 of EPA's List of Lists) :	1000 lb
Copper (7440-50-8)	
Listed on the United States TSCA (Toxic Subs Listed on SARA Section 313 (Specific toxic ch	tances Control Act) inventory emical listings)
RQ (Reportable quantity, section 304 of EPA's List of Lists) :	5000 lb
Manganese (7439-96-5)	
Listed on the United States TSCA (Toxic Subs Listed on SARA Section 313 (Specific toxic ch	tances Control Act) inventory emical listings)
Hexavalent Chromium (18540-29-9)	
Not listed on the United States TSCA (Toxic S	ubstances Control Act) inventory
Titanium (7440-32-6)	
Listed on the United States TSCA (Toxic Subs	tances Control Act) inventory
Nickel (7440-02-0)	teneng Control Anth Investory
Listed on the United States TSCA (Toxic Subs Listed on SARA Section 313 (Specific toxic ch	tances Control Act) inventory emical listings)
RQ (Reportable quantity, section 304 of EPA's List of Lists) :	100 lb
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Aluminum Alloy 900/1000/8000 Series

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Magneslum (7439-95-4)						· · · · · · · · · · · · · · · · · · ·	all a state
Listed on the United States TSCA	(Toxic Substa	nces Contr	rol Act) in	ventory			
15.2. International regulations							

CANADA

No additional information available

EU-Regulations No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.2.2. National regulations

Nickel (7440-02-0)

Listed on IARC (International Agency for Research on Cancer) Listed as carcinogen on NTP (National Toxicology Program)		

15.3. US State regulations

Nickel (7440-02-0)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes				
Aluminum (7429-90-5)				
U.S Idaho - Non-Carcino U.S New Jersey - Right U.S New York - Reportin	ogenic Toxic Air Pollutants - Acce to Know Hazardous Substance L ig of Releases Part 597 - List of	eptable Ambient Concentrations ist Hazardous Substances	1	
Iron (7439-89-8)		A STAR TISS STAR		
U.S Idaho - Non-Carcino	ogenic Toxic Air Pollutants - Acce	eptable Ambient Concentrations	3	
Zinc (7440-66-6)				
U.S Michigan - Critical M U.S New Jersey - Right U.S New York - Reportir U.S Pennsylvania - RTK	Aaterials List to Know Hazardous Substance L ng of Releases Part 597 - List of (Right to Know) List	ist Hazardous Substances	1	
Copper (7440-50-8)	and Taria Al- Dall tarts And			
U.S Idano - Non-Carcino U.S Massachusetts - Rig U.S Michigan - Critical M U.S New Jersey - Right U.S New York - Reportir U.S Pennsylvania - RTK	ogenic Toxic Air Pollutants - Acce ght To Know List Aaterials List to Know Hazardous Substance L ng of Releases Part 597 - List of (Right to Know) List	aptable Ambient Concentrations .ist Hazardous Substances	5	
Manganese (7439-96-5)			A STATE OF A STATE OF A	
U.S Idaho - Non-Carcino U.S Maine - Air Pollutan U.S New Jersey - Right U.S New York - Reportir	ogenic Toxic Air Pollutants - Acce ts - Hazardous Air Pollutants to Know Hazardous Substance L ng of Releases Part 597 - List of	eptable Ambient Concentrations .ist Hazardous Substances	5	
Titanium (7440-32-6)				
U.S New Jersey - Right	to Know Hazardous Substance L	list		
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Aluminum Alloy 900/1000/8000 Series

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Titanium (7440-32-6)	
U.S New York - Reporting of Releases Part 597 - List of Hazardous Substances	
Nickel (7440-02-0)	
U.S Idaho - Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations	
U.S Massachusetts - Right To Know List	
U.S New Jersey - Right to Know Hazardous Substance List	
U.S New York - Reporting of Releases Part 597 - List of Hazardous Substances	
U.S Pennsylvania - RTK (Right to Know) List	
Magnesium (7439-95-4)	
U.S New Jersey - Right to Know Hazardous Substance List	
U.S New York - Reporting of Releases Part 597 - List of Hazardous Substances	

SECTION 16: Other information

Other information

: None.

Full text of H-phrases; see section 16:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1		
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1		
Carc. 2	Carcinogenicity, Category 2		
Flam. Sol. 1	Flammable solids, Category 1		
Pyr. Sol. 1	Pyorphoric Solids, Category 1		
Skin Sens. 1	Sensitisation — Skin, category 1		
STOT RE 1	Specific target organ toxicity Repeated exposure, Category 1		
Water-react. 1	Substances and Mixtures which, in contact with water, emit flammable gases, Category 1		
Water-react. 2	Substances and Mixtures which, in contact with water, emit flammable gases, Category 2		
H228	Flammable solid		
H250	Catches fire spontaneously if exposed to air		
H260	In contact with water releases flammable gases which may ignite spontaneously		
H261	In contact with water releases flammable gases		
H317	May cause an allergic skin reaction		
H350	May cause cancer		
H351	Suspected of causing cancer		
H372	Causes damage to organs through prolonged or repeated exposure		
H400	Very toxic to aquatic life		
H410	Very toxic to aquatic life with long lasting effects		

SDS US (GHS HazCom 2012)

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